

** GRANT IN PART / DEFER IN PART **

S3021 SAT-STA-20171104-00149 IB2017003143
ES 172 LLC
EUTELSAT 172B



File # SAT-STA-20171104-00149

Call Sign S3021 Grant Date 11/16/17
(or other identifier)

Term Dates period of 60 days
From 11/16/17 To:

Approved by OMB
3060-0678

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

Date & Time Filed: Nov 4 2017 7:54:47:720AM
File Number: SAT-STA-20171104-00149
Callsign:

FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY
FOR OFFICIAL USE ONLY


APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
EUTELSAT 172B 60-Day STA Request

1. Applicant

Name:	ES 172 LLC	Phone Number:	5713325626
DBA Name:		Fax Number:	United States
Street:	8 Temasek Boulevard #15-02 Suntec Tower 3	E-Mail:	cnalda@lmiadvisors.com
City:	Singapore 038988	State:	DC
Country:	USA	Zipcode:	20037 -
Attention:	Mr Ken Loke		

ATTACHMENT TO GRANT
ES 172 LLC
IBFS File No. SAT-STA-20171104-00149

IBFS File No(s):	SAT-STA-20171104-00149	GRANT IN PART – DEFER IN PART With Conditions  International Bureau Satellite Division
Licensee/Grantee:	ES 172 LLC (Eutelsat)	
Call Sign:	S3021	
Satellite Name:	EUTELSAT 172B	
Orbital Location: (required station-keeping tolerance)	172° E.L. (± 0.10 degrees)	
Administration:	United States of America	
Nature of Service:	Fixed-Satellite Service (FSS)	
Scope of Grant:	Grant of special temporary authority for a period of 60-days to provide FSS via EUTELSAT 172B at the 172° E.L. orbital location, as specified below, and to conduct telemetry, tracking, and command (TT&C) operations necessary to maintain EUTELSAT 172B at the 172° E.L. orbital location. Deferral of request for authority to provide “incidental” FSS in the 12.7-12.75 GHz band in the space-to-Earth direction to earth stations inside the United States and its Territories and Possessions. ¹	
Previous Grant(s):	SAT-ASG-20120626-00105; SAT-ASG-20121227-00226; SAT-LOA-20031218-00358	
Service Area(s):	North-East Asia, North Pacific, Oahu GW (Gateway), Pacific Ocean Region, South-East Pacific, South Pacific and South-West Pacific	
Frequencies:	3700-4200 MHz (space-to-Earth) 10.95-11.20 GHz (space-to-Earth) 11.45-11.7 GHz (space-to-Earth) 12.2-12.70 GHz (space-to-Earth) 12.7-12.75 GHz (space-to-Earth) - outside United States and its Territories and Possessions, see scope of grant above 5925-6425 MHz (Earth-to-space) 14.0-14.5 GHz (Earth-to-space) TT&C: Telemetry: 11200.6 MHz and 12250.1 MHz Command: 14499.8 MHz	
<p>Unless otherwise specified herein, operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission’s rules not waived herein. This grant is also subject to the following conditions:</p> <ol style="list-style-type: none"> 1. All operations under this grant of special temporary authority must be on an unprotected and non-harmful interference basis, <i>i.e.</i>, Eutelsat must not cause harmful interference to, and must not claim protection from interference caused to it by, any other lawfully operating station. 2. In the event of any harmful interference under this grant of special temporary authority, Eutelsat must cease operations immediately upon notification of such interference and must inform the Commission, in writing, immediately of such an event. 3. Eutelsat must coordinate operations of EUTELSAT 172B with existing geostationary space stations to 		

¹ Eutelsat seeks a waiver of section 2.106 of the Commission’s rules in connection with this request, since there is no allocation in ITU Region 2 or the U.S. Table of Frequency Allocations for FSS in the space-to-Earth direction in 12.7-12.75 GHz.

ATTACHMENT TO GRANT
ES 172 LLC
IBFS File No. SAT-STA-20171104-00149

- ensure that no unacceptable interference results from its operations at the 172° E.L. orbital location.
4. In connection with the provision of service in any particular country, Eutelsat is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
 5. Eutelsat must operate EUTELSAT 172B at the 172° E.L. orbital location in compliance with all existing or future coordination agreements for this location.
 6. While at the 172° E.L. orbital location, Eutelsat must maintain the EUTELSAT 172B spacecraft with an east/west longitudinal station-keeping tolerance of +/- 0.10 degrees.
 7. Eutelsat's request for a waiver of 47 CFR § 2.106 of the Commission's rules to allow the use of the 12.2-12.7 GHz frequency on an unprotected, non-interference basis IS GRANTED. One of the operating conditions required by the Commission for the operation of EUTELSAT 172A was that Eutelsat may not provide downlink services into the United States and its possessions if the 12.2-12.75 GHz frequency band.² Eutelsat states that some of the beams on EUTELSAT 172B have "incidental coverage" of U.S. territory and possessions. Eutelsat also states that earth stations receive downlink transmissions in the 12.2-12.75 GHz frequency band by using direction antennas and that there are no U.S. broadcasting satellite service (BSS) satellites transmitting from orbital locations within 50 degrees of the 172° E.L. orbital location; thus, according to Eutelsat, there is no potential for interference between FSS and BSS downlink signals. Eutelsat also states that its operations have incidental coverage of Region I and thus can operate on a non-interference basis with any BSS downlinks. Additionally, although the Commission has authorized OneWeb's non-geostationary satellite orbit FSS system to operate in the 12.2-12.7 GHz band, Eutelsat states that there are currently NGSO FSS systems in this band and that EUTELSAT 172B downlink operations, like the OneWeb system, "comply with PFD limits in the 12.2-12.7 GHz [band] and are consistent with No. 5.492 of the ITUS Radio Regulations."
 8. Eutelsat's request for a waiver of section 25.210(j) of the Commission's rules, 47 CFR § 25.210(j) to allow EUTELSAT 172B operate with a station-keeping tolerance of $\pm .10^\circ$ IS GRANTED. Section 25.210(j) states that space stations "must be maintained within 0.05 degrees of their assigned orbital longitude in the east/west direction, unless specifically authorized by the Commission to operate with a different longitudinal tolerance." Eutelsat states that EUTELSAT 172B is designed to operate with a station-keeping tolerance of $\pm .10^\circ$, and will only overlap in station-keeping with EUTELSAT 172A. According to Eutelsat, the larger station-keeping volume will allow Eutelsat more flexibility to use EUTELSAT 172B's electric propulsion for station-keeping. This waiver and the operations it permits shall terminate in the event that a satellite is launched into a location such that its station-keeping volume would overlap the EUTELSAT 172B satellite's $\pm .10^\circ$ degree station-keeping volume, but would not overlap EUTELSAT 172B's $\pm 0.05^\circ$ station-keeping volume, unless Eutelsat has successfully coordinated its physical operations with those of the other spacecraft. This waiver is limited to this spacecraft, does not extend any other spacecraft, and it is limited to operations at the 172° E.L. orbital location.
 9. Eutelsat is granted a waiver of section 25.113(g), 47 CFR § 25.113(g), which requires that a "launch authorization and station license (*i.e.*, operating authority) must be applied for and granted before a space station may be launched and operated in orbit." Eutelsat did not seek replacement authority for EUTELSAT 172A prior to launching EUTELSAT 172B in 2017. However, the operation of EUTELSAT 172B in the period after the satellite's launch have not resulted, and based on the conditions adopted herein, will not result in any adverse effects on U.S. interests. Therefore, the prior approval requirements of section 25.113(g) would not be subverted by, and is not an impediment to, granting this special temporary authority.
 10. Pursuant to footnote US211 of the United States Table of Frequency Allocations, 47 CFR § 2.106, services operating in the 10.7-11.7 GHz band shall take all practicable steps to protect the radio

² See IBFS File No. SAT-LOA-20031218-00358.

ATTACHMENT TO GRANT
ES 172 LLC
IBFS File No. SAT-STA-20171104-00149

astronomy service from harmful interference.

11. Pursuant to footnote US342 of the United States Table of Frequency Allocations, 47 CFR § 2.106, services operating in the 14.47-14.5 GHz band shall take all practicable steps to protect the radio astronomy service from harmful interference.

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:	November 16, 2017
---------------------	-------------------

Term Dates	From: November 16, 2017	To: period of 60 days
-------------------	--------------------------------	------------------------------

Approved:



Stephen J. Duall
Chief, Satellite Policy Branch

2. Contact

Name:	Carlos M Nalda	Phone Number:	5713325626
Company:	LMI Advisors	Fax Number:	
Street:	2550 M Street NW Suite 345	E-Mail:	cnalda@lmiadvisors.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20037 --
Attention:		Relationship:	Other

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)

3. Reference File Number SATRPL2017092700136 or Submission ID

4a. 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):

4b. Fee Classification CRY – Space Station (Geostationary)

5. Type Request

- Change Station Location Extend Expiration Date Other

6. Temporary Orbit Location
172 E.L.

7. Requested Extended Expiration Date

8. Description (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Request for 60-day STA commencing November 15, 2015 for use prior to grant of replacement satellite application.

9. 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

10. Name of Person Signing
Ken Loke

11. Title of Person Signing
President

12. Please supply any need attachments.

Attachment 1: STA Narrative

Attachment 2:

Attachment 3:

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).

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.

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of

Application of ES 172 LLC for a 60-Day)
Special Temporary Authorization (“STA”)) Call Sign S3021
to Operate the EUTELSAT 172B Satellite)
at the 172° E.L. Orbital Location) File No.:

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

Pursuant to Section 25.120 of the Commission’s rules, 47 C.F.R. § 25.120, ES 172 LLC, an indirect, wholly owned subsidiary of Eutelsat S.A. (“Eutelsat”), respectfully seeks a 60-day special temporary authorization (“STA”) to operate the EUTELSAT 172B satellite (Call Sign S3021) from the 172° East Longitude (“E.L.”) orbital location during the pendency of its underlying application to replace the EUTELSAT 172A satellite currently operating at that location.¹ The EUTELSAT 172B satellite is currently undergoing in-orbit testing (“IOT”) at the 176° E.L. orbit location. ES 172 LLC anticipates the successful completion of IOT within days and seeks to transfer commercial traffic from the aging EUTELSAT 172A satellite to the next-generation EUTELSAT 172B satellite commencing on November 15, 2017.

I. DISCUSSION

ES 172 LLC has filed an application for Commission authority to operate the EUTELSAT 172B satellite to replace existing EUTELSAT 172A operations in certain C-band and Ku-band frequencies at the 172° E.L. orbit location.² While the Commission considers this application, ES

¹ ES 172 LLC’s application to license EUTELSAT 172B as a replacement satellite for S2610 at the 172° E.L. orbital location is pending before the Commission. *See* File No. SAT-RPL-20170927-00136, Call Sign S3021 (filed Sept. 27, 2017, accepted for filing Oct. 20, 2017) (“*EUTELSAT 172B Application*”).

² Other EUTELSAT 172B payloads that support additional service and gateway links will operate under authority issued by France.

172 LLC seeks this STA to facilitate the orderly transition of critical satellite services from EUTELSAT 172A to EUTELSAT 172B beginning in mid-November.³

In support of near-term EUTELSAT 172B operations, Hawaii Pacific Teleport (“HPT”) is filing an STA request,⁴ and has filed an underlying modification application,⁵ to operate a gateway earth station in the Ka-band to provide backhaul for EUTELSAT 172B service links. In addition, because EUTELSAT 172B includes Ku-band high-throughput satellite (“HTS”) beams specifically designed to support mobility applications such as earth stations aboard aircraft (“ESAAs”) in the Asia-Pacific region, both Panasonic Avionics and The Boeing Company have filed STA requests seeking authority to communicate with EUTELSAT 172B as soon it commences operations.⁶

The multiple applications and STA requests associated with EUTELSAT 172B include substantial technical and legal showings regarding the satellite’s proposed operations and demonstrate the strong public interest considerations associated with near-term access to this next-generation satellite. Notably, the *EUTELSAT 172B Application* provides the information required by Section 25.114 of the Commission’s rules, 47 C.F.R. § 25.114, including Schedule S data and other information related to the proposed satellite operations. ES 172 LLC hereby incorporates by

³ ES 172 LLC acknowledges that grant of the requested STA is without prejudice to any determination that the Commission may make regarding pending or future applications regarding the EUTELSAT 172B satellite. Any action taken or expense incurred as a result of operations pursuant to the requested STA is solely at ES172 LLC’s risk.

⁴ HPT is planning to concurrently file a 60-Day STA request to communicate with the EUTELSAT 172B satellite under Call Sign E150010 (anticipated filing date of November 2, 2017).

⁵ See Hawaii Pacific Teleport L.P., File Nos. SES-MFS-20170721-00787 and SES-AFS-20171007-01112, Call Sign E150010

⁶ See Panasonic Avionics Corporation, File No. SES-STA-20171003-01104, Call Sign E100089; The Boeing Company, SES-STA-20171006-01107, Call Sign E140097.

reference the satellite operational parameters and other relevant information previously provided in the *EUTELSAT 172B Application*, including the waivers requested therein.

The *EUTELSAT 172B Application* was placed on Public Notice on October 20, 2017, but the 30-day public notice requirement and possible comments or petitions will prevent the Commission from granting a license before the planned transition of customer traffic to EUTELSAT 172B is scheduled to begin. This 60-day STA is needed to enable ES 172 LLC to begin delivering the benefits of that satellite's superior HTS mobility and other broadband services as quickly as possible to U.S. service providers and network operators in the Asia-Pacific region.

ES 172 LLC respectfully requests this 60-day STA pursuant to Section 25.120 of the Commission's rules, 47 C.F.R. § 25.120. Section 25.120(a) provides that STA requests should be filed at least three working days prior to the date of commencement of the proposed operations. Here, ES 172 LLC is proposing to commence operations on or about November 15, 2017, immediately following the transfer of customer traffic from EUTELSAT 172A to EUTELSAT 172B. Additionally, the Commission may grant a 60-day STA without placing it on public notice if the applicant plans to file a request for regular authority for the operations. As discussed, ES 172 LLC currently has a replacement satellite application pending with the Commission.

Grant of this STA request is in the public interest because it will enable commencement of service of on EUTELSAT 172B, including new HTS spot beams supporting satellite mobility applications, thus enhancing capacity and the efficiency of satellite services provided to U.S. customers in the Asia-Pacific region. Moreover, this STA will facilitate the uninterrupted provisioning of satellite services for existing users of EUTELSAT 172A satellite capacity, including many U.S. customers, by permitting the orderly transition of customer traffic from EUTELSAT 172A to EUTELSAT 172B. Grant will also facilitate use of a more efficient satellite and further enhance U.S. leadership in satellite-based broadband mobility services.

II. CONCLUSION

In view of the foregoing, the public interest would be served by a grant of a 60-day STA to allow ES 172 LLC to operate the EUTELSAT 172B satellite at the 172° E.L. orbital location in accordance with the parameters described in the *EUTELSAT 172B Application*, commencing on November 15, 2017, or as soon as practicable thereafter.