



File # SAT-LOA-20080509-00101
(see also SAT-AMD-20081205-00223)
Call Sign S2751 Grant Date 01/09/09
(or other identifier)

Term Dates _____ Approved by OMB
From _____ To: See attached conditions 3060-0678
Approved: Stephen J. Duall
Stephen J. Duall
Chief, Policy Branch

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File Number: SAT-LOA-20080509-00101
Callsign/Satellite ID: S2751

* subject to attached conditions

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:

Application to Launch and Operate Replacement Satellite New Dawn at 32.8 E.L.

1-8. Legal Name of Applicant			
Name:	Intelsat New Dawn Company, Ltd.	Phone Number:	14412941650
DBA Name:		Fax Number:	14412928300
Street:	90 Pitts Bay Road	E-Mail:	susan.crandall@intelsat.com
City:	Pembroke, HM 08	State:	
Country:	Bermuda	Zipcode:	-
Attention:	Susan H. Crandall		



File # SAT-AMD-20081205-00223
(see also SAT-LOA-20080509-00101)

Call Sign S2751 Grant Date 01/09/09
(or other identifier)

Approved by OMB
3060-0678

Term Dates

From _____ To: see attached conditions

Approved: Stephen J. Duall

Stephen J. Duall
Chief, Policy Branch

Date & Time Filed: Dec 5 2008 4:03:08:903PM
File Number: SAT-AMD-20081205-00223

*subject to attached conditions

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:

Application of Intelsat New Dawn Company, Ltd. to Amend Pending Satellite Application

1-8. Legal Name of Applicant

Name:	Intelsat New Dawn Company, Ltd.	Phone Number:	14412941650
DBA Name:		Fax Number:	14412928300
Street:	90 Pitts Bay Road	E-Mail:	susan.crandall@intelsat.com
City:	Pembroke, HM 08	State:	
Country:	Bermuda	Zipcode:	-
Attention:	Susan H. Crandall		

ATTACHMENT
Conditions of Authorization:
IBFS File Nos. SAT-LOA-20080509-00101 and SAT-AMD-20081205-00223
Call Sign: S2751
Grant Date: January 9, 2009

Intelsat New Dawn Company, Ltd.'s (Intelsat New Dawn) application, IBFS File No. SAT-LOA-20080509-00101, as amended by SAT-AMD-20081205-00223, to construct, launch, and operate the hybrid C/extended C-band and Ku/extended Ku-band New Dawn space station (Call Sign: S2751) at the 32.8° E.L. orbital location IS GRANTED. Accordingly, Intelsat New Dawn is authorized to operate the New Dawn space station at the 32.8° E.L. orbital location in the fixed-satellite service (FSS) using the 5850-6550 MHz (Earth-to-space), 3625-4200 MHz (space-to-Earth), 14.0-14.5 GHz (Earth-to-space), 10.95-11.2 GHz (space-to-Earth), and 11.45-11.7 GHz (space-to-Earth) frequencies¹ in accordance with the technical specifications set forth in its application, the Federal Communication Commission's (Commission) rules, and the following conditions:

1. Intelsat New Dawn shall prepare the necessary information, as may be required, for submission to the International Telecommunication Union (ITU) to initiate and complete the advance publication, international coordination, due diligence, and notification process of this space station, in accordance with the ITU Radio Regulations. Intelsat New Dawn shall be held responsible for all cost recovery fees associated with these ITU filings. No protection from interference caused by radio stations authorized by other Administrations is guaranteed unless coordination and notification procedures are timely completed or, with respect to individual Administrations, coordination agreements are successfully completed. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments with other Administrations. 47 C.F.R. § 25.111(b).

2. Intelsat New Dawn's 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. Section 25.210(a)(1) requires that C-band operations use orthogonal linear polarization. Intelsat New Dawn employs circular polarization. This waiver grant is based upon findings 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, Intelsat New Dawn must accommodate future satellite networks that are compliant with Section 25.210(a)(1). Further, Intelsat New Dawn must operate New Dawn pursuant to any existing or future coordination agreements for this location.

3. Intelsat New Dawn's 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. 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

¹ Intelsat New Dawn characterizes the New Dawn space station as a replacement for Galaxy 11 (Call Sign: 2253) located at 32.8° W.L. The New Dawn application contains some new frequency bands not previously authorized on Galaxy 11 and also omits certain frequency bands authorized on Galaxy 11. Specifically, the 3625-3700 MHz, 5850-5925 MHz, 6425-6550 MHz, and 11.45-11.7 GHz frequency bands requested for the New Dawn space station are not authorized for the Galaxy 11 space station. The 3625-3700 MHz, 5850-5925 MHz, and 11.45-11.7 GHz bands are on another space station, Intelsat 802 (Call Sign: S2402), located at 32.9° W.L., that has an end of life anticipated for 2010. The frequency bands that are on the Galaxy 11 authorization, but are not part of the Intelsat New Dawn application, are the 11.7-12.2 GHz and 13.75-14.0 GHz frequency bands.

U.S.-licensed satellites with the flexibility to operate at different orbital locations, and (2) to mitigate potential interference between adjacent fixed-satellite systems transmitting analog television signals.² This waiver grant is based upon a finding that the ability to switch polarization is not currently necessary to protect other satellites at adjacent orbital locations from harmful interference, because the only space stations operating within two degrees of New Dawn's proposed location are operated by Intelsat (Galaxy 11 at 32.8° E.L. and Intelsat 802 at 32.9° E.L.), and because the New Dawn space station operations will be in compliance with existing coordination agreements. As a condition of granting this waiver, Intelsat must accommodate future satellite networks that are compliant with Section 25.210(a)(3). Further, Intelsat New Dawn must operate New Dawn pursuant to any existing or future coordination agreements for this location.

4. Intelsat New Dawn's request for waiver of Section 25.202(g) of the Commission's rules, 47 C.F.R. § 25.202(g), IS GRANTED. Section 25.202(g) requires "telemetry, tracking and telecommand (TT&C) functions for U.S. domestic satellites shall be conducted at either or both edges of the allocated band(s). Frequencies, polarization and coding shall be selected to minimize interference into other satellite networks and within their own satellite system." This waiver grant is based upon the following findings:

- (a) Placement of TT&C in the center of the standard C-band has already been coordinated for the existing satellites at this orbital location, and, therefore, operation of the new satellite would not negatively alter the potential impact on adjacent satellites or require additional coordination;
- (b) Altering current coordination arrangements for this and adjacent locations would be unduly disruptive of ongoing operations;
- (c) The New Dawn space station will operate with lower uplink TT&C power than Intelsat 802, thus resulting in reduced interference potential; and
- (d) Intelsat does not plan to operate this space station in the future at a location capable of serving the contiguous United States (CONUS).

As a condition of granting this waiver, Intelsat must accommodate future space station networks that are compliant with Section 25.202(g). Further, Intelsat New Dawn must operate New Dawn pursuant to any existing or future coordination agreements for this location.

5. Intelsat New Dawn's request for 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. The main purpose of the contour map is to allow evaluation of the potential for harmful interference with other operators and services in the frequency band.³ Intelsat New Dawn's application indicates that the TT&C Bicone and wide coverage antenna diagrams (Exhibits 5J, 5K, 5M, and 5N) were not prepared in accordance with the requirements in Section 25.114(d)(3) of the Commission's rules because the space station manufacturer did not provide contours in the required form. We find that Exhibits 5J, 5K, 5M, and 5N, together with the descriptive characterization provided in Section 2.7.1 of the application, provide a sufficiently complete description of the transponder characteristics of the New Dawn space station to enable

² Telesat Canada; Petition for Declaratory Ruling for of Inclusion of ANIK F3 on the Permitted Space Station List, *Order*, 22 FCC Rcd 588 (para. 10) (Int'l Bur., Sat. Div. 2007).

³ SES Americom, Inc., Application for Modification of Space Station Authorization, DA 04-1581, *Order and Authorization*, 19 FCC Rcd. 20,377, 20,377-78 (paras. 4-8) (Int'l Bur., Sat. Div. 2004).

the Commission to determine whether or not the New Dawn space station meets the Commission's technical requirements

6. Intelsat New Dawn is directed to bear in mind the needs of the passive services when designing and operating the New Dawn space station pursuant to Footnote 5.458 to the Table of Allocations, 47 C.F.R. § 2.106, Footnote 5.458.

7. Intelsat New Dawn's use of the 10.95-11.2 GHz and the 11.45-11.7 GHz frequency bands shall comply with the terms of Footnote US211 to the 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.

8. In connection with the provision of service in any particular country, Intelsat New Dawn is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.

9. Intelsat New Dawn's operation of New Dawn at the 32.8° E.L. orbital location in the C- and extended C-band frequencies of 5850–6425 MHz (Earth-to-space), 3625–4200 MHz (space-to-Earth), and the Ku- and extended Ku-band frequencies of 14.0–14.5 GHz (Earth-to-space), 10.95-11.200 GHz (space-to-Earth), and 11.45-11.7 GHz (space-to-Earth) is subject to the following conditions:

(a) Intelsat shall remain a signatory to the Public Services Agreement between Intelsat and the International Telecommunications Satellite Organization (ITSO) that was approved by the ITSO Twenty-fifth Assembly of Parties, as amended.

(b) No entity shall be considered a successor-in-interest to Intelsat under the ITSO Agreement for licensing purposes unless it has undertaken to perform the obligations of the Public Services Agreement approved by the Twenty-fifth Assembly of Parties, as amended.

10. With respect to the 3625-3700 MHz, 5850-5925 MHz 6425-6550 MHz, and 11.45-11.7 GHz frequency bands, New Dawn must be constructed, launched, and placed into operation in accordance with the technical parameters and terms and conditions of this authorization by these specified time periods following the date of authorization:

(a) Execute a binding non-contingent contract for construction within one year (January 9, 2010);

(b) Complete the Critical Design Review within two years (January 9, 2011);

(c) Commence construction within three years (January 9, 2012);

(d) Launch and begin operations within five years (January 9, 2014); and

(e) Intelsat New Dawn must file a bond with the Commission in the amount of \$3 million, pursuant to the procedures set forth in Public Notice, DA 03-2602, 18 FCC Rcd 16283 (2003), within 30 days of the date of this grant.

Failure to meet any of these dates shall render this authorization to operate in the 3625-3700 MHz, 5850-5925 MHz, 6425-6550 MHz, and 11.45-11.7 GHz frequency bands NULL and VOID.

11. With respect to the 3625-3700 MHz, 5850-5925 MHz, and 11.45-11.7 GHz

frequency bands, in lieu of complying with the milestone requirements (including bond) in paragraph 10, Intelsat New Dawn may file a certification within 30 days of the date of this grant stating that the New Dawn space station will begin providing service at the 32.8° E.L. orbital location in these frequency bands before the Intelsat 802 space station discontinues service. If Intelsat New Dawn elects to file this certification, a failure to provide service in these frequency bands before the Intelsat 802 space station discontinues service shall render this authorization to operate in the 3625-3700 MHz, 5850-5925 MHz, and 11.45-11.7 GHz frequency bands NULL and VOID.

12. The New Dawn space station must begin providing service at the 32.8° E.L. orbital location in the 3700-4200 MHz, 5925-6425 MHz, 10.95-11.2 GHz, and 14.0-14.5 GHz bands before the space station it is replacing, Galaxy 11, discontinues service at the 32.8° E.L. orbital location. Failure to meet this milestone shall render this authorization to operate in the 3700-4200 MHz, 5925-6425 MHz, 10.95-11.2 GHz, and 14.0-14.5 GHz frequency bands NULL and VOID.

13. The license term for the New Dawn space station is 15 years and will begin to run on the date the licensee 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 this authorization. Intelsat New Dawn is directed to file its certification with the Chief, Satellite Division, International Bureau within 10 business days after the space station commences operations at its assigned location.

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

15. This Grant is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release. 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.



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