S2948

SAT-LOA-20151231-00089

IB2015002524

Intelsat License LLC **INTELSAT 36** 

International Bureau + with conditions

Call Sign S2948 Grant Date 06/09/16

File # SAT-LOA - 2015 1231-00089

(or other identifier) see

From conditions

Term Dates See

Approved by OMB 3060-0678

Date & Time Filed: Dec 31 2015 4:37:51:070PM

File Number: SAT-LOA-20151231-00089

Callsign/Satellite ID: S2948

Stephen J. Duall

Chief, Satellite Policy Branch

To: conditions

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

FCC Use Only

### APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: Application for Authority to Launch and Operate Intelsat 36 at 68.5 E.L.

1-8. Legal Name of Applicant

Name:

Intelsat License LLC

Phone Number:

703-559-7848

DBA Name:

Fax Number:

703-559-8539

Street:

c/o Intelsat Corporation

E-Mail:

susan.crandall@intelsat.com

-5972

7900 Tysons One Place

City:

McLean

State:

VA

Country:

USA

Zipcode:

22102

Attention:

Susan H. Crandall

# ATTACHMENT TO GRANT IBFS File No. SAT-LOA-20151231-00089

IBFS File No(s):	SAT-LOA-20151231-00089	GRANTED-			
Licensee/Grantee:	Intelsat License LLC	With Conditions			
Call Sign:	S2948				
Satellite Name:	Intelsat 36				
Orbital Location:	8.5° E.L.				
(required station-	(+/- 0.05 degrees east/west)				
keeping tolerance)		COMMISSION			
Administration:					
Nature of Service:	Fixed-Satellite Service (FSS)	International Bureau Satellite Division			
Scope of Grant:	Authority to construct, deploy, and operate a C- and Ku -band geostationary orbit space station				
Service Area(s):	See Item S6 of Schedule S and accompanying .gxt files				
Frequencies:	3650–3700 MHz (space-to-Earth) 3700–4200 MHz (space-to-Earth) 11.2–11.45 GHz (space-to-Earth) 11.7–12.5 GHz (space-to-Earth)  5925–6675 MHz (Earth-to-space) 6675–6725 MHz (Earth-to-space) 13.0–13.25 GHz (Earth-to-space) 17.3–18.1 GHz (Earth-to-space)				

Operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with the Federal Communication Commission's rules not waived herein. This grant is also subject to the following conditions:

- 1. Intelsat must 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 will be held responsible for all cost-recovery fees associated with 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 of other administrations. See 47 C.F.R. § 25.111(b).
- 2. In connection with the provision of service in any particular country, Intelsat is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
- 3. Intelsat must operate Intelsat 36 at the 68.5° E.L. orbital location in compliance with all existing or future coordination agreements for this location.
- 4. Intelsat must maintain the Intelsat 36 space station within an east/west longitudinal station-keeping tolerance of  $\pm$  0.05 degrees of the 68.5° E.L. orbital location.
- 5. Intelsat's requests for waiver of Sections 25.210(a)(2), 25.210(a)(3), and 25.210(i)(1) of the Commission's rules, 47 C.F.R. §§ 25.210(a)(2), 25.210(a)(3), and 25.210(i)(1), are GRANTED. Section 25.210(a)(2) requires that the polarization sense of uplink transmissions is opposite to that of downlink transmissions on the same transponder for space stations in the Fixed Satellite Service used for domestic service in the 3700-4200 MHz and 5925-6425 MHz frequency bands. Section 25.210(a)(3) requires that space stations in the FSS used for domestic service in the 3700-4200 MHz

# ATTACHMENT TO GRANT IBFS File No. SAT-LOA-20151231-00089

and 5925-6425 MHz frequency bands be capable of switching polarization sense upon ground command. Section 25.210(i)(1) requires space station antennas in the FSS to be designed to meet a cross-polarization isolation of at least 30 dB within the primary coverage area of the antenna. Sections 25.210(a)(2), 25.210(a)(3), and 25.210(i)(1) were eliminated as part of a recent Commission-level order streamlining Part 25 rules governing satellite communications, but the rule changes are not yet effective. The same public interest rationales for elimination of these rules justify waiver of these rules in this instance.

- 6. The operation of Intelsat 36 and associated earth stations must comply with: (i) the applicable uplink limits in Sections , 25.211, 25.218, 25.221, 25.222, 25.226, and/or 25.227 of the Commission's rules in the 5925–6675 MHz, 6675–6725 MHz, 13.0–13.25 GHz, and 17.3–18.1 GHz, frequency bands; (ii) the applicable downlink limits in Sections and/or 25.212 of the Commission's rules in the 3650–4200 MHz, 11.2–11.45 GHz, and 11.7–12.5 GHz frequency bands. These limits cannot be exceeded unless Intelsat coordinates any non-conforming operation with the operations of U.S.-licensed GSO space stations within 6 degrees of 68.5° E.L. Non-conforming operation must also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of 68.5° E.L. involving approved communications with U.S.-licensed earth stations.
- 7. The FSS operations of Intelsat 36 and associated earth stations must be in accordance with the Appendix 30B satellite network Odyssey FSS-68.5° E.L. filed with the ITU for operation in the 11.2–11.45 GHz (space-to-Earth) and the 13.0–13.25 GHz (Earth-to-space) frequency bands and any additional conditions resulting from the coordination of this network.
- 8. The United States remains the licensing administration of the Intelsat 36 space station and its communications payloads for purposes of International Telecommunication Union (ITU) Radio Regulation 18.1 and is the administration responsible for the operations of Intelsat 36. The U.S. Administration will not object to use of the Intelsat 36 satellite by the German Administration for claiming bringing into use or continuing the use of orbital assignments at 68.5° E.L. This grant does not in any way express a view concerning, or agreement as to, the validity or lack of validity of any ITU filing at or within the vicinity of the 68.5° E.L. orbital location.
- 9. Intelsat's use of the 3650-3700 MHz (space-to-Earth) band is subject to footnote NG185 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG185, which states that the 3650-3700 MHz use of the non-Federal FSS is limited to international inter-continental systems.
- 10. Intelsat's use of the 3650-3700 MHz (space-to-Earth) band is subject to footnote NG169 of the United States Table of Frequency Allocations, which states that after December 1, 2000, operations on a primary basis by the FSS (space-to-Earth) in the band 3650-3700 MHz must be limited to grandfathered earth stations. All other FSS earth station operations in the band 3650-3700 MHz must be on a secondary basis.
- 11. Intelsat is directed to bear in mind the needs of the passive services when operating the Intelsat 36 space station in the 6425-6725 MHz frequency band pursuant to Footnote 5.458 to the United States Table of Frequency Allocations, 47 C.F.R. §2.106, Footnote 5.458.
- 12. Operations of Intelsat 36 in the 6650-6675.2 MHz (Earth-to-space) frequency band is subject to the terms of footnotes 5.149 and US342 to the United States Table of Frequency Allocations, 47 C.F.R. §2.106, 5.149, US342, which urge applicants to take all practicable steps to protect the radio astronomy service from harmful interference.

<sup>&</sup>lt;sup>1</sup> Comprehensive Review of Licensing and Operating Rules for Satellite Services, Second Report and Order, 30 FCC Rcd 14713 (2015) (Part 25 Review Second R&O) (not yet published in the Federal Register).

<sup>&</sup>lt;sup>2</sup> Part 25 Second Report and Order, 30 FCC Rcd at 14816-17, paras. 331-333.

# ATTACHMENT TO GRANT IBFS File No. SAT-LOA-20151231-00089

- 13. Intelsat seeks to operate Intelsat 36 in the 3650-3700 MHz (space-to-Earth), 6675-6725 MHz (Earth-to-space), 11.2-11.45 GHz (space-to-Earth), 11.7-12.5 GHz (space-to-Earth), 13.0-13.25 GHz (Earth-to-space), and 17.3-18.1 GHz (Earth-to-space) frequency bands that are not authorized on the Intelsat 20 space station, thus, Intelsat is required to file a bond for the additional frequencies it seeks to include in the Intelsat 36 space station, pursuant to Section 25.165 of the Commission's rules, 47 C.F.R. § 25.165. Accordingly, this grant of authority in the 3650-3700 MHz (space-to-Earth), 6675-6725 MHz (Earth-to-space), 11.2-11.45 GHz (space-to-Earth), 11.7-12.5 GHz (space-to-Earth), 13.0-13.25 GHz (Earth-to-space), and 17.3-18.1 GHz (Earth-to-space) frequency bands will become NULL and VOID, with no further action on the Commission's part, if Intelsat does not meet the following requirements:
  - a. Execute a non-contingent contract for construction of the satellite within one year (June 9, 2017);
  - b. Complete the Critical Design review within two years (June 9, 2018);
  - c. Commence construction within three years (June 9, 2019); and,
  - d. Launch and begin operations within five years (June 9, 2021).
- 14. Intelsat must file a bond with the Commission in the amount of \$3,000,000, pursuant to the procedures set forth in Public Notice, DA 03-2602, 18 FCC Rcd 16283 (2003), within 30 days of this grant (July 9, 2016);
- 15. The license term for the space station is 15 years and will begin on the date that Intelsat certifies to the Commission that Intelsat 36 has been successfully placed into orbit and its operations fully conform to the terms and conditions of this authorization. Intelsat is directed to file its certification of commencement of operation with the Commission within five business days of Intelsat 36 being placed into operation at the 68.5° E.L. orbital location.

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.

This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 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 Date:	June 9, 2016	
Term Dates	From: See conditions	To: See conditions
Approved:	Stephen J. Duall Chief, Satellite Policy Branch	

9-16. Name of Contact Representative

Name:

Jennifer Hindin

Phone Number:

202-719-4975

Company:

Wiley Rein LLP

Fax Number:

202-719-7049

Street:

1776 K Street, NW

E-Mail:

jhindin@wileyrein.com

City:

Washington

State:

DC

Country:

USA

Zipcode:

20006

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.

6 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

o 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)

o 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?		
if Yes, complete and attach FCC Form 159.		
If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).		
Governmental Entity Noncommercial educational licensee		
Other(please explain):		
17c. Fee Classification BNY - Space Station (Geostationary)		
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:		
(a) Date pending application was filed:	(b) File number of pending application:	
Not Applicable	Not Applicable	

# 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 thebutton next to the applicable status. Choose	22. If earth station applicant, check all that apply.	
only one.  Common Carrier Non-Common Carrier	Not Applicable	
**		
23. If applicant is providing INTERNATIONAL COMMON CARRIER sifacilities:	ervice, see instructions regarding Sec. 214 filings. Choose one.Are these	
O Connected to a Public Switched Network Not connected to	to a Public Switched Network 👩 N/A	
24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all a	pplicable 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: Frequency Upper: (Please specify addit	ional 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.
23. CLASS OF STATION. Choose the Sutton 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.
o f. Non-Geostationary Space Station
g. Other (please specify)
26. TYPE OF EARTH STATION FACILITY: Not Applicable
PURPOSE OF MODIFICATION
27. The purpose of this proposed modification is to: (Place an "X" in the box(es) next to all that  Not Applicable
apply.)
ENVIRONMENTAL POLICY
28. Would a Commission grant of any proposal in this application or amendment have a significant environmental Yes No
28. Would a Commission grant of any proposal in this application or amendment have a significant environmental Yes No 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.

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?	O Yes ⊗ No O N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes   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?	
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.	
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.	
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.	O Yes O No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attemptiing 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	O Yes O 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.	O Yes O 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 "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.	0	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.)

Intelsat License LLC, pursuant to Section 25.114 of the rules of the Federal Communications Commission, hereby applies to launch and operate a C/Ku-band satellite, to be known as Intelsat 36, at the 68.5 E.L. orbital location. Intelsat 36 is scheduled for launch in August 2016 and will be collocated with Intelsat 20 (call sign S2847), which

Narrative & Exhibits

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.	<b>⊚</b> 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.	<b>o</b> c
	.gxt files

### 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	onse.)	
O Individual		
O Unincorporated Association		
O Partnership		
O Corporation		
O Governmental Entity		
Other (please specify) Limited Liability Company		
45. Name of Person Signing Susan H. Crandall	46. Title of Person Signing Assoc. Gen. Counsel, Intelsat Corporation	
47. Please supply any need attachments.		
1: 2:	3:	
(U.S. Code, Title 18, Section 1001), AND/OR R	RM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT EVOCATION OF ANY STATION AUTHORIZATION OR FORFEITURE (U.S. Code, Title 47, Section 503).	

Completed Schedule S

#### FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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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.

# 43. Description. (Summarize the nature of the application and the services to be provided).

Intelsat License LLC, pursuant to Section 25.114 of the rules of the Federal Communications Commission, hereby applies to launch and operate a C/Ku-band satellite, to be known as Intelsat 36, at the 68.5 E.L. orbital location. Intelsat 36 is scheduled for launch in August 2016 and will be collocated with Intelsat 20 (call sign S2847), which will continue to operate at 68.5 E.L.