SAT-AMD-20120420-00071 S2861 DIRECTV Enterprises, LLC **DIRECTV KU-79W** 

IB2012001078

File # SAT-AMD-20120420-00071 From conditions GRANTED\* International Bureau

Call Sign S2861

Grant Date 07/12/12

(or other identifier) see

Term Dates See To: conditions Approved by OMB 3060-0678

SAT-LOA-20120316-00051

Date & Time Filed: Apr 20 2012 5:08:40:940PM File Number: SAT-AMD-20120420-00071

\*with conditions

Approved: Stephen J. Duall Chief, Satellite Policy Branch

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM

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FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

#### **APPLICANT INFORMATION**

Enter a description of this application to identify it on the main menu: SAT-AMD-DIRECTV79W (1)

1-8. Legal Name of Applicant

Name:

DIRECTV Enterprises, LLC

**Phone Number:** 

301-663-0053

**DBA** 

Fax Number:

240-358-0569

Name:

**Street:** 

2230 E. Imperial Hwy

E-Mail:

jwengryniuk@directv.com

CA/LAI/N340

City:

El Segundo

State:

CA

Country:

USA

Zipcode:

90245

Attention:

Mr Jack M Wengryniuk

# Attachment to Grant IBFS File Nos. SAT-LOA-20120316-00051, SAT-AMD-20120420-00071 Call Sign S2861

The application of DIRECTV Enterprises, LLC (DIRECTV), IBFS File No. SAT-LOA-20120316-00051, as amended by IBFS File No. SAT-AMD-20120420-00071, to construct, launch, and operate DIRECTV KU-79W (Call Sign S2861), a 12/14 GHz-band geostationary-satellite orbit space station at the 79° W.L. orbital location, IS GRANTED. Accordingly, DIRECTV is authorized to operate the DIRECTV KU-79W space station at the 79° W.L. orbital location to provide Fixed-Satellite Service (FSS) in the 11.7-12.2 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space) bands. DIRECTV is also authorized to conduct telemetry, tracking, and command (TT&C) operations necessary to maintain DIRECTV KU-79W at the 79° W.L. orbital location using frequencies centered on 11.704 GHz and 11.705 GHz (space-to-Earth) and on 14.005 GHz and 14.495 GHz (Earth-to-space). DIRECTV's operations are subject to the technical specifications set forth in DIRECTV's application, the Federal Communications Commission's rules, and the following conditions:

- 1. DIRECTV 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 for this space station, in accordance with the ITU Radio Regulations. DIRECTV shall 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, by successfully completing coordination agreements. 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. See 47 C.F.R. § 25.111(b).
- 2. In connection with the provision of service in any particular country, DIRECTV is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
- 3. DIRECTV shall operate the DIRECTV KU-79W space station at the 79° W.L. orbital location in compliance with all existing and future coordination agreements.
- 4. DIRECTV shall maintain its space station within an east-west longitudinal station-keeping tolerance of  $\pm 0.05^{\circ}$  of its assigned 79° W.L. orbital location.
- 5. DIRECTV's request for a waiver of Section 25.114(c)(9) of the Commission's rules, 47 C.F.R. § 25.114(c)(9), is granted. Section 25.114(c)(9) requires space station applicants to specify the arrangements for TT&C of their space stations. DIRECTV states that it will conduct TT&C operations from a remote site, but has not yet chosen the site(s). As a condition of this waiver, DIRECTV must file a letter to the Chief, Satellite Division, International Bureau, no

Attachment.

<sup>&</sup>lt;sup>1</sup> The application was accepted for filing on May 4, 2012. Policy Branch Information, Space Station Applications Accepted for Filing, Report No. SAT-00864 (May 4, 2012). The Communications Secretariat of the Republic of Argentina filed comments in response to the Public Notice on June 4, 2012. DIRECTV filed a response to Argentina's comments on June 14, 2012. The issues raised by Argentina are addressed in condition 3 of this

# Attachment to Grant IBFS File Nos. SAT-LOA-20120316-00051, SAT-AMD-20120420-00071 Call Sign S2861

later than 10 business days after the completion of Critical Design Review, specifying the addresses and telephone numbers of its TT&C earth stations.

- 6. DIRECTV's authorization for a 12/14 GHz FSS space station at the 79° W.L. orbital location will be null and void with no further action on the Commission's part if the space station is not 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 contract for construction within one year (July 12, 2013);
  - b. Complete the Critical Design Review within two years (July 12, 2014);
  - c. Commence construction within three years (July 12, 2015);
  - d. Launch and begin operations within five years (July 12, 2017); and
  - e. DIRECTV 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 (August 11, 2012).
- 7. The license term for the DIRECTV KU-79W space station, Call Sign S2861, is 15 years and will begin to run on the date that DIRECTV certifies to the Commission that the satellite has been successfully placed into orbit and its operations fully conform to the terms and conditions of this authorization. DIRECTV is directed to file its certification with the Chief, Satellite Division, International Bureau, within 10 days after the space station commences operations at its assigned location.
- 8. DIRECTV is afforded 30 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.
- 9. 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.

File # SAT-AMD-20120420-00071

Call Sign \$2861 Grant Date 0 7/12/12

(or other identifier)

See Torm Dates See

From Conditions

To: Conditions

Approved: Stephen J. Duall

Chief, Satellite Policy Branch

2

9-16. Name of Contact Representative

Name:

William M. Wiltshire

**Phone Number:** 

202-730-1350

Company:

Wiltshire & Grannis LLP

Fax Number:

202-730-1301

Street:

1200 18th Street NW

E-Mail:

wwiltshire@wiltshiregrannis.com

City:

Washington

State:

DC

**Country:** 

USA

Zipcode:

20036-

Attention:

William M. Wiltshire

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.	(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
a1. Earth Station a2. Space Station	<ul> <li>b4. Modification of License or Registration</li> <li>b5. Assignment of License or Registration</li> <li>b6. Transfer of Control of License or Registration</li> <li>b7. Notification of Minor Modification</li> <li>(N/A) b8. Application for License of New Receive—Only Station Using Non—U.S. Licensed Satellite</li> <li>(N/A) b9. Letter of Intent to Use Non—U.S. Licensed Satellite to Provide Service in the United States</li> <li>(N/A) b10. Other (Please specify)</li> <li>(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</li> <li>(N/A) b12. Application for Database Entry</li> <li>b13. Amendment to a Pending Database Entry Application</li> <li>b14. Modification of Database Entry</li> </ul>
17c. Is a fee submitted with this application of If Yes, complete and attach FCC Form if Governmental Entity Noncomme Other(please explain):	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
17d.  Fee Classification CWY – Space Station A	amendment(Geostationary)

18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pendi modification please enter only the file number.	ing application enter both fields, if this filing is a per:	
(a) Call sign of station:	(a) Date pending application was filed:	(b) File number:	
	03/16/2012	SATLOA2012031600051	
TYPE OF SERVICE			
20. NATURE OF SERVICE: This filing is  a. Fixed Satellite	s for an authorization to provide or use the follo	wing type(s) of service(s): Select all that apply:	
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	22. If earth station applicant, check all that apply.
only one.	Using U.S. licensed satellites
Common Carrier Non-Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER s facilities:	service, see instructions regarding Sec. 214 filings. Choose one. Are these
Connected to a Public Switched Network Not connected to a	Public Switched Network 👩 N/A

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: 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
o b. Temporary—Fixed Earth Station
o c. 12/14 GHz VSAT Network
o d. Mobile Earth Station
e. Geostationary Space Station
of. Non-Geostationary Space Station
o 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.)
27. The purpose of this proposed modification is to. (I face all X in the box(es) flext 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 & Double
j — authorization to change Points of Communication (satellites & amp; countries)
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
1 — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o — Other (Please specify)

## ENVIRONMENTAL POLICY

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, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	rou	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	•	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	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?	0	Yes	0	No	0	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?	0	Yes	0	No	<b>●</b> <sup>1</sup>	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.		<b>⊚</b> /	/es	C	) No	)
	Narra	ative				
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.		<b>o</b>	/es	•	) 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 explination of circumstances.	O Yes	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	<b>⊚</b> 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	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.	<b>⊚</b> Yes	O 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	<b>⊚</b> No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, w coordinated or is in the process of coordinating the space station?	hat administr	ation has

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.)

DIRECTV hereby amends its pending application for the authority to launch and operate a KU-band spacecraft at the nominal 79 W.L. orbital location, to address certain clerical errors.

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.	O 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>⊚</b> 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

## **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.

144 A 11 (1) (2) (2)	11	
44. Applicant is a (an): (Choose the button next to appli	cable response.)	
O Individual		
O Unincorporated Association		
O Partnership		
Corporation		
Governmental Entity		
Other (please specify)		
• • • • • • • • • • • • • • • • • • •		
45. Name of Person Signing	46. Title of Person Signing	
Romual Pontual	Executive Vice President	
>		
	ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISON	MENT
	01), AND/OR REVOCATION OF ANY STATION AUTHORIZATION a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).	
(0.5. Code, 11110 47, Section 512(8	1)(1)), AND/OK FORFEITORE (0.3. Code, Title 47, Section 303).	

## FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060–0678.

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.

## MINOR AMENDMENT TO DIRECTV KU-79W APPLICATION

DIRECTV Enterprises, LLC ("DIRECTV") has filed an application for authority to launch and operate a Ku-band satellite in the Fixed Satellite Service at the nominal 79° W.L. orbital location, to be designated as DIRECTV KU-79W. In this Application, DIRECTV submits minor amendments to correct a few clerical errors in its original application, including a revised Schedule S that incorporates all such corrections. In accordance with Section 25.117(d)(1) of the Commission's rules, DIRECTV identifies in this Application only those items of information that should be changed from its original application. DIRECTV hereby certifies that the remaining information in its original application has not changed.

## 1. TT&C Frequencies

In the Schedule S filed with its original application, DIRECTV specified that telemetry would be transmitted on two frequencies: 11724 MHz and 11725 MHz. Those frequencies fall within one of the satellite's communications transponders. The correct frequencies are 11704 MHz and 11705 MHz, as shown on the revised Schedule S attached hereto. DIRECTV notes that the TT&C link budget submitted as Exhibit C to its application narrative used one of the correct telemetry frequencies (11705 MHz).

#### 2. Antenna Gain Contour

The original antenna gain contour pattern for the Mexico beam submitted in .gxt format did not include a -8 dB contour. The revised Schedule S attached hereto includes a new .gxt file that includes the -8dB contour for that beam.

<sup>&</sup>lt;sup>1</sup> See IBFS File No. SAT-LOA-20120316-00051.

## 3. Solar Array

The original application indicated that the area of the satellite's solar array would be 13 m<sup>2</sup>. This figure is erroneous, as it relates to only a single wing of the solar array. The revised Schedule S attached hereto reflects the correct value of 26 m<sup>2</sup> for both wings of the array.

## 4. Remote Location for TT&C - Request for Waiver

In the Schedule S accompanying its original application, DIRECTV indicated that it planned to operate the satellite by remote control, but did not provide further information related to the remote control point. However, as DIRECTV stated in its original narrative application, it "has not yet contracted for the construction of the DIRECTV KU-79W satellite, and therefore has not yet finalized arrangements for tracking, telemetry and control." (Application Narrative at 10.) In these circumstances, DIRECTV is unable to provide the contact information for the remote control point requested in Schedule S.

Accordingly, to the extent necessary, DIRECTV requests a waiver of the requirement to submit such information. The Commission may waive its rules for good cause shown,<sup>2</sup> or where the particular facts make strict compliance inconsistent with the public interest.<sup>3</sup> At this very early stage, DIRECTV knows that it will conduct TT&C operations for this satellite from a remote site, but does not know any details related those TT&C operations. Accordingly, in this case, there is no way to provide the information requested.

<sup>&</sup>lt;sup>2</sup> 47 C.F.R. § 1.3; see also WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969), cert. denied, 409 U.S. 1027 (1972).

<sup>&</sup>lt;sup>3</sup> See Northeast Cellular Tel. Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

Were the Commission to delay or deny the application for lack of such information, it would unnecessarily require satellite applicants to finalize all arrangements for TT&C years before launch of a new satellite – in fact, before the satellite authorization is even granted. This could significantly delay or deny the provision of valuable satellite services to the public. There can be no realistic concern that the inability to provide specific information on TT&C arrangements at this early stage could affect ultimate operations of the satellite. DIRECTV operates a fleet of satellites, and clearly will arrange for TT&C of DIRECTV KU-97W well in advance of launching the satellite just as it has done for its many other satellites. At that point, DIRECTV will be in a position to supply the information requested by Schedule S. At present, however, DIRECTV respectfully requests that the Commission waive any requirement for submission of information on the remote control site for TT&C and continue to process the application to completion as expeditiously as possible.

Respectfully submitted,

DIRECTV ENTERPRISES, LLC

By: /s/
Romulo Pontual
Executive Vice President

## **ENGINEERING CERTIFICATION**

The undersigned hereby certifies	to the Federal	Communications	Commission as
follows:			

- (i) I am the technically qualified person responsible for the engineering information contained in the foregoing Amendment,
- (ii) I am familiar with Part 25 of the Commission's Rules, and
- (iii) I have either prepared or reviewed the engineering information contained in the foregoing Minor Amendment, and it is complete and accurate to the best of my knowledge and belief.

Signed:	
/s/	
Jack Wengryniuk	
April 20, 2012	
Dota	