

S2737

SAT-MOD-20091127-00129

IB2009007732

ViaSat, Inc.
VIASAT-77

Date & Time Filed: Nov 27 2009 8:56:12:433PM
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File # SAT-MOD-2009 1127-00129

Call Sign S2737 Grant Date 04/20/10
(or other identifier) Term Dates see attached

From 04/20/10 To: conditions

Approved: Stephen J. Duall

Stephen J. Duall
Chief, Satellite Policy Branch

Approved by OMB
3060-0678



FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Resubmission of 77.3 Modification Application to use NGSO Frequencies

I-8. Legal Name of Applicant

Name:	ViaSat, Inc.	Phone Number:	760-476-2583
DBA Name:		Fax Number:	760-929-3941
Street:	6155 El Camino Real	E-Mail:	daryl.hunter@viasat.com
City:	Carlsbad	State:	CA
Country:	USA	Zipcode:	92009
Attention:	Mr Daryl T Hunter		

Attachment to Grant
ViaSat, Inc.
IBFS File No. SAT-MOD-20091127-00129
Call Sign: S2737

The application of ViaSat Inc. (ViaSat) to operate its Ka-band Geostationary Satellite Orbit (GSO) Fixed Satellite Service (FSS) space station, VIASAT-77 (Call Sign S2737), at the 77.3° W.L. orbital location in the 18.8-19.3 GHz frequency band (space-to-Earth) on a non-conforming basis, and in the 28.6-29.1 GHz frequency band (Earth-to-space) on a secondary basis, IBFS File No. SAT-MOD-20091127-00129, is GRANTED. Accordingly, ViaSat is now authorized to operate VIASAT-77 at 77.3° W.L. using the 18.3-18.8 GHz and 19.7-20.2 GHz frequency bands (space-to-Earth), the 28.35-28.6 GHz and 29.5-30.0 GHz frequency bands (Earth-to-space), the 18.8-19.3 GHz frequency band (space-to-Earth) on a non-conforming basis, and the 28.10-28.35 GHz and 28.6-29.1 GHz frequency bands (Earth-to-space) on a secondary basis. This authorization is granted in accordance with the terms and conditions of ViaSat's previous authorizations for the VIASAT-77 satellite at 77.3° W.L.,¹ the technical specifications set forth in its modification application, the Federal Communications Commission's rules, and the following conditions:

1. ViaSat's request for a waiver of Section 25.210(i) of the Commission's rules is GRANTED. Section 25.210(i) requires space station antennas in the Fixed Satellite Service to be designed to meet a cross-polarization isolation of 30 dB within the primary coverage area of the antenna. 47 C.F.R. § 25.210(i). This requirement is necessary to facilitate two-degree orbital spacing between geostationary satellites. ViaSat states that the VIASAT-77 space station uplink spot beam receive antennas provide a minimum cross-polarization isolation of 26 dB. ViaSat notes that the shortfall is in the uplink direction only and will have no adverse affects on other satellite networks.² Accordingly, we grant this waiver with the condition that the operation of VIASAT-77 shall not cause more interference to U.S. services being provided by any authorized system that is two-degree spacing compliant than would be caused if VIASAT-77 complied with Section 25.210(i). Further, ViaSat shall not claim protection from interference to its operations caused by U.S. services being provided by the two-degree spacing compliant satellites if such interference results from failure of the VIASAT-77 satellite to comply with Section 25.210(i) of the Commission's rules. Grant of this waiver request is consistent with our precedent. *See* 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 of neighboring satellite systems of a 3-5 dB difference from the required cross-polarization isolation ratio would be negligible).

2. ViaSat's request for a waiver of Footnote NG165 to Section 2.106 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, to permit ViaSat to operate its GSO FSS VIASAT-77 space station in the 18.8-19.3 GHz (space-to-Earth) frequency band on a non-conforming basis is GRANTED. In the United States, the 18.8-19.3 GHz frequency band is designated for non-Federal, non-geostationary satellite orbit (NGSO) FSS operations on a primary basis, with no designation for non-Federal GSO operations, and is allocated to Federal GSO and NGSO FSS operations on a co-primary basis internationally. As a non-conforming user, ViaSat must accept any interference from any non-Federal NGSO FSS system and Federal GSO FSS or NGSO FSS system, or any grandfathered co-primary fixed service stations

¹ *See* ViaSat, Inc. IBFS File No. SAT-LOA-20070314-00051, Policy Branch Information, *Public Notice*, Report No. SAT-00458, DA No. 07-3322 (rel. July 20, 2007), SAT-MOD-20071204-00168, Policy Branch Information, *Public Notice*, Report No. SAT-00524, DA 08-1204 (rel. May 23, 2008), and SAT-MOD-20080718-00144 and SAT-AMD-20081203-00220, Policy Branch Information, *Public Notice*, Report No. SAT-00591, DA No. 09-692 (rel. March 27, 2009).

² ViaSat, Inc., IBFS File No. SAT-MOD-20091127-00129, Narrative at 8 and Technical Narrative at 13.

Attachment to Grant
ViaSat, Inc.
IBFS File No. SAT-MOD-20091127-00129
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authorized to use the 18.8-19.3 GHz frequency band. In addition, ViaSat shall not cause harmful interference to any authorized non-Federal NGSO FSS system, Federal GSO FSS or NGSO FSS system, and any grandfathered co-primary fixed service stations. ViaSat shall immediately cease operations upon notification of such harmful interference resulting from its operations.

3. ViaSat must coordinate its space-to-Earth operations in the 18.8-19.3 GHz frequency band with the U.S. Federal GSO and NGSO FSS systems, including Federal operations to earth stations in foreign countries, in accordance with footnote US334 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106.

4. Consistent with the technical specifications in its application, the power flux density (pfd) limits for ViaSat's Ka-band space-to-Earth operations in the 18.8-19.3 GHz frequency band must not exceed -122.1 dBW/m²/MHz at any angle of arrival. ViaSat must also comply with Article 21.16 of the International Telecommunication Union Radio Regulations for international operations in this frequency band.

5. ViaSat is authorized to use the 28.6-29.1 GHz frequency band, which is designated for GSO FSS use on a secondary basis with respect to primary NGSO FSS operations. 47 C.F.R. § 2.104(d). As a secondary user, ViaSat's operations cannot cause harmful interference to or claim protection from harmful interference from stations of a primary service. ViaSat shall immediately cease operations upon notification of such harmful interference resulting from its operations.

6. Grant of this modification does not extend the license term for the VIASAT-77 space station, which is 15 years from the date that ViaSat certifies to the Commission that the space station has been successfully placed into orbit and its operation fully conforms to the terms and conditions of its authorizations. 47 C.F.R. § 25.121(a). ViaSat shall file this certification with the Chief, Satellite Division, International Bureau, within ten business days of the space station commencing operations at its assigned orbital location.

7. ViaSat is afforded thirty days from the date of the release of this grant and authorization to decline the authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.

8. 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 and 1.115, may be filed within 30 days of the date of the public notice indicating this action was taken.



* subject to conditions

File # SAT-MOD-20091127-00129
Call Sign S2737 Grant Date 04/20/10
(or other identifier) Term Dates see attached
From 04/20/10 To: conditions
Approved: _____

Stephen J. Duall
Stephen J. Duall
Chief, Satellite Policy Branch

9-16. Name of Contact Representative

Name: John P. Janka **Phone Number:** 202-637-2289
Company: Latham & Watkins LLP **Fax Number:** 202-637-2201
Street: 555 Eleventh Street **E-Mail:** john.janka@lw.com
 10th Floor
City: Washington **State:** DC
Country: USA **Zipcode:** 20004-
Attention: Mr. John P. Janka **Relationship:** Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

- a1. Earth Station
- a2. Space Station

- (N/A) b1. Application for License of New Station
- (N/A) b2. Application for Registration of New Domestic Receive-Only Station
- b3. Amendment to a Pending Application
- b4. Modification of License or Registration
- b5. Assignment of License or Registration
- b6. Transfer of Control of License or Registration
- b7. Notification of Minor Modification
- (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- (N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- (N/A) b10. Other (Please specify)
- (N/A) b11. Application for Earth Station to Access a Non-U.S. satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States
- (N/A) b12. Application for Database Entry
- b13. Amendment to a Pending Database Entry Application
- b14. Modification of Database Entry

<p>17c. Is a fee submitted with this application? <input type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114). <input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee <input checked="" type="radio"/> Other (please explain): Refiling application pursuant to dismissal letter (see DA 09-2481)</p>	
<p>17d. Fee Classification</p>	
<p>18. If this filing is in reference to an existing station, enter: (a) Call sign of station: S2737</p>	<p>19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number: (a) Date pending application was filed: (b) File number: SATMOD2008071800144</p>

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.

- Using U.S. licensed satellites
- Using Non-U.S. licensed satellites

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

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: 18300 Frequency Upper: 30000 (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.

- a. Fixed Earth Station
- b. Temporary-Fixed Earth Station
- c. 12/14 GHz VSAT Network
- d. Mobile Earth Station
- e. Geostationary Space Station
- f. Non-Geostationary Space Station
- g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY:

- Transmit/Receive
- Transmit-Only
- Receive-Only
- N/A

"For Space Station applications, select N/A."

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

- a --- authorization to add new emission designator and related service
- b --- authorization to change emission designator and related service
- c --- authorization to increase EIRP and EIRP density
- d --- authorization to replace antenna
- e --- authorization to add antenna
- f --- authorization to relocate fixed station
- g --- authorization to change frequency(ies)
- h --- authorization to add frequency
- i --- authorization to add Points of Communication (satellites & countries)
- j --- authorization to change Points of Communication (satellites & countries)
- k --- authorization for facilities for which environmental assessment and radiation hazard reporting is required
- l --- authorization to change orbit location
- m --- authorization to perform fleet management
- n --- authorization to extend milestones
- o --- Other (Please specify)

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

<p>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?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>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.</p>	

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>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
<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>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>

<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>	<p style="text-align: right;"> <input type="radio"/> Yes <input checked="" type="radio"/> No </p>
<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>	<p style="text-align: right;"> <input type="radio"/> Yes <input checked="" type="radio"/> No </p>
<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>	<p style="text-align: right;"> <input type="radio"/> Yes <input checked="" type="radio"/> No </p>
<p>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.</p>	

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"; 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?

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.)

See Exhibit A.

Exhibit A

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

Exhibit B

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
Richard A. Baldrige

—>

46. Title of Person Signing
President & COO

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).

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