

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

In the Matter of	)	
	)	
Eutelsat S.A.	)	
	)	File No.:
Petition for Declaratory Ruling to	)	Call Sign: S2596
Modify the U.S. Market Access Grant	)	
for EUTELSAT 12 West B	)	

**PETITION FOR DECLARATORY RULING**

Eutelsat S.A. (“Eutelsat”) pursuant to Section 25.137(f) of the Commission’s Rules, 47 C.F. R. § 25.137(f), hereby seeks to modify the U.S. market access grant of the EUTELSAT 8 West A satellite (formerly “Atlantic Bird-2”), which has been relocated and is now known as “EUTELSAT 12 West B.”<sup>1</sup> In this Petition, Eutelsat demonstrates that it is legally, technically, and otherwise qualified to hold the requested authority; that the proposed facilities and operations are compliant with applicable Commission rules, regulations, and policies; and that grant of the Petition would serve the public interest, convenience, and necessity.

**I. INTRODUCTION**

EUTELSAT 12 West B, a French-licensed satellite currently in orbit at 12.5° W.L., operates in Ku-band frequencies, providing fixed-satellite service (“FSS”) connectivity to a range of users. The EUTELSAT 12 West B satellite was launched on 25 September 2001 to the

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<sup>1</sup> The satellite was originally included on the Permitted List at 8° W.L. See Petitions for Declaratory Ruling To Add EUTELSAT Satellites ATLANTIC BIRD™ 1 at 12.5° W.L and ATLANTIC BIRD™ 2 at 8° W.L to the Commission’s Permitted Space Station List, Order, File No. SAT-PDR-20010207-00012 (rel. Aug. 30, 2001) (the “Order”); see also FCC Space Station Approval List (available at <https://www.fcc.gov/approved-space-station-list>). Eutelsat has relocated the subject satellite and now seeks to modify the Order to reflect new frequencies and planned services for U.S. market access from the satellite’s current orbital location. Thus, modification of the Order appears to be the appropriate procedural approach. To the extent the Commission concludes otherwise, this Petition includes sufficient information for the Commission to issue a new order and call sign for the satellite to permit U.S. market access with the operational characteristics proposed herein.

8°W.L. orbital location with an expected lifetime of more than 19 years. The satellite was renamed EUTELSAT 12 West B when moved to the 12.5° W.L. orbit location. EUTELSAT 12 West B commenced operating in inclined orbit in April 2019 and currently has an inclination of .5°, which is increasing at a rate of .9° per year. The anticipated end of life of the satellite is 31 December 2020.

In addition to its current offerings, Eutelsat seeks to utilize the EUTELSAT 12 West B satellite to provide Ku-band mobility and other FSS services over parts of the Americas (including the eastern United States and U.S. Caribbean territories). With this Petition, Eutelsat seeks to modify the satellite's U.S. market access authority to permit such operations in the 10.95-11.2 GHz, 11.45-11.7 GHz, and 12.5-12.75 GHz bands (space-to-Earth) and the 13.75-14.5 GHz band (Earth-to-space), and requests inclusion on the Permitted List at its new location for those bands eligible for Permitted List authority.<sup>2</sup> For the reasons discussed herein, grant of this Petition will serve the public interest by allowing Eutelsat to meet continued growing U.S. market demand for satellite services.

## **II. DISCUSSION**

The Commission will allow non-U.S. licensed satellites to access the U.S. market and will include them on the Permitted List upon compliance with the Commission's Rules, 47 C.F.R. §§ 25.114 & 25.137, and demonstration that the public interest would be served by such inclusion. This Petition and accompanying information, including the waivers requested herein, establish that updating the Permitted List to include EUTELSAT 12 West B at its current location would be consistent with the Commission's rules and policies.

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<sup>2</sup> Eutelsat understands that the 10.95-11.2 GHz and 11.45-11.7 GHz bands (space-to-Earth) and the 13.75-14.5 GHz band (Earth-to-space) can be utilized by U.S. earth stations under Permitted List authority, subject to appropriate demonstrations, but that authority to operate with EUTELSAT 12 West B in the 12.5-12.75 GHz band must be specifically added to earth station licenses.

**A. Legal Qualifications**

The legal qualifications of Eutelsat are a matter of record before the Commission. Eutelsat and its affiliates 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, including the French-licensed EUTELSAT 12 West B satellite.<sup>3</sup> Eutelsat provides additional information regarding its current legal qualifications in FCC Form 312 and relevant attachments to this Petition. As explained below, Eutelsat seeks modification of the prior authority in order to satisfy recent demand for mobility and other FSS services which was not previously anticipated, to afford additional flexibility to meet that demand, and to reflect the satellite's current orbital location.

**B. Technical Qualifications**

Pursuant to Commission rule 47 C.F.R. § 25.137(d), Eutelsat demonstrates in this Petition that the proposed operations of the EUTELSAT 12 West B satellite comply with applicable Commission requirements for non-U.S. licensed satellites to operate in the United States. Eutelsat provides the attached Engineering Statement, Schedule S, and associated materials containing information establishing the technical and operational characteristics of the satellite.

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<sup>3</sup> See *Order*. France is a member country of the World Trade Organization (“WTO”). Satellites licensed by WTO-member countries seeking to provide services covered by the WTO Basic Telecommunications Agreement are presumed to promote competition in the United States. See 47 C.F.R. § 25.137(a)(2); see also *Amendment of the Commission’s Regulatory Policies to Allow Non-U.S. Licensed satellites Providing Domestic and International Service in the United States*, Report and Order, IB Docket No. 96-111, 12 FCC Rcd 24094, ¶ 39 (1997). Accordingly, Eutelsat need not make the effective competitive opportunities showing set out in Section 25.137 of the Commission’s rules.

## **1. Satellite Service Area**

The EUTELSAT 12 West B satellite includes American and European beams, as well as steerable beam capability. Eutelsat seeks to obtain the operational flexibility to facilitate reorientation of all beams. Specifically, Eutelsat wishes to accommodate potential future access to EUTELSAT 12 West B by Ku-band mobility terminals, which may require repointing of the steerable beam or reorientation of the entire satellite, which would in turn alter the American and European beam footprints.

The technical information in this Petition includes beam characteristics as EUTELSAT 12 West B is currently oriented. To the extent the beams are reoriented, Eutelsat will conform to all Commission operating requirements in the new orientation, including permissible transmit and receive power levels.

## **2. Spectrum Compatibility**

Eutelsat seeks to include the 10.95-11.2 GHz, 11.45-11.7 GHz, and 12.5-12.75 GHz bands (space-to-Earth) and the 13.75-14.5 GHz band (Earth-to-space) in the EUTELSAT 12 West B satellite's market access authority. The Commission has previously granted authority for satellite operations in all of these bands and Eutelsat affirms that EUTELSAT 12 West B and associated earth stations will be operated consistent with other approved operations.<sup>4</sup>

### **a. Satellite Downlink (Earth Station Receive) Bands**

The United States Table of Frequency Allocations ("Table of Allocations"), Commission rule 47 C.F.R. § 2.106, identifies conditions for spectrum use by satellite networks in these bands. In the 10.95-11.2 GHz and 11.45-11.7 GHz (space-to-Earth) bands, FSS operations are co-primary with fixed service ("FS") and access to the band has been permitted for a range of earth

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<sup>4</sup> See generally FCC Space Station Approval List (available at <https://www.fcc.gov/approved-space-station-list>).

station receive operations (*e.g.*, various Ku-band mobility terminals, now collectively known as earth stations in motion or “ESIMs”) subject, in part, to compliance with downlink PFD limits and not claiming protection from transmissions of FS stations.<sup>5</sup> The addition of these Ku-band downlink frequencies for communications with satellites on the Permitted List is consistent with this policy,<sup>6</sup> and Eutelsat will comply with all applicable PFD limits to protect terrestrial operations.

The 12.5-12.7 GHz band has a primary allocation for BSS and terrestrial fixed microwave services in the United States, and additional primary allocations for broadcasting and mobile (except aeronautical mobile) services elsewhere in Region 2. The 12.7-12.75 GHz band is allocated to FS, MSS (except aeronautical mobile) and FSS (uplinks) in Region 2; and mobile services are included in the United States.

Only the European beam of the EUTELSAT 12 West B satellite operates in the 12.5-12.75 GHz band.<sup>7</sup> However, Eutelsat is including this band in this Petition to afford flexibility to physically reorient the satellite to address potential customer requirements for mobility services that could result in overlap of the European beam with U.S. territory. In this context, EUTELSAT 12 West B downlink operations in the 12.5-12.7 GHz band would be conducted from an orbital location approximately 50° from the closest U.S. BSS orbital location.<sup>8</sup> Given the large off-axis angle and associated antenna discrimination, there is no potential for

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<sup>5</sup> See 47 C.F.R. § 2.106 at footnote NG52, NG527A.

<sup>6</sup> See *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Second Report and Order, IB Docket No. 12-267 (rel. Dec. 17, 2015) at ¶249.

<sup>7</sup> See, *infra*, for a waiver requesting authority for limited operations in this band.

<sup>8</sup> Eutelsat’s subsidiary, ES 172 LLC, and New Skies Satellites B.V. have been granted authority to operate in this band in similar circumstances. See ES 172 LLC, File No. SAT-RPL-20170927-00136 (grant reissued Sept. 5, 2018) (“EUTELSAT 172B Grant”); New Skies Satellites B.V., File No. SAT-PDR-20190403-00022 (granted Sept. 12, 2019) (“NSS-6 Grant”).

interference into U.S. BSS downlinks. In addition, Eutelsat will comply with the same PFD limits applicable in the 12.5-12.75 GHz band in Regions 1 and 3 to protect terrestrial operations.<sup>9</sup>

**b. Satellite Uplink (Earth Station Transmit) Bands**

In the 13.75-14.0 GHz band, FSS operations share spectrum with U.S. government shipboard radar radiolocation and National Aeronautics and Space Administration (“NASA”) Tracking and Data Relay Satellite Systems (“TDRSS”) operations. Eutelsat will operate the EUTELSAT 12 West B satellite consistent with the Commission’s rules and policies governing use of the 13.75-14.0 GHz band,<sup>10</sup> will not claim protection from radiolocation stations, and will otherwise ensure compatibility with U.S. government operations. In particular, Eutelsat acknowledges that applicants proposing uplink earth station operations with EUTELSAT 12 West B would be required to comply with FCC Report and Order 96-377<sup>11</sup> to protect U.S. government operations from harmful interference. In addition, as necessary, Eutelsat will coordinate operation of EUTELSAT 12 West B with NASA TDRSS operations.

In the 14.0-14.5 GHz band, FSS operations are considered primary and the Commission routinely grants authority for satellite operations in this band, which was the only band included in the original Permitted List grant for the satellite.<sup>12</sup> Eutelsat affirms that operations of the EUTELSAT 12 West B satellite in this band will continue to conform with the Commission’s rules, including, to the extent applicable, footnotes 5.149, US113, US133, US342, and NG527A to the Table of Allocations, by taking all practicable steps to protect the radio astronomy service and TDRSS operations from harmful interference.

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<sup>9</sup> See EUTELSAT 172B Grant at Condition 4; *see also* NSS-6 Grant at Condition 8(e).

<sup>10</sup> See 47 C.F.R. § 2.106 at footnote US337, US356.

<sup>11</sup> See *Amendment of Parts 2, 25 and 90 of the Commission’s Rules to Allocate 13.75-14.0 GHz Band to the Fixed-Satellite Service*, Report and Order, FCC 96-377 (rel. September 26, 1996).

<sup>12</sup> See *Order* at ¶¶10-11.

Eutelsat’s contemplated mobility operations will take place largely outside of U.S. airspace given the location and potential coverage of the EUTELSAT 12 West B satellite. However, as discussed below, it is possible the Ku-band ESIMs and supporting gateway earth stations will operate in U.S. territory. Accordingly, Eutelsat is seeking modification of its prior U.S. market access authority as described herein. At all times, such operations will be consistent with applicable Commission rules and power levels (either two-degree spacing values or power levels coordinated with other satellite operators within +/- 6° of EUTELSAT 12 West B).

### **C. Public Interest Considerations**

EUTELSAT 12 West B is an in-orbit satellite asset currently operated by Eutelsat at 12.5°W.L. Grant of this Petition will enable additional satellite service to U.S. consumers using Ku-band spectrum from a European location from which Eutelsat has been previously authorized by the Commission to serve the U.S. market.

Modifying the original U.S. Market access grant for EUTELSAT 12 West B authority to add frequency bands and operational flexibility, and to reflect the satellite’s current location, will allow new commercial operations with the previously authorized satellite. These satellite services will help address current and future U.S. demand in particular for Ku-band mobility and other FSS services.

### **D. Waiver Requests**

Eutelsat requests waivers of certain Commission rules in the context of this Petition. The Commission has authority to grant waivers of its rules for “good cause shown.”<sup>13</sup> In general, good cause exists if grant of a waiver would not undermine the purposes of the rule and would

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<sup>13</sup> See 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

otherwise serve the public interest.<sup>14</sup> As discussed, compelling reasons exist to grant the requested waivers in connection with Eutelsat's Petition to modify its U.S. market access authority and include EUTELSAT 12 West B in the Permitted List at its present location.

### **1. EUTELSAT 12 West B Station-keeping Tolerance**

Commission rule 47 § C.F.R. § 25.210(j), requires satellite operators to maintain station-keeping within  $\pm 0.05^\circ$  of their assigned orbital longitude in the east/west direction, unless specifically authorized by the Commission to operate with a different longitudinal tolerance. The Commission has previously allowed an increased station-keeping tolerance based on a finding that doing so would not adversely affect the operations of other spacecraft and would have benefits such as conserving fuel for future operations.<sup>15</sup>

Eutelsat operates EUTELSAT 12 West B with an increased station-keeping volume of  $\pm 0.10^\circ$ . Operating with this station-keeping tolerance has had no adverse impact on other operators because the volume does not overlap with that of any other satellites. Furthermore, a station-keeping tolerance of  $\pm .10^\circ$  affords Eutelsat additional operational flexibility and conserves fuel to extend the on-orbit lifetime of this valuable satellite asset. Thus, permitting a larger station-keeping tolerance under Section 25.210(j) will serve the public interest.

Eutelsat notes that the Commission has repeatedly granted authority to operate with a  $\pm .10^\circ$  station-keeping tolerance, subject to the condition that authority to operate with the larger tolerance shall terminate in the event that another satellite is launched into a location such that its station-keeping volume would overlap the satellite's  $\pm 0.10$  degree station-keeping volume, but

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<sup>14</sup> *WAIT Radio*, 418 F.2d at 1157; *Intelsat North America LLC*, 22 FCC Rcd. 11989 (2007) at ¶6.

<sup>15</sup> *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).



would not overlap a  $\pm 0.05^\circ$  degree station-keeping volume, unless the satellite operator has successfully coordinated its physical operations with those of the other spacecraft.<sup>16</sup>

## **2. EUTELSAT 12 West B End-of-Life Venting**

Commission rule 47 C.F.R. § 25.283(c) requires that after the completion of a satellite mission “all stored energy sources on board the satellite are discharged, by venting excess propellant, discharging batteries, relieving pressure vessels, and other appropriate measures.” Eutelsat requests waiver of 47 C.F.R. § 25.283(c) to the extent necessary to grant this Petition.

The EUTELSAT 12 West B satellite is built on the widely used Thales Alenia Space Spacebus 3000-B2 spacecraft bus. This bus’s propulsion system design, like many others, isolates the propellant and pressurant tanks from each other during the orbit-raising process. Once the propellant and pressurant tanks have been isolated from each other, the remaining helium in the pressurant tank cannot be vented because the exit from the tank is closed by irreversible firing of a pyro-valve. Therefore, as a result of the design of the spacecraft bus, Eutelsat cannot vent all remaining pressurant from EUTELSAT 12 West B at end-of-life.

Multiple factors ensure that EUTELSAT 12 West B’s design is consistent with a safe flight profile and end-of-life passivation, and thus will not pose a risk of creating orbital debris. As explained in the EUTELSAT 12 West B Space Debris Mitigation Plan, the remaining helium in the two pressurant tanks will be *de minimis* – no more than 0.6 kg of helium in each 51.6-liter tank. The pressurant tanks have been designed, manufactured, and validated according to MIL-STD-1522 and they are “leak before burst” designed. Therefore, the risk of break-up is negligible.<sup>17</sup>

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<sup>16</sup> See, e.g., FCC ISAT List, available at <https://www.fcc.gov/isat-list> (noting multiple waivers for Inmarsat 3F and 4F satellites).

<sup>17</sup> See Attachment D, EUTELSAT 12 West B Space Debris Mitigation Plan.

Eutelsat notes that the Commission has granted a waiver in analogous circumstances, such as for Anik F3, AMAZONAS-3, and Eutelsat 36B.<sup>18</sup> Eutelsat respectfully submits that a similar waiver is justified in this circumstance because EUTELSAT 12 West B belongs to the same family of bus designs and its propellant and pressurant tanks operate in a similar manner. Based on the above, a grant of this waiver would be consistent with Commission policy and precedent, would serve the public interest by enabling new U.S. commercial operations at the 12.5°W.L. orbital location, and would not undermine the purposes of the Commission's rule.

### **3. Waiver of Section 2.106 To Permit Downlink Operations in the 12.5-12.75 GHz Band for the European Beam Only**

Eutelsat proposes to operate the EUTELSAT 12 West B European beam in the 12.5-12.75 GHz downlink band. Under the U.S. Table of Frequency Allocations, the 12.5-12.7 GHz band has a primary allocation for BSS and terrestrial fixed microwave services in the United States, and additional primary allocations for certain terrestrial services elsewhere in Region 2. The 12.7-12.75 GHz downlink band is allocated to FS, mobile services (except aeronautical mobile), and FSS (uplinks) in Region 2.

Eutelsat anticipates a possibility for European beam reorientation to cover portions of the Atlantic Ocean and overlap U.S. territory. Grant of a waiver to utilize the 12.5-12.75 GHz downlink band for Ku-band mobility and related operations would be consistent with Commission policy and precedent, serving the public interest by enabling communications with aeronautical mobile networks that do not interfere with other authorized satellite operations in

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<sup>18</sup> See, e.g., Telesat Canada Petition for Partial Waiver of Section 25.283(c), File No. SAT-APL-20111117-00222, Call Sign S2703 (granted April 11, 2012); Hispamar Satélites, S.A. Petition for Declaratory Ruling to Add Amazonas-3 Satellite to the Permitted Space Station List, File No. SAT-PPL-20121018-00183, Call Sign S2886 (granted March 14, 2013) (granting Permitted List status to Amazonas-3, which will retain a de minimis quantity of helium pressurant at end of life); Boeing Application Supplement and Request for Waiver, Eutelsat 36B Space Debris Mitigation Plan at 6, File No. SES-LIC-20140922-00748, Call Sign E140097 (granted March 13, 2015).

the U.S. market. Potential use of the reoriented European beam throughout the 12.5-12.75 GHz band would be on an unprotected, non-interference basis.

Because the EUTELSAT 12 West B satellite is located approximately 50° away from the closest BSS satellite serving the U.S. market and the satellite operates at downlink PFDs that are no greater than those permitted for FSS services in Regions 1 and 3,<sup>19</sup> no interference is possible in the 12.5-12.7 GHz band segment. There is also little potential for interference with non-geostationary satellite orbit (“NGSO”) FSS systems that may operate in the 12.5-12.7 GHz band,<sup>20</sup> and PFD compliance will protect terrestrial operations in the 12.7-12.75 GHz band.<sup>21</sup>

Finally, access to additional downlink spectrum on an unprotected, non-interference basis for mobility applications and other FSS services will facilitate more service to consumers and will address issues of traffic asymmetry, where greater satellite downlink capacity is needed to transport traffic to users (versus uplink capacity to transport traffic from users). Thus, use of the 12.5-12.75 GHz band can be authorized on an unprotected, non-interference basis as proposed herein.

### **III. CONCLUSION**

EUTELSAT 12 West B is currently operating at the 12.5°W.L. orbital location. Eutelsat seeks authority for the EUTELSAT 12 West B satellite to access the U.S. market with additional Ku-band frequencies and operational flexibility at its current orbital location in particular for

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<sup>19</sup> In the band 12.5-12.7 GHz, downlink PFD limits for FSS services in Regions 1 and 3 are equal to downlink PFD limits for BSS services in Region 2. *See* ITU RR No. 21.16 and ITU RR Appendix 30, Annex 1, §4.

<sup>20</sup> EUTELSAT 12 West B downlink operations comply with applicable PFD limits, and authorized NGSO systems must similarly comply with PFD limits applicable to their operations. Through mutual compliance with these limits, the operations of EUTELSAT 12 West B and NGSO systems will be compatible in this downlink band.

<sup>21</sup> *See* note 9, *supra*.

aeronautical and associated FSS services. In addition, Eutelsat seeks to include EUTELSAT 12 West B on the Permitted List at its current location for bands that are eligible for such authority.

Authorizing EUTELSAT 12 West B to provide service to U.S. customers will serve the public interest by enhancing competition in the United States and making efficient use of in-orbit satellite assets. For these and other reasons set forth herein, Eutelsat respectfully requests that the EUTELSAT 12 West B satellite be authorized to access the U.S. market and be added to the Permitted List in relevant Ku-band frequencies at the 12.5° W.L. orbital location.

## Attachment A

### **FCC Form 312, Response to Questions 34 and 40: Foreign Ownership, Officers, Directors, and Ten Percent or Greater Shareholders of Eutelsat S.A.**

Eutelsat S.A. is a *société anonyme* organized under the laws of France and incorporated under number 422 551 176 RCS Paris. The address of Eutelsat S.A. is 70 rue Balard, 75015 Paris, France. An organizational chart showing the ownership of Eutelsat S.A. 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 Communications Company ("RSCC") holds 3.38% of the shares issued by Eutelsat S.A. and 0.25% 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 0.05% 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.

19.80% of the share capital of Eutelsat Communications S.A. is held by Bpifrance Participations (formerly named Fonds Stratégique d'Investissement), a *société anonyme* formed in 2008 to enhance equity in France and help stabilize French companies during the economic crisis. Approximately 50% of Bpifrance Participations' share capital is held by the Caisse des Dépôts et Consignations (the "CDC") and approximately 50% of its share capital is held 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 independent directors. 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 and under the supervision of the French Parliament that serves the general interest and the economic development of France. CDC has a mission of long-term investment. 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 thirteen 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.l. 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: [www.china-inv.cn](http://www.china-inv.cn).

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 12 members, each of whom has a four-year renewable term of office. Currently, eight 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](http://www.eutelsat.com).

Principal officers of Eutelsat Communications S.A. include:

Rodolphe Belmer, CEO  
Michel Azibert, Deputy CEO  
Yohann Leroy, Deputy CEO

The individuals listed above can be contacted c/o Eutelsat S.A., 70 rue Balard, 75015 Paris, France. Mr. Belmer, Mr. Azibert and Mr. Leroy are citizens of the Republic of France.

