

S2917 SAT-MOD-20150618-00037 IB2015001113  
ViaSat, Inc.  
VIASAT-3



File # SAT-MOD-20150618-00037  
Call Sign S2917 Grant Date 10/21/15  
(or other identifier)  
Term Dates  
From \_\_\_\_\_ To: \_\_\_\_\_  
Approved: Stephen J. Duall

Approved by OMB  
3060-0678

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

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:  
Modification of Letter of Intent – Nominal 89 W.L.

1-8. Legal Name of Applicant

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

Attachment to Grant  
SAT-MOD-20150618-00037  
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The Letter of Intent of ViaSat, Inc. (ViaSat), as modified, IBFS File No. SAT-MOD-20150618-00037, requesting modification of the grant of access to the United States market for the ViaSat-3 space station, IS GRANTED.<sup>1</sup> Accordingly, the grant of U.S. market access for the ViaSat-3 space station is modified to change the center frequencies used for telemetry, tracking, and command (TT&C) operations and otherwise reflect the revised technical parameters of the ViaSat-3 satellite under contract for construction. ViaSat-3 will operate under the authority of the United Kingdom at the 88.9° W.L. orbital location. ViaSat is granted access to the U.S. market to provide Fixed-Satellite Service (FSS) using the 18.3-18.8 GHz and 19.7-20.2 GHz (space-to-Earth), and 28.35-28.6 GHz and 29.5-30.0 GHz (Earth-to-space) frequency bands on a primary basis; the 28.1-28.35 GHz and 28.6-29.1 GHz (Earth-to-space) frequency bands on a secondary basis; and the 18.8-19.3 GHz (space-to-Earth) frequency band on a non-conforming basis.<sup>2</sup> ViaSat-3 will use the following modified center frequencies for TT&C operations: 18301 MHz and 18303 MHz (space-to-Earth) and 29501 MHz and 29999 MHz (Earth-to-space). In addition, ViaSat-3 will support an autotrack function using the center frequencies 18799.6 MHz (space-to-Earth) and 29501 MHz (Earth-to-space), and a pseudo-noise modulated carrier also using the center frequency 18799.6 MHz (space-to-Earth). Communications between the U.S.-licensed earth stations and the ViaSat-3 space station must be in accordance with the terms, conditions, and technical specifications set forth in ViaSat's Letter of Intent, as amended, the Federal Communications Commission's rules not waived herein, and the following conditions:

1. ViaSat must comply with the conditions placed upon its original grant of U.S. market access for the ViaSat-3 space station not explicitly modified by this action. *See* IBFS File Nos. SAT-LOI-20140204-00013 and SAT-AMD-20140218-00023 (granted June 18, 2014).

2. ViaSat's request for a waiver of Section 25.114(c)(4) of the Commission's rules, 47 C.F.R. §25.114(c)(4), to the extent necessary to provide antenna beam information for two representative beams in lieu of replicating the beam information for additional, identical beams, IS GRANTED. Specifically, we waive in part Sections 25.114(c)(4)(i), (ii) and (v) of the Commission's rules, 47 C.F.R. §§ 25.114(c)(4)(i), (ii), (v). We find that a waiver is warranted in this instance because the representative beam information, when combined with the antenna gain contour information ViaSat provided under Sections 25.114(c)(4)(vii)(C) of the Commission's rules, 47 C.F.R. §§ 25.114(c)(4)(vii)(c), is sufficient to fulfill the relevant informational requirements.

3. ViaSat's request for a waiver of Section 25.210(i) of the Commission's rules, 47 C.F.R. § 25.210(i), IS GRANTED. Section 25.210(i)(1) requires space station antennas used for FSS operation to provide cross-polarization isolation of at least 30 dB within the primary coverage area. The ViaSat-3 transmit and receive antennas are designed to provide a minimum cross-polarization isolation of 24 dB. ViaSat states that this deficit will cause a negligible increase in interference to adjacent satellite networks

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<sup>1</sup> ViaSat-3 was previously known as VIASAT-KA 89W. *See* IBFS File Nos. SAT-LOI-20140204-00013 and SAT-AMD-20140218-00023.

<sup>2</sup> ViaSat-3 satellite also will be capable of operating in the 17.7-18.3 GHz (space-to-Earth) and 27.5-28.1 GHz (Earth-to-space) frequency bands. ViaSat has not requested U.S. market access for these operations. *See* IBFS File No. SAT-MOD-20150618-00037, Narrative at 1 n.1.

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and to the ViaSat-2 satellite network, and that it has accounted for the self-interference in the design of its link budgets. We find that a waiver is warranted under these circumstances. As a condition of this waiver, ViaSat must not claim greater protection from interference from other radiocommunication systems operating in accordance with the Commission's rules than if its antenna complied with Section 25.210(i)(1).

4. 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 from the date of the public notice indicating that this action was taken.

 <b>GRANTED*</b> International Bureau *with conditions	File # <u>SAT-MOD-20150618-00037</u>
	Call Sign <u>S2917</u> Grant Date <u>10/21/15</u> (or other identifier)
	Term Dates From _____ To: _____
	Approved: <u>Stephen J. Duall</u> Stephen J. Duall Chief, Satellite Policy Branch

9-16. Name of Contact Representative

<b>Name:</b>	John P. Janka	<b>Phone Number:</b>	202-637-2200
<b>Company:</b>	Latham & Watkins LLP	<b>Fax Number:</b>	202-637-2201
<b>Street:</b>	555 Eleventh Street NW Suite 1000	<b>E-Mail:</b>	john.janka@lw.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20004-
<b>Attention:</b>	Mr. John P. Janka	<b>Relationship:</b>	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



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:	
<input checked="" type="checkbox"/> a. Fixed Satellite <input type="checkbox"/> b. Mobile Satellite <input type="checkbox"/> c. Radiodetermination Satellite <input type="checkbox"/> d. Earth Exploration Satellite <input type="checkbox"/> e. Direct to Home Fixed Satellite <input type="checkbox"/> f. Digital Audio Radio Service <input type="checkbox"/> g. Other (please specify)	
21. STATUS: Choose the button next to the applicable status. Choose only one. <input type="radio"/> Common Carrier <input checked="" type="radio"/> Non-Common Carrier	22. If earth station applicant, check all that apply. <input type="checkbox"/> Using U.S. licensed satellites <input type="checkbox"/> 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: <input type="radio"/> Connected to a Public Switched Network <input type="radio"/> Not connected to a Public Switched Network <input checked="" type="radio"/> N/A	
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s). <input type="checkbox"/> a. C-Band (4/6 GHz) <input type="checkbox"/> b. Ku-Band (12/14 GHz) <input checked="" type="checkbox"/> 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?	<input type="radio"/> Yes <input checked="" type="radio"/> No
30. Is the applicant an alien or the representative of an alien?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	<input type="radio"/> Yes <input checked="" 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 type="radio"/> Yes <input checked="" 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?

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

Technical Annex

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 &quot;party to the application&quot; 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? United Kingdom

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.)

ViaSat, Inc. ('ViaSat') files this application for minor modification to reflect the technical parameters in the construction contract for the satellite. In addition, ViaSat notifies the Commission that the name of the satellite has been changed from 'VIASAT-KA 89W' to 'ViaSat-3.'

GIMS File

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

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  
Daryl T. Hunter

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46. Title of Person Signing  
Sr. Director, Regulatory Affairs

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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