

** GRANTED W/RESPECT TO PERMITTED LIST ONLY; OTHER REQUESTS DEFERRED **

S2463 SAT-MPL-20120215-00017 IB2012000575
New Skies Satellites B.V.
NSS-7



File # SAT-MPL-20120215-00017

Call Sign S2463 Grant Date 05/25/12

(or other identifier)

Term Dates

From 05/25/12

To: _____

Approved by OMB
3060-0678

Approved: _____

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

* with conditions

Date & Time Filed: Feb 15 2012 6:56:25:286PM
File Number: SAT-MPL-20120215-00017

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:
NSS-7 (S2463) Mod – Move to 20 W.L. and DTH

1-8. Legal Name of Applicant

Name:	New Skies Satellites B.V.	Phone Number:	202-478-7183
DBA Name:		Fax Number:	202-478-7101
Street:	1129 20th St. NW Suite 1000	E-Mail:	joslyn.read@ses.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036 -
Attention:	Ms Joslyn Read		

Attachment to Grant
IBFS File No. SAT-MPL-20120215-00017
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Modification of the Permitted Space Station List for NSS-7 at 20° W.L.

The petition of New Skies Satellites, B.V. (New Skies), IBFS File No. SAT-MPL-20120215-00017, as supplemented, to modify the Commission's Permitted Space Station List (Permitted List) entry for the NSS-7 space station (Call Sign S2463) to reflect the change of orbital position of NSS-7 from its current orbital location of 22° W.L. to the 20° W.L. orbital location, is GRANTED.¹ The operations of NSS-7 addressed by this grant are licensed by the Administration of the Netherlands. Accordingly, each U.S.-licensed earth station with "ALSAT" designated as a point of communication is authorized to access the NSS-7 space station at 20° W.L. to provide Fixed-Satellite Service (FSS) using the conventional C-band frequencies of 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-Space), and a portion of the conventional Ku-band, 11.95-12.2 GHz (space-to-Earth),² to, from, or within the United States, subject to the parameters set forth in the earth station license. In addition, New Skies' request is granted to use NSS-7 to provide direct-to-home FSS in the conventional C- and portions of the Ku-band (1) within the United States and (2) between the United States and the Netherlands, other European Union member states, Mexico, Brazil, the Netherlands Antilles, Guatemala, Honduras, Nicaragua, Bermuda, the British Virgin Islands, and the Cayman Islands. Communications between U.S.-licensed earth stations and the NSS-7 space station must be in accordance with the terms, conditions, and technical specifications contained in New Skies' application, the Federal Communications Commission's rules not waived herein, and the following conditions:

1. Communications between U.S.-licensed earth stations and the NSS-7 space station shall comply with all existing and future space station coordination agreements reached between the Netherlands and other administrations.

2. New Skies' request for a waiver of Section 25.210(a)(1) of the Commission's rules, 47 C.F.R. 25.210(a)(1), is granted, as conditioned. Section 25.210(a)(1) requires that C-band operations use orthogonal linear polarization. The NSS-7 space station employs circular polarization. This waiver is based upon a finding that there is currently no potential for harmful interference from operations at this location with circular polarization, and that there would be an undue hardship to customers if they were required to reconfigure existing circularly-polarized antennas to operate with linear polarization. As a condition of this waiver, New Skies must accommodate future space station networks that comply with Section 25.210(a)(1). Further, New Skies must operate NSS-7 pursuant to any existing or future coordination agreements for this location.

¹ The application was placed on Public Notice as accepted for filing on April 6, 2012. Policy Branch Information, Satellite Space Applications Accepted for Filing, *Public Notice*, Report No. SAT-00858. Intelsat North America LLC (Intelsat) has separately filed an application to operate other Ku-band frequencies of the NSS-7 space station (Call Sign S2854) at the 20.0° W.L. orbital location. See IBFS File No. SAT-RPL-20120216-00018.

² NSS-7 is a replacement for the NSS-5 space station (Call Sign S2802) at the 20.0° W.L. location in the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) frequency bands. In addition, New Skies seeks to add the 11.95-12.2 GHz frequency band (space-to-Earth) to the Permitted List for NSS-7 at the 20.0° W.L. location. This frequency band was not on NSS-5.

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3. New Skies' request for a waiver of Section 25.210(a)(3) of the Commission's rules, 47 C.F.R. 25.210(a)(3), is granted, as conditioned. Section 25.210(a)(3) requires FSS space stations using the C-band to be capable of switching polarization sense upon ground command. The Commission requires polarity-switching capability for two reasons: (1) to provide U.S.-licensed space stations with the flexibility to operate at different orbital locations, and (2) to mitigate potential interference between adjacent fixed space station systems transmitting analog television signals. *See Telesat Canada, Order, 22 FCC Rcd 588 (para. 10) (Int'l Bur., Sat. Div. 2007)*. This waiver is based upon a finding that the ability to switch polarization is not currently necessary to protect other space stations at adjacent orbital locations from harmful interference, because the NSS-7 space station's operations will be in compliance with existing coordination agreements. As a condition of this waiver, New Skies must accommodate future space station networks that comply with Section 25.210(a)(3). Further, New Skies must operate NSS-7 pursuant to any existing or future coordination agreements for this location.

4. New Skies' request for a waiver of Section 25.210(i)(1), of the Commission's rules, 47 C.F.R. § 25.210(i), for the NSS-7 space station is granted, as conditioned. Section 25.210(i) requires FSS space station antennas to be designed to meet a cross-polarization isolation of 30 dB within the primary coverage area of the antenna.³ The cross-polarization isolation of the antennas for the East Hemisphere beam, the West Hemisphere beam, the Europe/Middle East beam, and the North America beam in NSS-7's primary coverage area will be less than the minimum 30 dB required by the rules. The worst-case cross-polarization isolation performance for the NSS-7 space station ranges between 25.8 dB and 29.3 dB. This waiver is based upon a finding that this shortfall will not produce a significant increase in interference, except to the space station itself, and will not adversely affect any other operator. As a condition of the waiver, New Skies must accommodate future satellite networks serving the United States that are two-degree compliant and other licensed radiocommunication systems operating in accordance with the Commission's rules.

5. New Skies' request for a waiver of Section 25.211(a) of the Commission's rules, 47 C.F.R. 25.211(a), is granted, as conditioned. Section 25.211(a) provides that downlink analog video transmissions in the C-band shall be transmitted only on a center frequency of $3700+20N$ MHz, where $N=1$ to 24, with corresponding uplink frequencies 2225 MHz higher. This waiver is based upon findings that New Skies designed the NSS-7 replacement space station using the same analog TV center frequencies traditionally used by Intelsat space stations and legacy customers now using New Skies' space stations, that existing analog video operations at the 20.0° W.L. orbital location are fully coordinated and will not cause interference to adjacent space station operators, and that NSS-7 will, over time, shift to digital transmissions that are not subject to this rule. We grant this waiver on the condition that New Skies must accommodate future space station networks serving the United States that are compliant with Section 25.211(a). Further, New Skies must operate NSS-7 pursuant to any existing or future coordination agreements for this location.

³ 47 C.F.R. § 25.210(i)(1).

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6. New Skies' request for a waiver of Section 25.114(d)(3) of the Commission's rules, 47 C.F.R. § 25.114(d)(3), IS GRANTED. Section 25.114(d)(3) requires predicted space station antenna gain contour(s) for each transmit and each receive antenna beam and nominal orbital location requested. New Skies indicates that because certain beams on NSS-7 do not intersect with the Earth's surface, it has not provided gain contours for these beams. (Figure B-1 in the Technical Appendix, p. 112). We find, however, that Figure B-1, together with the descriptive characterization provided on page 13 of the Narrative, fulfill the requirements of Section 25.114(d)(3).

7. New Skies' request for waiver of Sections 25.114(d)(14)(ii) and 25.283(c) of the Commission's rules, 47 C.F.R. §§ 25.114(d)(14)(ii) and 25.283, is granted in part. Sections 25.114(d)(14)(ii) and 25.283(c) specify that space stations must discharge all stored energy sources at end-of-life of the space station. New Skies states that residual oxidizer will not be vented at the spacecraft's end of life because the oxidizer tanks on NSS-7 were sealed using pyrotechnic valves at the end of transfer orbit and therefore cannot be vented. NSS-7 was launched on April 16, 2002, before Section 25.283(c) was adopted. Furthermore, compliance with Section 25.283(c) would require direct retrieval of the spacecraft or launching a servicing mission to the spacecraft, which is not practicable at this time. This waiver is conditioned upon New Skies confirming the accuracy or correcting, within 10 calendar days of the date of this grant, information previously provided concerning volumes, temperatures, and pressures of the oxidizer tanks, and providing a list of the chemicals and the masses thereof that will be retained in the tanks at end-of-life. Such confirmation or correction and additional information must be supported by an engineering certification executed in the form specified in Section 1.16 of the Commission's rules. This action is without prejudice to possible future licensing decisions in connection with other spacecraft of the same manufacturing series.

8. Operations using NSS-7 to or from the United States shall comply with the power levels specified in Section 25.212 of the Commission's rules, 47 C.F.R. § 25.212, unless New Skies coordinates any operations using power levels exceeding the levels in Section 25.212 with all potentially affected adjacent satellites within 6 degrees orbital separation of the 20° W.L. orbital location. New Skies shall inform the Commission of the power levels it has coordinated. In addition, New Skies must inform all affected earth station operators that Section 25.220 of the Commission's rules, 47 C.F.R. § 25.220, applies to operations that exceed the power levels specified in Section 25.212. In no event shall the uplink power density level of NSS-7's digital carriers exceed -42 dBW/Hz and the downlink EIRP density of such carriers exceed -34 dBW/Hz for the C-band. Further, in no event shall the uplink power density of NSS-7's digital carrier exceed -50 dBW/Hz and the downlink EIRP density of such carriers exceed -24.7 dBW/Hz for the Ku-band.

9. This grant of market access will terminate in the event that the NSS-7 space station is relocated from the 20° W.L. orbital location or ceases to operate. In either case, New Skies will be removed from the Permitted List. If New Skies wishes to provide service to the U.S. using another space station, it must file a new application to have that space station placed on the Permitted List.

10. New Skies is afforded 30 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.

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11. This action is taken pursuant to Section 0.261 of the Commission's rules, 47 C.F.R. §§ 0.261, and is effective immediately. Petitions for reconsideration under Section 1.106 of the Commission's rules 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 public notice indicating that this action was taken.

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Call Sign S2463 Grant Date 05/25/12
(or other identifier)
Term Dates
From 05/25/12 To: _____

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

9-16. Name of Contact Representative

Name:	Karis A. Hastings	Phone Number:	202-599-0975
Company:	SatCom Law LLC	Fax Number:	
Street:	1317 F St. NW Suite 400	E-Mail:	karis@satcomlaw.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20004-
Attention:	Karis A. Hastings	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

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 checked="" 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 checked="" type="checkbox"/> a. C-Band (4/6 GHz) <input checked="" type="checkbox"/> b. Ku-Band (12/14 GHz) <input type="checkbox"/> 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.

- 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 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? 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. Exhibit A

BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? Yes No
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

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

<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><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><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><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" 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?The Netherlands

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.)

New Skies Satellites B.V. requests modification of the terms of U.S. market access for NSS-7 (S2463) to reflect the proposed relocation of the satellite to 20 deg. W.L. and add authority for direct-to-home service.

Narrative + Tech App

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
Joslyn R. Read

46. Title of Person Signing
Vice President, 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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