Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Application of	)	
	)	
ES 172 LLC	)	File No. SAT-RPL-_____
	)	
For Authority to Operate the Replacement Payloads of the EUTELSAT 172B Satellite in the 3700-4200 MHz, 5925-6425 MHz, 10.95-11.20 GHz, 11.45-11.7 GHz, 12.2-12.75 GHz and 14.0-14.5 GHz Bands at 172.0˚ E.L.	)	
	)	
Expedited Action Requested	)	
	)	

APPLICATION OF ES 172 LLC

By this application, ES 172 LLC, an indirect, wholly owned subsidiary of Eutelsat S.A. ("Eutelsat"), respectfully requests authority to operate the C-band and Ku-band payloads of the EUTELSAT 172B satellite on a non-common carrier basis at the 172˚ East Longitude ("E.L.") orbit location to replace the U.S.-licensed EUTELSAT 172A satellite currently operating at that location.[1] The EUTELSAT 172B satellite has been registered by France, it is currently in transfer orbit to a temporary location for in-orbit testing ("IOT") scheduled to take place in October 2017, and seeks to begin long-term commercial operations at 172˚E.L. pursuant to Commission license authority in the C-band and Ku-band frequencies specified herein as soon as practicable thereafter.

Grant of the requested authority would be consistent with Commission rules and precedent, would serve the public interest by authorizing new satellite capacity to replace an aging U.S.-licensed satellite, and would enhance competition and U.S. leadership in satellite-based mobility and other broadband communications services.

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1 *See generally* ES 172 LLC, File No. SAT-ASG-20121227-00226, Call Sign S2610 (granted July 11, 2013) ("*ES 172 LLC Assignment*").

I. Introduction and Background

ES 172 LLC is the licensee of the EUTELSAT 172A satellite, which is currently authorized by the Commission at the 172˚E.L. orbit location. Together with its Eutelsat affiliates, ES 172 LLC operates EUTELSAT 172A's communications payloads to support a wide range of traditional fixed-satellite service ("FSS") and satellite mobility applications throughout the Asia-Pacific region.

Eutelsat recently launched the EUTELSAT 172B satellite, which is designed to replace and enhance the broadband satellite services offered by EUTELSAT 172A.[2] Like the EUTELSAT 172A satellite, EUTELSAT 172B includes a C-band payload operating in the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) bands and Ku-band payloads operating in the 10.95-11.20 GHz, 11.45-11.7 GHz and 12.2-12.75 GHz bands (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space) bands, as well as high-throughput satellite ("HTS") beams specifically designed to support Ku-band satellite mobility applications. These payloads will operate under U.S. satellite network filings at the International Telecommunication Union ("ITU") and the Commission authority requested herein.

The EUTELSAT 172B satellite also includes additional Ku-band frequencies at 11.2-11.45 GHz (space-to-Earth) and 13.0-13.25 GHz and 13.75-14.0 GHz (Earth-to-space) not operated on EUTELSAT 172A, as well as Ka-band gateway beams at 18.4-19.2 GHz (space-to-Earth) and 27.5-29.15 GHz (Earth-to-space) to support Ku-band service link operations.[3] These

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[2] ES 172 LCC plans to file an application to relocate the EUTELSAT 172A satellite upon successful deployment of EUTELSAT 172B.

[3] Hawaii Pacific Teleport, L.P. has filed an earth station modification application to support gateway operations for the EUTELSAT 172B satellite from its teleport facility in Hawaii. *See* Hawaii Pacific Teleport, L.P., Earth Station Modification Application, File No. SES-MFS-20170721-00787 (Call Sign E150010).

payloads will operate under French satellite network filings at the ITU pursuant to authority issued by French authorities and are expressly excluded from this application.[4]

Given these unique circumstances, ES 172 LLC and Eutelsat have been engaged in extensive consultations to confirm the appropriate approach for authorizing EUTELSAT 172B operations. This application, including the dual-administration licensing approach contemplated herein, is the result of those consultations.

ES 172 LLC requests expedited Commission review of this application to permit an orderly transition of customer traffic from EUTELSAT 172A to EUTELSAT 172B at the earliest possible time, as well as to meet the increasing demand for satellite mobility and other services in the United States and throughout the Pacific region. To the extent necessary and subject to the Commission's rules and policies, ES 172 LLC may file an STA request for interim operation of EUTELSAT 172B during the pendency of this licensing proceeding.

II. ES 172 LLC Is Fully Qualified to Hold the Authority Requested Herein

Authorizing the operation of C-band and Ku-band replacement payloads of the EUTELSAT 172B satellite at 172° E.L. will permit ES 172 LLC to provide continued and expanded service to customers in the United States and elsewhere in the region. Furthermore, grant of the requested authorization is consistent with Commission policy and precedent.

A. Legal Qualifications

The legal qualifications of ES 172 LLC, a wholly-owned subsidiary of Eutelsat and the current licensee of EUTELSAT 172A, are a matter of record before the Commission.[5] Eutelsat

[4] Although it does not seek Commission authority to operate in these bands, ES 172 LLC provides relevant information regarding these bands for the Commission's information and possible reference by U.S. earth station applicants that may seek to communicate with the satellite in these bands.

[5] *See generally ES 172 LLC Assignment*.

and its affiliates, including Satelites Mexicanos, S.A. de C.V d/b/a Eutelsat Americas, operate many satellites that have been approved by the Commission for inclusion on the Permitted Space Station List or as authorized points of communication for U.S. earth station licensees.[6]

In this application, ES 172 LLC requests authority to operate C-band and Ku-band capacity on EUTELSAT 172B as a replacement for the EUTELSAT 172A satellite. The frequency ranges currently licensed on EUTELSAT 172A are present on EUTELSAT 172B and are included in this application for replacement authority, with enhanced geographic coverage in certain bands compatible with satellite operations at the 172° E.L. orbit location. In addition to current usage, ES 172 LLC will operate service links in these bands to further develop satellite broadband and mobility applications throughout the Pacific region.

The Commission has established a replacement expectancy for geostationary satellite orbit ("GSO") satellite operators:

> Given the huge costs of building and operating GSO space stations, we have found that there should be some assurance that operators will be able to continue to serve their customers. Therefore, the Commission has stated that, when an orbit location remains available for a U.S. satellite with the technical characteristics of the proposed replacement satellite, it will generally authorize the replacement satellite at the same location.[7]

The Commission also has made clear that a replacement satellite need not be identical to the current spacecraft:

> We do not require replacement satellites to be technically identical to the existing satellite. We recognize that next-generation satellites will incorporate satellites with technical advancements made since the previous generation satellite was launched. We do not intend to change this policy, which facilitates state-of-the-

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6 *See, e.g.*, Permitted Space Station List (available at https://www.fcc.gov/permitted-space-station-list).

7 Amendment of the Commission's Space Station Licensing Rules and Policies, First Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 10760, 10854-55 (2003) (footnotes omitted).

> art systems. Rather, we will continue to assess only whether operations of the replacement satellite will be consistent with our international coordination obligations pursuant to regulations promulgated by the International Telecommunication Union.[8]

The EUTELSAT 172B satellite can and will operate consistent with the international coordination obligations of the United States pursuant to ITU regulations, and the coverage and other enhancements incorporated into the replacement C-band and Ku-band payloads (e.g., HTS beams in areas previously covered by regional beams) are precisely the type of technical advancements contemplated by the Commission.

B. Technical Qualifications

In the attached Form 312 (Schedule S) and Engineering Statement, ES 172 LLC demonstrates that it is technically qualified to hold the authorization requested herein. ES 172 LLC provides the information required by Section 25.114 of the Commission's rules, 47 C.F.R. § 25.114, and, with the exception of limited rule waivers requested herein, demonstrates compliance with other relevant Commission rules.

The following table shows the frequencies available for use on the EUTELSAT 172B satellite, as compared to those currently authorized by the Commission on EUTELSAT 172A, with regional service area designations indicated.[9] The geographic coverage of the satellite beams is depicted in the technical information associated with each satellite.

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8 *See id.* at 10857 (footnotes omitted).

9 The regional service area designations include HTS (High Throughput Satellite), NEA (North-East Asia), NP (North Pacific), Oahu GW (Gateway), C-POR (C-band Pacific Ocean Region), SEP (South-East Pacific), SP (South Pacific) and SWP (South-West Pacific). The "→" symbol indicates a change in service areas (from EUTELSAT 172A to EUTELSAT 172B) in which the relevant band is included. Note the attached Schedule S includes variations on these names/designations because it includes entries for each band in each regional beam.

Uplink Band	EUTELSAT 172B Regional Service Area	EUTELSAT 172A Regional Service Area	Geographic Coverage (ITU Region)
5925 – 6425 MHz*	C- POR	C- POR	R1, R2 and R3
13.0 -13.25 GHz	NEA	-	R1, R3
13.75 – 14.0 GHz	NP, NEA, SEP, SWP, SP	-	R1, R2 and R3
14.0 – 14.5 GHz*	HTS, NP, NEA, SEP, SWP, SP	NP, NEA, SEP, SWP, AusNZ[10]	R1, R2 and R3
27.5 – 29.15 GHz	Oahu GW	-	Hawaii
Downlink Band			
3700 – 4200 MHz*	C- POR	C- POR	R1, R2 and R3
10.95 – 11.20 GHz*	NP, NEA, SEP, SWP, SP	NP	R1, R2 and R3
11.2 – 11.45 GHz	NEA	-	R1, R3
11.45 – 11.7 GHz*	NP, NEA, SEP, SWP, SP	NP, SWP, SEP, AusNZ	R1, R2 and R3
12.2 – 12.5 GHz*	HTS, NP, SEP, SP	NEA	R3 → R1, R2 and R3
12.5 – 12.75 GHz*	HTS, NP, NEA, SWP, SP	NEA, AusNZ	R3 → R1, R2 and R3
18.4 – 19.2 GHz	Oahu GW	-	Hawaii

Table 1. EUTELSAT 172B Frequency Bands
(*denotes band included in this license application)

Except as waived by the Commission, the EUTELSAT 172B satellite can and will operate consistent with Commission rules governing satellite operations in these bands.

C. Waiver Requests

Under Section 1.3 of the Commission's rules, the Commission has authority to waive its rules "for good cause shown."[11] Good cause exists if "special circumstances warrant a deviation from the general rule and such deviation will serve the public interest" better than adherence to

[10] The EUTELSAT 172B beam with Australia/New Zealand coverage is designated "SP" and has essentially the same coverage as EUTELSAT 172A's "AusNz" beam.

[11] 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

the general rule.[12] In determining whether waiver is appropriate, the Commission should "take into account considerations of hardship, equity, or more effective implementation of overall policy."[13]

In this application, ES 172 LLC requests waiver of certain Commission technical and licensing rules and, out of an abundance of caution, waivers of other rules that either may not be directly applicable or that may be satisfied in the unique circumstances presented here. As discussed below, there is good cause for each of these waiver requests and to the extent necessary they should be granted.

1. U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106, for Use of 12.2-12.75 GHz

In this application, ES 172 LLC proposes to operate in the 12.2-12.75 GHz downlink band in portions of ITU Regions 1, 2, and 3 within its beam coverage. Under the U.S. Table of Frequency Allocations, these frequencies have a primary allocation for BSS and terrestrial fixed microwave services in the United States, and additional primary allocations for certain mobile and broadcasting services elsewhere in Region 2. In Region 1, there is no primary FSS allocation at 12.2-12.5 GHz. However, No. 5.492 of the ITU Radio Regulations, included in the U.S. Table of Frequency Allocations, contemplates the potential for FSS downlink operations in this band.[14] In Region 3, the primary coverage area of the EUTELSAT 172B satellite, there is a primary allocation for FSS across the entire band.

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[12] *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

[13] *WAIT Radio*, 418 F.2d at 1159.

[14] No. 5.492 provides: "Assignments to stations of the broadcasting-satellite service which are in conformity with the appropriate regional Plan or included in the Regions 1 and 3 List in Appendix 30 may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference, or require more protection from interference, than the broadcasting-satellite service transmissions operating in conformity with the Plan or the List, as appropriate." *See* 47 C.F.R. § 2.106.

EUTELSAT 172A currently operates in the 12.2-12.75 GHz band exclusively in Region 3,[15] and pursuant to a condition imposed by the FCC that the licensee "may not provide downlink services into the United States and its possessions in the 12.2-12.75 GHz frequency band."[16] EUTELSAT 172B incorporates the ability to use these frequencies in additional beams, some of which have incidental coverage of U.S. territory and possessions in or bordering the Pacific Ocean. ES 172 LLC requests that the Commission grant a waiver permitting EUTELSAT 172B to operate in the 12.2-12.75 GHz band, like the satellite it replaces, on an unprotected, non-harmful interference basis as a non-conforming use.

Because earth stations receive downlink transmissions in this band using directional antennas and there are no U.S. BSS satellites transmitting from orbital locations within 50 degrees of 172˚ E.L., there is no potential for interference between FSS and BSS downlink signals. Similarly, the proposed downlink operations have only incidental coverage of Region 1 (limited to the Russian Far East) and can operate on a non-interference basis with any BSS downlinks in the 12.2-12.5 GHz band in this area.

There is also little potential for interference with non-geostationary satellite orbit ("NGSO") FSS systems that may operate in the 12.2-12.7 GHz band.[17] Currently, there are no

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[15] *See* SAT-LOA-20031218-00358, Technical Appendix at 1 ("The spacecraft will operate in Ku-band frequencies with downlink frequencies from . . . 12.20 to 12.75 GHz in ITU Region 3 . . . . SES Americom will prepare the required ITU filing for the frequency band 12.20 to 12.75 in ITU Region 3 to complement the existing FCC filing for USASAT-14K at the 172.0° E.L orbital location.").

[16] *See* SAT-LOA-20031218-00358, Terms and Conditions of Authorization at 2 (Condition #6) (grant stamped July 13, 2004).

[17] Pursuant to No. 5.487A of the ITU Radio Regulations, included in the U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106, there is an additional primary allocation to FSS for 11.7-12.5 GHz in Region 1, and for 12.2-12.7 GHz in Region 2, limited in each case to NGSO systems.

NGSO FSS systems operating in this band, although the FCC has authorized the OneWeb system to use the band.[18] EUTELSAT 172B downlink operations comply with PFD limits in the 12.2-12.7 GHz and are consistent with No. 5.492 of the ITU Radio Regulations,[19] and ES 172 LLC understands that the OneWeb system complies with PFD and EPFD limits applicable to its NGSO FSS operations. Through mutual compliance with these limits, the operations of EUTELSAT 172B and the OneWeb system will be compatible in this downlink band.

As noted above, the EUTELSAT 172A satellite already includes these frequencies, albeit in the Northeast Asia (12.2-12.75 GHz) and South Pacific (AusNZ beam) (12.5-12.75 GHz) beams. The use of the 12.2-12.75 GHz band in additional downlink beams in the Pacific region does not alter the fundamental compatibility considerations associated with satellite operations at 172˚ E.L. Thus, as with EUTELSAT 172A and other U.S.-licensed satellites authorized to operate in this spectrum,[20] the EUTELSAT 172B satellite should be permitted to conduct downlink operations in the band 12.2-12.75 GHz.

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[18] *See* WorldVu Satellite Limited, Order and Declaratory Ruling, IBFS File No. SAT-LOI-20160428-00041, Call Sign S2963 (rel. June 23, 2017).

[19] No. 5.492 of the ITU Radio Regulations contemplates FSS operations in the band "provided that such transmissions do not cause more interference, or require more protection from interference, than the broadcasting-satellite service transmissions operating in conformity with the Plan or the List, as appropriate."

[20] *See, e.g.*, SAT-LOA-2013-0722-00097, SAT-AMD-2014-718-00087, Cal Sign S2913, Attachment to Grant (Condition #21) ("Intelsat's request for waiver of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, to provide FSS to the United States and its territories using the 12.2-12.5 GHz (space-to-Earth) frequency band ….on a non-interference, nonprotected basis, is GRANTED. Such operations shall be on a non-interference and non-protected basis within the United States and its territories located within ITU Region 2. Waiver is justified because FSS operations in these bands are consistent with No. 5.492 of the ITU Radio Regulations and the closest U.S. BSS Plan entry is at 61.50 W.L.").

2. Section 25.210(j) Stationkeeping

Section 25.210(j) of the Commission's rules requires satellite operators to maintain stationkeeping within 0.05° of their assigned orbital longitude in the east/west direction, unless specifically authorized by the Commission to operate with a different longitudinal tolerance. The EUTELSAT 172B satellite is designed to operate with a stationkeeping tolerance of ±.10°. Thus, a waiver of Section 25.210(j) is necessary to the extent the Commission has not specifically authorized a different tolerance.

The Commission has previously waived this rule based on a finding that allowing an increased stationkeeping volume would not adversely affect the operations of other spacecraft and would have benefits such as conserving fuel for future operations.[21] Allowing EUTELSAT 172B to be operated within an increased stationkeeping volume will not harm other operators because the volume will not overlap with that of any other satellites except EUTELSAT 172A, which is controlled by ES 172 LLC and can be physically coordinated with EUTELSAT 172B. Furthermore, the previously accepted stationkeeping tolerance of ±.10° will afford ES 172 LLC additional operational flexibility in the use of electric propulsion for on-station positioning. Finally, a larger spacecraft stationkeeping volume will not adversely affect the services to be provided by EUTELSAT 172B or the interference environment. Under these circumstances, a waiver of Section 25.210(j) will serve the public interest.

ES 172 LLC notes that the Commission has repeatedly granted authority to operate with a ±.10 degree longitudinal tolerance, subject to the condition that the waiver and the operations it permits shall terminate in the event that a satellite is launched into a location such that its

[21] *See, e.g.*, SES Americom, Inc. Application for Modification of Satcom SN-4 Fixed Satellite Space Station License, 20 FCC Rcd 11542, 11545 (Sat. Div. 2005).

stationkeeping volume would overlap a satellite's ± 0.10 degree stationkeeping volume, but would not overlap a ±0.05° degree stationkeeping volume, unless the satellite operator has successfully coordinated its physical operations with those of the other spacecraft.[22] ES 172 LLC acknowledges and accepts this potential condition on EUTELSAT 172B operations.

3. Section 25.113(g) Advance Licensing Requirement

ES 172 LLC requests a waiver of Section 25.113(g) of the Commission's rules, 47 C.F.R. § 25.113(g), which requires that "approval for orbital deployment and a station license (*i.e.*, operating authority) must be applied for and granted before a space station may be deployed and operated in orbit," with certain exceptions not relevant here. While ES 172 LLC acknowledges that, in the ordinary course, the Commission's license application process affords more advance notice of the construction and launch of U.S.-licensed satellites, a waiver is justified in the unique circumstances presented here.

First, there was no initial requirement for FCC authorization because EUTELSAT 172B was constructed and launched into orbit under French authority pursuant to the well-settled licensing processes of that nation. Now, after extensive consultations regarding an appropriate approach for authorizing EUTELSAT 172B satellite operations, ES 172 LLC seeks replacement satellite authority from the Commission to operate the C-band and Ku-band payloads specified herein. The FCC's public notice and comment process associated with this application will afford the Commission and interested parties an ample opportunity to review and comment on the merits of ES 172 LLC's proposal.

[22] *See* FCC ISAT List, available at https://www.fcc.gov/isat-list (noting multiple waivers for Inmarsat 3F and 4F satellites).

Second, Section 25.113(g) does not state that satellite launch must occur pursuant to U.S. authority to receive a Commission satellite license and there are numerous examples where the Commission has authorized the operation of satellites previously launched and authorized by foreign administrations without reference to this rule.[23] Notwithstanding this precedent, the Commission recently suggested Section 25.113(g) applied in circumstances where a previously launched, foreign-licensed satellite was used to replace a U.S.-licensed satellite. However, the Commission expressly granted a waiver of the rule because:

> the operations of [the replacement satellite] 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 requirement of Section 25.113(g) would not be subverted by, and is not an impediment to, granting operating authority….[24]

To the extent a waiver is necessary in this case, ES 172 LLC submits that the same circumstances exist here to support a waiver.

ES 172 LLC and Eutelsat have been working closely with the U.S. and French administrations to ensure that EUTELSAT 172B can be authorized in a manner that implements its U.S.-licensed C-band and Ku-band replacement payloads, as well as new French-licensed payloads, while fully protecting the interests of both countries at 172˚ E.L. As in other cases of dual-administration licensing of satellites, ES 172 LLC understands that the U.S. and French administrations may exchange letters to establish a mutual understanding of licensing responsibilities and appropriate conditions to facilitate operation of the satellite consistent with

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[23] *See, e.g.*, AMSC Subsidiary Corp., Order and Authorization, 13 FCC Rcd 12316 (IB 1998); PanAmSat Corp., Order and Authorization, DA 99-2220 (Oct. 26, 1999); Intelsat North America LLC, File No. SAT-A/O-20091223-00151 (grant stamped Apr. 2, 2010); Intelsat License LLC, File No. SAT-A/O-20091208-00141 (grant stamped June 4, 2010); Intelsat License LLC, File No. SAT-RPL-20120216-00018 (grant stamped May 25, 2012).

[24] *See* SES Americom, Inc., File No. SAT-RPL-20121228, Call Sign S2892 (grant stamped Apr. 2, 2015) at para. 4.

their national interests. Such conditions would adequately protect U.S. national interests and the public interest at this orbit location.

Finally, grant of the requested waiver is also justified because U.S. licensing of EUTELSAT 172B C-band and Ku-band payloads will strongly serve the public interest by ensuring service continuity for users of EUTELSAT 172A satellite capacity, including many U.S. customers, and expanding service for satellite mobility and other applications in the Pacific region. Thus, to the extent Section 25.113(g) applies here, special circumstances plainly exist and warrant a deviation from the general rule. Given the substantial public interest benefits that will result from grant of this application, the requested deviation will serve the public interest better than strict adherence to the general rule.

4. Section 25.165(e)(2) Replacement Satellite Definition

Given the high financial, technical, and technological barriers to entry in satellite communications, as well as the importance of service continuity for long-term customers in difficult-to-serve locations, the Commission has recognized the importance of a "replacement expectancy" for satellite operators for their existing licensed frequencies and orbital slots.[25] Thus, the Commission has repeatedly stated that, "when the orbit location remains available for a U.S. satellite with the technical characteristics of the proposed replacement satellite, it will

[25] *See, e.g., Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order and Further Notice of Proposed Rulemaking in IB Docket No. 02-34 and First Report and Order in IB Docket No. 02-54, FCC 03-102, 18 FCC Rcd 10760 (2003), at ¶ 250 (observing that, "[g]iven the huge costs of building and operating GSO space stations, we have found that there should be some assurance that operators will be able to continue to serve their customers") ("*Space Station Licensing Rules First Report and Order*").

generally authorize the replacement satellite at the same location."[26] Replacement satellites are exempt from queue processing.[27]

A replacement satellite station is one that:

> (1) Is authorized to operate at an orbital location within ±0.15° of the assigned location of a GSO space station to be replaced…;
>
> (2) Is authorized to operate in the same frequency bands, and with the same coverage area as the space station to be replaced; and
>
> (3) Is scheduled to be launched so that it will be brought into use at approximately the same time as, but no later than, the existing space station is retired.[28]

Although EUTELSAT 172B will operate within ±0.15° of the EUTELSAT 172A orbit location consistent with Section 25.165(e)(1), the new satellite has slight differences in coverage and frequencies from EUTELSAT 172A. The aggregate coverage of EUTELSAT 172B is essentially identical to its predecessor but re-uses Ku-band spectrum more intensively with its 11 HTS beams and it uses frequencies within the 12.2-12.75 GHz downlink band in a larger geographic area than EUTELSAT 172A. ES 172 LLC believe this is consistent with Section 25.165(e)(2)'s provision that a replacement satellite should "operate in the same frequency bands, and with the same coverage area as the space station to be replaced." If the Commission concludes otherwise, however, EUTELSAT 172B should be afforded replacement satellite treatment via waiver because these enhancements plainly serve the public interest.

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[26] *Columbia Communications Corporation Authorization to Launch and Operate a Geostationary C-band Replacement Satellite in the Fixed-Satellite Service at 37.5° W.L.*, Memorandum Opinion and Order, DA 01-2633, 16 FCC Rcd 20176 (2001), at ¶ 7 (*citing Assignment of Orbital Locations to Space Stations in Domestic Fixed-Satellite Service*, Memorandum Opinion and Order, 3 FCC Rcd 6972, n.31 (1988) and *GE American Communications, Inc.*, Order and Authorization, 10 FCC Rcd 13775 (Int'l Bur. 1995), at ¶ 6.

[27] *See* 47 C.F.R. §25.158(a)(2).

[28] *See* 47 C.F.R. §25.165(e).

In addition, although Section 25.165(e)(3) suggests that a replacement satellite is one that will be brought into use when an existing satellite is "retired," this provision is consistent with the existing satellite being taken out of service and relocated to another obit location. The Commission has recognized the value of in-orbit satellite assets and permits the use of in-orbit satellites to be moved to other locations, even to replace other U.S.-licensed satellites on a case-by-case basis.[29] Thus, continued use of the EUTELSAT 172A satellite elsewhere does not affect EUTELSAT 172B's replacement satellite status. Accordingly, ES 172 LLC should be afforded a replacement expectancy for the 172º E.L. orbital location, where the Commission has previously licensed EUTELSAT 172A.

D. ITU Cost Recovery and Filings

ES 172 LLC is aware that processing fees are currently charged by the ITU for satellite filings, and that Commission applicants are responsible for any and all fees charged by the ITU.[30] ES 172 LLC unconditionally accepts this requirement to pay any ITU cost recovery fees associated with ITU filings that the Commission may make on behalf of ES 172 LLC for the C-band and Ku-band satellite payload operations proposed in this application.[31]

III. Grant of This Application Will Serve the Public Interest

As discussed herein, granting ES 172 LLC authority to operate the specified C-band and Ku-band payloads of EUTELSAT 172B to replace the EUTELSAT 172A satellite would strongly serve the public interest. EUTELSAT 172B was specifically designed to replace and

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[29] *See, e.g., Issues Related to Allegations of Warehousing and Vertical Foreclosure in the Satellite Space Segment*, Notice of Inquiry, IB Docket 13-147 (rel. June 7, 2013) at ¶18.

[30] *See Implementation of ITU Cost Recovery Charges for Satellite Network Filings*, Public Notice, DA 01-2435 (Oct. 19, 2001).

[31] 47 C.F.R. § 25.111.

enhance the services provided by its predecessor satellite, and it is in orbit and nearly ready to fulfill its intended role. Public interest considerations relating to service availability are particularly important in this case given the planned relocation of EUTELSAT 172A. Furthermore, the limited waivers requested herein facilitate enhanced operation of this next-generation satellite by bringing additional capacity and new HTS beams to the Pacific region.

ES 172 LLC is cognizant that expedited consideration of its application may present issues relative to the timing of Commission consideration in typical satellite application proceedings.[32] ES 172 LLC and Eutelsat are committed to working with U.S. and French administrations to ensure that the EUTELSAT 172B satellite can commence operations consistent with the requirements of Eutelsat customers and both administrations.

In this connection, ES 172 LLC anticipates that the dual-administration licensing approach contemplated herein will facilitate expedited processing of this application. Because such licensing decisions are made on a case-by-case basis in light of the facts and circumstances presented, however, ES 172 LLC addresses the additional public interest considerations relating to the dual-licensing approach proposed here.

A. Grant of this Application Would Be Consistent with Prior Dual-Licensing Arrangements

This application seeks dual-administration licensing of EUTELSAT 172B by U.S. and French authorities. The Commission will license the payloads operating pursuant to U.S. ITU filings with priority at 172° E.L. and France will authorize operations on other frequencies

[32] *See, e.g.,* Comprehensive Review of Licensing and Operating Rules for Satellite Services, Second Report and Order, IB Docket No. 12-267 (rel. Dec. 17, 2015) at ¶¶ 132-134.

pursuant to French ITU filings with priority at that location. The Commission has repeatedly authorized such dual-licensing arrangements, providing ample precedent for this request.

The Commission's acceptance of dual-licensing arrangements stems from its analysis, first conducted nearly 20 years ago in the *AMSC Order*, in which the International Bureau granted a modification of the AMSC-1 satellite license to permit the satellite to operate with a portion of the transponders on an existing, Canadian-licensed satellite, MSAT-1.[33] In granting this request, the International Bureau stated:

> We do not foresee any insurmountable difficulties with respect to AMSC's proposal for joint U.S.-Canadian licensing and coordination responsibility for MSAT-1. While this is the first time the Commission has been asked to 'share' a satellite with another licensing administration, there appears to be nothing in the international Radio Regulations that would preclude such an arrangement.[34]

In the wake of that ruling, the Commission has approved dual-licensing in a number of cases. In some instances, dual-licensing has been contemplated from the beginning, and the Commission has routinely licensed U.S. payloads on satellites where another payload is to be operated under foreign authority.[35] In other instances, a portion of an otherwise foreign-licensed satellite's

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[33] *AMSC Subsidiary Corp.*, Order and Authorization, DA 98-493, 13 FCC Rcd 12316 (Int. Bur. 1998) ("AMSC Order") at ¶ 17. AMSC then leased AMSC-1 to a South African company for use in providing service to southern Africa.

[34] *Id.*

[35] *See, e.g., Lockheed Martin Corp*., Order and Authorization, DA 05-242420 FCC Rcd 14558 (Int. Bur., Sat. Div. 2005) (authorizing launch and operation of a radionavigation payload onboard the Canadian-licensed Anik-F1R satellite); *PanAmSat Licensee Corp.*, Order and Authorization, DA 03-3005, 18 FCC Rcd 19680 (Int. Bur., Sat. Div. 2003) ("*Galaxy 13/Horizons I Order*") (authorizing launch and C-band operation of Galaxy 13, which also carries a Japanese-licensed Horizons I Ku-band payload); *EchoStar Satellite Corp.*, Order and Authorization, DA 03-2559, 18 FCC Rcd 15862 (Sat. Div. 2003) ("EchoStar 9/Telstar 13 Order") (authorizing the EchoStar 9 Ku- and Ka-band spacecraft and noting that the satellite also included the Telstar 13 C-band payload to be operated by Loral under authority granted by Papua New Guinea).

capacity has been transitioned to U.S. licensing jurisdiction.[36] In either case, these arrangements allow satellites to be efficiently designed with multiple payloads on a single spacecraft bus. As here, dual-licensing serves the public interest by permitting the various payloads to be operated pursuant to different administrations' ITU filings, which ensures that customer traffic can be effectively protected from harmful interference.

Grant of a U.S. license for the subject C-band and Ku-band payloads on EUTELSAT 172B will be consistent with these policies. The Commission's practice in dual-licensing situations is to enter into an exchange of letters with the other licensing administration to ensure a mutual understanding regarding spacecraft operations, thereby fully protecting U.S. interests.[37] ES 172 LLC understands that compliance with any such understanding would be a condition of a license grant.

B. Grant of this Application Will Place the C-band and Ku-band Payloads of EUTELSAT 172B Under FCC Licensing Jurisdiction

The Commission has recognized the strong interests of the United States in serving as a licensing administration for satellite operators.[38] Among other benefits a strong U.S. licensing

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[36] *SES Americom, Inc.*, Order, DA 14-462, 29 FCC Rcd 3678 (Int. Bur. 2014), at ¶ 5 (noting that, "[t]he Commission has exchanged letters with Industry Canada to ensure a mutual understanding regarding the operations of SES-3. The understandings, and the factual background for these understandings, are provided in Appendix A and are material considerations for the authorization contained in this order"); *Intelsat License LLC,* Call Sign S2854, File No. SAT-RPL-20120216-00018, grant-stamped May 25, 2012 (processing as a replacement satellite application a request for authority to use Ku-band capacity on an in-orbit spacecraft otherwise licensed by the Netherlands); *Intelsat License LLC*, Call Sign S2801, File No. SAT-A/O-20091208-00141, grant-stamped June 4, 2010, Attachment to Grant at 1 & n.2 (granting the Intelsat application and noting that NSS-5, licensed by the Netherlands, was to be used as a replacement for Intelsat 603 at 20° W.L., but also included bands not present on Intelsat 603).

[37] *See, e.g. SES Americom, Inc.*, Order, DA 14-462, 29 FCC Rcd 3678 (Int. Bur. 2014), at ¶ 5

[38] *See, e.g., Applications of Intelsat LLC for Authority to Operate, and to Further Construct, Launch, and Operate C-band and Ku-band Satellites that Form a Global Communications*

presence in satellite communications helps to promote U.S. pro-competitive policy objectives, to ensure the availability of satellite services with global reach to U.S. commercial and federal government customers, and to achieve scale efficiencies in coordination among U.S.-licensed satellite operators without resorting to the formal ITU negotiation process.[39]

Grant of this application will help advance these U.S. satellite regulatory objectives. In this case, EUTELSAT 172B has already been constructed, launched, and placed into orbit pursuant to French authorization. By granting this application, the Commission will advance the public interest by facilitating the continuity of responsibility to a U.S. licensee, under the continued jurisdiction of the United States and this Commission, for the C-band and Ku-band payloads that Eutelsat intended to serve as a replacement for an existing U.S.-licensed satellite.

C. ES 172 LLC Will Exercise Full Direction and Control of U.S.-Licensed Payloads on EUTELSAT 172B

As it does with the EUTELSAT 172A satellite today, ES 172 LLC will exercise full direction and control over the U.S.-licensed C-band and Ku-band payloads of EUTELSAT 172B through arrangements with its Eutelsat affiliates. In particular, ES 172 LLC will retain the unilateral right to direct the cessation or modification of these C-band and Ku-band operations without the need for consultation with or approval from French authorities. This will allow it to comply with any U.S. statute or Commission rule, regulation or order, including but not limited to any direction by the U.S. President under Section 706(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 606(c).

System in Geostationary Orbit, Memorandum Opinion Order and Authorization, FCC 00-287, 15 FCC Rcd 15460 (2000), at ¶ 31.

[39] *Id.* at ¶¶ 31-33.

IV. CONCLUSION

Based on the foregoing, ES 172 LLC respectfully requests that the Commission grant this application to operate the replacement C-band and Ku-band payloads of the EUTELSAT 172B satellite at 172˚E.L. at the earliest practicable time.

Attachment A

FCC Form 312, Response to Questions 34 and 40:
Foreign Ownership, Officers, Directors, and Ten Percent or Greater Shareholders

ES 172 LLC's ownership structure has been approved by the Commission in connection with the assignment of EUTELSAT 172A, Call Sign 2610, from Eutelsat America Corp. to ES 172 LLC. *See* SAT-ASG-20121227-00226.

ES 172 LLC is a limited liability company organized pursuant to and in accordance with the Delaware Limited Liability Company Act (6 Del. C. § 18-101 *et seq.),* as amended from time to time. Assignee has a single member, Eutelsat Asia (the "Member"). The Member, which has a registered office at 8 Marina Boulevard #05-02, Marina Bay Financial Centre, Singapore, 018981, wholly owns and controls ES172 LLC. The Member is a limited exempt private company organized under the laws of Singapore. The sole shareholder of the Member is Eutelsat S.A., a *société anonyme* organized under the laws of France. Eutelsat S.A. is the Eutelsat Group's main operating subsidiary. The address of Eutelsat S.A. is 70 rue Balard, 75015 Paris, France. An organizational chart showing the ownership of ES 172 LLC is attached.

96.37% of Eutelsat S.A.'s share capital is held by Eutelsat Communications S.A., the publicly traded parent of Eutelsat S.A. In addition, the Russian Satellite Communication Company ("RSCC") holds 3.38% of the shares issued by Eutelsat S.A. and 0.31% of the shares of Eutelsat S.A. are held by other non-Eutelsat entities as set out on the ownership chart attached hereto. RSCC and these other entities have no control over Eutelsat S.A. All shareholdings of Eutelsat S.A. (other than the 0.11% of such shares held by Eutelsat S.A.'s employees and executives) are a result of the privatization of Eutelsat S.A., formerly an intergovernmental organization.

26.45% of the share capital of Eutelsat Communications S.A. is held by Bpifrance Participations (formerly named Fonds Stratégique d'Investissement ("FSI")), a *société anonyme* formed in 2008 to enhance equity in France and help stabilize French companies during the economic crisis. Approximately 51% of the FSI's share capital is held by the Caisse des Dépôts et Consignations (the "CDC") and approximately 49% of its share capital is held directly by the French State. Bpifrance Participations must present its strategic plans and annual report to the supervisory commission of the CDC. The Bpifrance Participations' board of directors has ten members. Three of the directors are representatives of the CDC, three of the directors are representatives of the French State and three of the directors are qualified personalities. The chief executive officer of Bpifrance Participations is appointed by its board of directors. The address of Bpifrance Participations is 27-31, avenue du Général Leclerc, 94710 Maisons-Alfort, Cedex, France.

The CDC is a financial institution wholly owned by the French State that serves the general interest and the economic development of France. Approximately 50% of the CDC's recurring and non-recurring net profit is paid to the French State. The CDC is managed by a chief executive officer, who is appointed by the President of the French State. The CDC is supervised by a supervisory commission of 13 members, all of which are appointed by various sectors of the French government.

7.50% of the share capital of Eutelsat Communications is held by Fonds Stratégique de Participation (FSP). Backed by six major French insurance companies (BNP PARIBAS CARDIF, CNP ASSURANCES, CREDIT AGRICOLE ASSURANCES, SOGECAP (SOCIETE GENERALE group), GROUPAMA and NATIXIS ASSURANCES), the FSP is a long-term equity investor in French companies. Through FSP, insurance companies and key institutional investors with long-term liabilities channel some of France's long-term savings into equity investments.

6.60% of the share capital of Eutelsat Communications S.A. is held by Land Breeze s.a.r.1. Land Breeze s.a.r.l. is organized under the laws of Luxembourg and is a wholly owned subsidiary of China Investment Corp. ("CIC"). Two other subsidiaries of CIC organized under the laws of the People's Republic of China, Flourish Investment Corporation and Best Investment Corporation (together with Land Breeze s.a.r.l., the "CIC Entities"), own 0.06% and 0.01% of the shares of Eutelsat Communications, S.A., respectively. Information about CIC can be found on its website: http://www.chinainv.cn/cicen/.

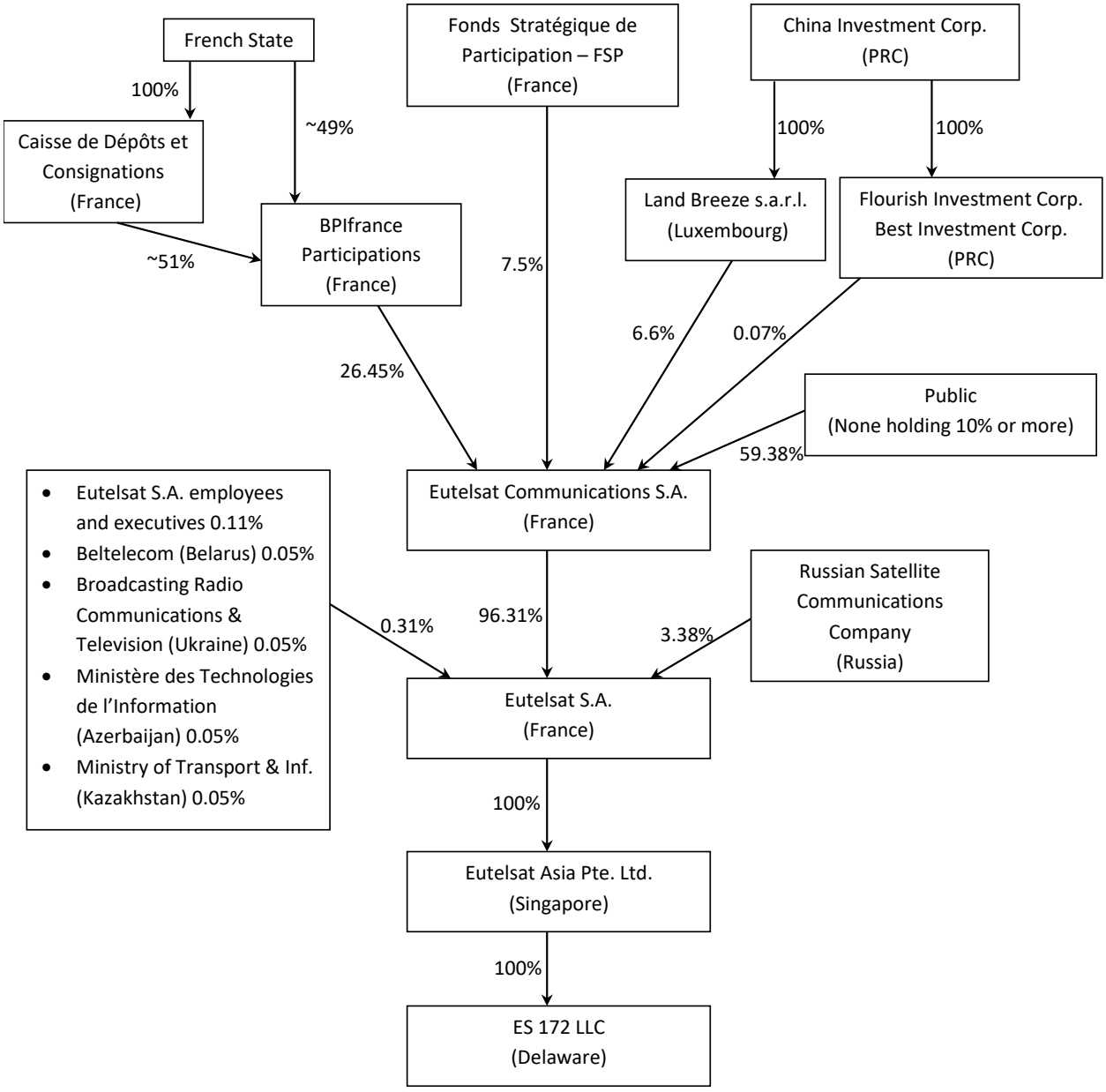
To the best of Eutelsat Communications S.A.'s knowledge, no other shareholders own, directly or indirectly, more than 10% of its share capital or voting rights. Eutelsat Communications S.A. is managed by a board of directors that currently has 10 members (with a maximum of 12 members), each of whom has a four-year renewable term of office. Currently, in addition to the CEO and the chairman of the Board, five of the directors are independent, three are affiliated with the Bpifrance Participations. No decisions of the board of directors can be taken or be blocked by three directors. Neither the Bpifrance Participations, nor any of the CIC Entities or FSP, nor any foreign government or person controlled by or acting on behalf of a foreign government has or will have the right or power to appoint any of Eutelsat Communications S.A.'s principal officers. None of the CIC Entities or FSP has the right or power to appoint any of Eutelsat Communications S.A.'s directors.

More information about Eutelsat Communications S.A., its shareholders, and its governance can be found on its website at www.eutelsat.com.

The following individuals are managers of ES 172 LLC:

Edouard Silverio, President
Michael Freundlich, Vice President

The individuals listed above can be contacted c/o Eutelsat Communications S.A., 70 rue Balard, 75015 Paris, France. Mr. Silverio is a citizen of the Republic of France and Mr. Freundlich is a dual citizen of the United States and the Republic of France.


French State
100%
~49%
Caisse de Dépôts et Consignations (France)
~51%
BPIfrance Participations (France)
Fonds Stratégique de Participation – FSP (France)
7.5%
China Investment Corp. (PRC)
100%
100%
Land Breeze s.a.r.l. (Luxembourg)
Flourish Investment Corp. Best Investment Corp. (PRC)
6.6%
0.07%
26.45%
Public (None holding 10% or more)
59.38%
Eutelsat Communications S.A. (France)
• Eutelsat S.A. employees and executives 0.11%
• Beltelecom (Belarus) 0.05%
• Broadcasting Radio Communications & Television (Ukraine) 0.05%
• Ministère des Technologies de l'Information (Azerbaijan) 0.05%
• Ministry of Transport & Inf. (Kazakhstan) 0.05%
0.31%
96.31%
Russian Satellite Communications Company (Russia)
3.38%
Eutelsat S.A. (France)
100%
Eutelsat Asia Pte. Ltd. (Singapore)
100%
ES 172 LLC (Delaware)