S3037

SAT-PPL-20180815-00062

Date & Time Filed: Aug 15 2018 11:18:07:153AM

IB2018004817

NSS-11

SES Americom, Inc.

File # SAT- PPL-20180815-00062 International Bureau

Call Sign S 3037 Grant Date 02 / 26/19

(or other identifier)

conditions

Approved by OMB 3060-0678

From_02/26/19

Approved:

+with conditions

File Number: SAT-PPL-20180815-00062 Callsign/Satellite ID: S3037

APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

FCC Use Only

Satellite Policy Branch

en J. Duall

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: Market Access for NSS-11 at 176 E.L.

1-8. Legal Name of Applicant

Name:

SES Americom, Inc.

Phone Number:

202-478-7143

DBA Name:

Fax Number:

202-478-7111

Street:

1129 20th Street NW

E-Mail:

petra.vorwig@ses.com

Suite 1000

City:

Washington

State:

DC

Country:

USA

Zipcode:

20036

Attention:

Ms Petra A Vorwig

IBFS File No(s):	S File No(s): SAT-PPL-20180815-00062 GRANTED					
Licensee/Grantee:	ensee/Grantee: SES Americom, Inc. With Conditi					
Call Sign:	COMMISS					
Satellite Name:	NSS-11					
Orbital Location:	176.0° E.L.					
(required station-	$(\pm 0.05 \text{ degrees})$	COMMISSION				
keeping tolerance)		International Bureau				
Administration:	Gibraltar	Satellite Division				
Nature of Service:	Fixed-Satellite Service (FSS)	Satemite Division				
Scope of Grant:	Scope of Grant: Grant of U.S. market access, including the addition of the NSS-11 space station to the					
	Commission's Permitted Space Station list in the 14.0-14.5 GHz band (Earth-to-space).					
Service Area(s):	ce Area(s): See Schedule S Tech Report at 5-8. Alaska, Canada, Japan, China, Hawaii, Northweste					
	USA, Guam, Eastern Asia.					
Frequencies:	Service Bands:					
	12.25-12.75 GHz (space-to-Earth) ¹					
	14-14.5 GHz band (Earth-to-space)					
	TT&C Center Frequencies:					
	14498.0 MHz (Earth-to-space), and 12250.5 MHZ, 12251.5 MHz, 12749.5 MHz (space-to-					
	Earth)					

Unless otherwise specified herein, 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. This grant does not include provision of any Direct-to-Home service, Direct Broadcast Satellite service, or Digital Audio Service to, from, or within the United States.²
- 2. SES Americom must maintain its NSS-11 space station with an east/west longitudinal station-keeping tolerance of \pm 0.5 degrees of the 176.0° E.L. orbital location.
- 3. Communications between U.S.-licensed earth stations and the NSS-11 space station must comply with all existing and future space station coordination agreements reached between the United Kingdom and other administrations. In the absence of a coordination agreement, such communications must comply with applicable provisions of the International Telecommunications Union (ITU) Radio Regulations as the Commission cannot guarantee the success of the required conditions.³
- 4. SES Americom's request for waiver of the United States Table of Frequency Allocations, 47 CFR § 2.106, to provide FSS to the United States and its territories using the 12.2-12.7 GHz (space-to-Earth) frequency band on a non-interference, non-protected basis, is GRANTED. The 12.2-12.7 GHz frequency

¹ Eutelsat S.A. (Eutelsat) filed comments to this application stating that while NSS-11 could be added to the Permitted List in the 14.0-14.5 GHz bandt, the 12.25-12.75 GHz band is not included in the list of frequency bands eligible for Permitted List authority, and thus NSS-11 must be added as an individual authorized point of communication in FCC earth station licenses in order to provide service to the U.S. using 12.25-12.75 GHz. Comments of Eutelsat S.A. (filed Nov. 19, 2018). In response, SES acknowledges that the NSS-11 Petition should have stated that SES was seeking U.S. market access, rather than inclusion on the Permitted Space Station List, for the 12.2-12.75 GHz band segment.

² With respect to DBS and DTH, this condition excludes from the scope of this market access grant those services specified in Section 25.701(a)(1)-(5) of the Commission's rules. 47 CFR § 25.701(a)(1)-(5).

³ Eutelsat filed comments arguing that SES should revise and provide additional information regarding compatibility with the EUTELSAT 174A satellite at 174° E.L. before any potential Commission grant of the Petition. In response, SES provided an updated compatibility analysis that we find addresses Eutelsat's concerns.

band is allocated to the Broadcasting-Satellite Service (BSS) in ITU Region 2 and the United States. NSS-11's operations shall be on a non-interference and non-protected basis within the United States and its territories located in ITU Region 2. Additionally, NSS-11 will protect terrestrial station operations by complying with ITU PFD limits specified in No. 21.16 of the ITU Radio Regulations. As a non-conforming user of the 12.2-12.75 GHz band in ITU Region 2, NSS-11 must not cause harmful interference to existing and future authorized users who are operating in accordance with the Table of Allocations in ITU Region 2 and must accept interference from such authorized users. Waiver is justified because FSS operations in these bands are consistent with No. 5.492 of the ITU Radio Regulations and there are no U.S. BSS satellites transmitting from orbital locations within 55 degrees of NSS-11 at 176° E.L.

- 5. SES Americom's request for a waiver of 47 CFR § 2.106 of the Commission's rules to permit the provision of FSS within Region 2 and the United States in the 12.7-12.75 GHz frequency band (space-to-Earth) IS GRANTED, subject to the following conditions:⁴
 - a. SES Americom shall not cause any harmful interference to existing and future authorized users operating in the United States in accordance with the U.S. Table of Frequency Allocations and shall accept any interference in the United States from such authorized users, including CARS operators, BAS operators, Private Operational Fixed Point-to-Point Service (OFS) operators and Common Carrier Local TV Transmission Service (LTTS) operators;
 - b. In the event of harmful interference to any authorized services operating in accordance with the ITU Table of Frequency Allocations resulting from SES Americom's use of the 12.7-12.75 GHz band in Region 2, SES shall immediately cease operations in that band.
 - c. SES Americom is required to inform its customers in writing, including end-users receiving service from resellers accessing capacity on NSS-11, that service:
 - i.) shall be discontinued should a report of harmful interference resulting from this service occur;
 - ii.) is being provided pursuant to authority subject to a non-harmful interference basis, and that the customers therefore are not protected from harmful interference resulting from services that are allocated to this frequency band;
 - d. In the event that SES receives any report of harmful interference, SES shall inform the Commission of this and provide details of how it has been resolved;
 - e. In the event that SES Americom receives any report of harmful interference, SES Americom shall inform the Commission of this and provide details of how it has been resolved;

⁴ Eutelsat argues that NSS-11's operations in the 12.7-12.75 GHz band should be limited to providing mobility services. SES responded that this supposed limitation is incorrect and based on Eutelsat's belief that the grant of US market access for EUTELSAT 172B in the 12.7-12.75 GHz frequency band limited use of the band to mobility services. See ES 172 LLC Petition for Clarification or Reconsideration of License Conditions, and Request for Stay, IBFS File No. SAT-RPL-20170927-00136, filed May 29, 2018 (grant reissued Sept. 5, 2018). Although Eutelsat acknowledges that there is no specific limitation on use of the 12.7-12.75 GHz band segment in the reissued EUTELSAT 172B grat, it also states that such a limitation may have been considered unnecessary because operations in this spectrum must be authorized pursuant to earth station-specific licensing and a limitation could be placed on subsequent earth station licenses. Reply of Eutelsat S.A. (filed Dec. 14, 2018). Eutelsat's position is not correct. The grant of US market access for EUTELSAT 172B, as conditioned, does not indicate a limitation of operations in the 12.7-12.75 GHz band to mobility services. To the contrary, other satellites have been authorized, or granted US market access, in the 12.7-12.75 GHz band to provide a variety of other services. See e.g., Horizons-3 License LLC, Application to Modify Authorization for Horizons 3e Satellite, IBFS File No. SAT-MOD-20170622-00093 (granted April 25, 2018).

- f. To further protect services in this band, the power flux density limits (PFD) at the surface of the Earth for transmissions from the satellite in the band 12.7 12.75 GHz shall not exceed the limits specified in rule No. 21.16 of the ITU Radio Regulations.⁵
- 6. SES's request for a waiver of Sections 25.114(d)(14)(ii) and 25.283(c) is granted. Section 25.283(c) specifies that space stations must discharge all stored energy sources at end-of-life of the space station. NSS-11 is a Lockheed Martin A2100 series spacecraft that is not designed to vent all of its pressurized systems. SES states that the oxidizer tanks on the spacecraft were sealed following completion of the launch phase and will therefore retain residual pressure when the spacecraft is retired. Given the spacecraft design, it is physically impossible for SES to vent the oxidizer tanks. We grant the requested waiver because NSS-11 was launched before Section 25.283(c) was adopted and compliance with Section 25.283(c) is not achievable except through direct retrieval of the spacecraft. In making this determination, however, we note that information submitted in the application is not sufficient to support a finding that the intent of the rule would be satisfied by the described procedure for sealing the oxidizer tanks.
- 7. Pursuant to footnote US342 of the United States Table of Frequency Allocations, 47 CFR § 2.106, services operating in the 14.47-14.50 GHz band shall take all practicable steps to protect the radio astronomy service from harmful interference.
- 8. Earth station operators in the United States seeking access to NSS-11 for direct-to-home services may do so only after obtaining an earth station license that includes authority to provide direct-to-home services via the NSS-11 space station, or after modifying an existing earth station license to include authority to provide direct-to-home services via the NSS-11 space station.⁶
- 9. The operations of NSS-11 to and from the United States and associated earth stations must comport with the applicable uplink and downlink limits in 47 CFR § 25.140(a)(3) of the Commission's rules, unless SES coordinates any non-conforming operations with the operations of U.S.-licensed geostationary orbit space stations within 6 degrees of the 176.0° E.L. orbital location. SES must also comport with the maximum power limits indicated in its application. Non-conforming operations must also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of 176.0° E.L. involving approved communications with U.S.-licensed earth stations.
- 10. This grant of market access will terminate in the event that the NSS-11 space station is relocated from the 176.0° E.L. orbital location or ceases to operate. In either case, NSS-11 will be removed from the Permitted List and will no longer have market access to the U.S. If SES wishes to provide service to the U.S. using another space station, it must file a new application for market access to the U.S. in order to have that space station placed on the Permitted List.

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

⁵ Article 21.16 of the International Radio Regulations imposes power flux density (PFD) limits on FSS downlink transmissions in the 12.2-12.7 GHz band within Region 3 and 12.5-12.75 GHz band within Region 1 in order to protect terrestrial services. As SES Americom's non-conforming downlink transmissions are also in a terrestrial service band, we impose these same PFD limits on SES Americom's downlink transmissions in the 12.7-12.75 GHz band in the United States.

⁶ As part of the changes to the *Part 25 Streamlining Second R&O*, the Commission 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. Those bands are the extended and conventional C-bands, the extended and conventional Ku-bands, the conventional Ka-band, and the 24.75-25.25 GHz band. As a result, operators of receive-only earth stations will no longer need to apply for a license for the extended C- and Ku-bands. *See Part 25 Second Report and Order*, 30 FCC Rcd at 14794-96, paras. 247-251; *see also* 47 CFR § 25.131(j)(2) (stating, in part, that operators of receive-only earth stations receiving transmissions from non-U.S.-licensed space stations on the Permitted Space Station List do not need to file for a license).

This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

Action February 26, 2019.

Date:
Term Dates From: February 26, 2019 To: see conditions

Approved:

Stephen J. Duall

Chief, Satellite Policy Branch

9-16. Name of Contact Representative

Name:

Karis Hastings

Phone Number:

2025990975

Company:

SatCom Law LLC

Fax Number:

karis@satcomlaw.com

Street:

1317 F Street, N.W.

E-Mail:

Suite 400

City:

Washington

State:

DC

Country:

USA

Zipcode:

20004

Attention:

Relationship:

Legal Counsel

CLASSIFICATION OF FILING

17. Choose the buttonnext to the classification that applies to this filing 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.

- o bl. 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
- 6 b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- o 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)

17c. Is a fee submitted with this application?					
o If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).					
Other(please explain): Permitted Space Station List and Market Access Application					
17c. Fee Classification					
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:					
	4) 50				
(a) Date pending application was filed:	(b) File number of pending application:				
Not Applicable	Not Applicable				
	F.F.				

TYPE OF SERVICE

e or use the following type(s) of service(s): Select all that apply:				
22. If earth station applicant, check all that apply. Not Applicable				
Not Applicable				
ervice, see instructions regarding Sec. 214 filings. Choose one.Are these				
to a Public Switched Network N/A				
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.)				
ional frequencies in an attachment)				
t				

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 FURPOSE OF MODIFICATION	FACILITY: Not Applicable	
27. The purpose of this proposed modifi	cation is to: (Place an "X" in the box(es) next to	o all that 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.



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.

apply.)

29. Is the applicant a foreign government or the representative of any foreign government?	O 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?	O Yes O No O 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.	Exhibits A and B

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	0	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 explination of circumstances.	0	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 explination of circumstances.	0	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	0	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 exhinit, an explanation of the circumstances.	0	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.				8	3
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	0	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	0	No	B
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? Gibraltar					-

	B. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this pax, please go to the end of the form to view it in its entirety.)						
THE REAL PROPERTY OF THE PROPE	SES Americom, Inc. seeks U.S. market access for the Gibraltar-licensed NSS-11 spacecraft currently located at 176 E.L. Please see attached narrative.						
N	Narrative						

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.	O _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.	O C

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 butt	ton next to applicab	le response.)				
o Individual						
O Unincorporated Association						
O Partnership	O Partnership					
Corporation						
Governmental Entity						
Other (please specify)						
*:						
45. Name of Person Signing Petra A. Vorwig		46. Title of Person Signing Senior Legal & Regulatory Counsel				
47. Please supply any need attachments.		9				
1:	2:	3:				
(U.S. Code, Title 18,	Section 1001), AND	IIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT D/OR REVOCATION OF ANY STATION AUTHORIZATION AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).				

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 0.25-24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060–0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060–0678.

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.