

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

In the Matter of Application by )  
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SES AMERICOM, INC. ) SES-STA-\_\_\_\_\_ - \_\_\_\_\_  
 ) Call Sign \_\_\_\_\_  
For Special Temporary Authority to Perform )  
In-Orbit Testing for SES-10 at 68.5° W.L. )

**REQUEST FOR SPECIAL TEMPORARY AUTHORITY**

By this application, SES Americom, Inc. (“SES Americom” or “SES”) respectfully requests earth station special temporary authority (“STA”) for a period of 30 days, beginning 11 days following launch of SES-10, to use a new antenna in Somis, California to perform in-orbit testing (“IOT”) activities for the SES-10 satellite at 68.5° W.L. in the conventional Ka-band. The satellite is currently scheduled to launch mid-March 2017, and SES seeks action on the STA consistent with that schedule. Grant of the requested authority will serve the public interest by facilitating the testing of SES-10 before it commences regular operations.

SES Americom’s affiliate, New Skies Satellites B.V. (“NSS”), has been authorized to provide service into the United States using SES-10.<sup>1</sup> SES-10 will be located at 68.5° W.L. +/- 0.1 degrees during in-orbit testing. The relaxed stationkeeping tolerance will minimize interruptions to the payload testing operations due to stationkeeping maneuvers, which

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<sup>1</sup> See *New Skies Satellites B.V. Market Access Application*, File No. SAT-PPL-20160117-00005 (“SES-10 Petition”), granted on June 23, 2016 (“SES-10 Grant”). The grant was based on SES-10 operating at 67.0° W.L., but NSS has filed a modification seeking to operate the satellite at 66.9° W.L. pursuant to the Commission’s expedited process set out in Section 25.117(h)(1). *New Skies Satellites B.V. Modification*, File No. SAT-MPL-20170108-00002, (Call Sign S2950), filed Jan. 8, 2017.

would delay the satellite's on-station start of operations. The proposed stationkeeping volume will not overlap with any other satellite at 68.5° W.L. Following the completion of in-orbit testing at 68.5° W.L., SES-10 will drift to its final orbital location at 66.9° W.L.

The SES-10 satellite includes a beacon that transmits from space to Earth at 19700.30 MHz. The beacon was not described in the SES-10 Petition because NSS does not currently have plans to receive the signal in the United States once the satellite is at its final orbital location. NSS, however, does wish to test the beacon's operations during IOT and requests this STA to allow for reception of the beacon in the United States for a limited time.<sup>2</sup> The uplink transmissions associated with this beacon will originate outside the U.S., so no transmitting authority is sought as part of this STA. Neither SES Americom nor NSS is requesting market access authority to use this frequency to serve the U.S.

The proposed operations have been coordinated with all satellite operators that use the same frequency band within six degrees of 68.5° W.L. All operators of potentially affected satellites will be provided with an emergency phone number where the licensee can be reached in the event harmful interference occurs.

***Grant of STA Will Serve the Public Interest.*** Grant of this STA request is in the public interest. The requested authority to test SES-10 will ensure that the satellite is able to operate as designed.

***No Harmful Interference to Other Spacecraft.*** All operations with SES-10 while it is located at 68.5° W.L. will be on a non-harmful interference basis, and SES has commenced

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<sup>2</sup> SES Americom provides the spacecraft certifications required under Section 25.140(a) of the Commission's rules and incorporates by reference all of the technical information submitted by NSS in its SES-10 Petition.

coordinating the proposed IOT operations with the satellites positioned near 68.5° W.L.<sup>3</sup>

**Waiver Requests.** SES requests a waiver of Sections 25.114 and 25.137 and the other Commission rules cross-referenced therein. Grant of this waiver is consistent with Commission policy:

The Commission may waive a rule for good cause shown. Waiver is appropriate if special circumstances warrant a deviation from the general rule and such deviation would better serve the public interest than would strict adherence to the general rule. Generally, the Commission may grant a waiver of its rules in a particular case if the relief requested would not undermine the policy objective of the rule in question and would otherwise serve the public interest.<sup>4</sup>

SES seeks special temporary authority in order to test a Ka-band beacon on SES-10, a foreign-licensed spacecraft, which was not described in the original market access request.

Section 25.137 requires that applicants proposing to use U.S.-licensed earth stations to communicate with foreign-licensed spacecraft demonstrate that the Commission's policies for U.S. market access are satisfied. Section 25.137 also incorporates by reference other requirements for Commission-licensed space stations, including the obligation to file detailed technical information as specified in Section 25.114.

Waiving Section 25.137 is consistent with the purpose of the rule, which was intended to address situations in which a non-U.S.-licensed satellite is to be used to serve the United States. Here, the earth station will be used solely for receiving a signal as part of in-orbit

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<sup>3</sup> The 24/7 point of contact for the proposed SES-10 operations is the SES Payload Management Operations Centre (PMOC) in Woodbine, MD, 1 800 772 2363 or 1 410 970 7570; e-mail: [PMOC@ses.com](mailto:PMOC@ses.com).

<sup>4</sup> *PanAmSat Licensee Corp.*, 17 FCC Rcd 10483, 10492 (Sat. Div. 2002) (footnotes omitted).

testing activities, not for commercial operations. Thus, SES is not seeking authority to communicate with SES-10 for purposes of providing U.S. service.

To the extent the Commission disagrees, SES requests a waiver of the market access and other requirements imposed in Section 25.137. Grant of a waiver will not undermine the objectives of these requirements. The market access test described in the rule is intended to ensure that U.S.-licensed systems have “effective competitive opportunities to provide analogous services.”<sup>5</sup> Because SES Americom is not seeking authority to provide commercial services in the United States using the Ka-band beacon, the requested STA does not raise any concerns about competitive equality.<sup>6</sup>

Strict adherence with Section 25.114’s requirements for detailed technical information is also unnecessary and would be unduly burdensome. SES Americom is proposing only to use its earth station to receive a signal as part of the spacecraft in-orbit testing, and the relevant technical characteristics of those transmissions are described herein. The planned IOT activities will be coordinated with nearby satellite operators, consistent with industry practice. Furthermore, a full description of the satellite’s operational characteristics for service to the United States from 66.9° W.L., including the orbital debris mitigation plan, is already on file with the Commission.<sup>7</sup>

SES Americom’s request is consistent with Commission precedent. In similar cases in which limited communications by U.S. earth stations with a foreign-licensed satellite

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<sup>5</sup> 47 C.F.R. § 25.137(a).

<sup>6</sup> In any event, the SES-10 spacecraft at 66.9° W.L. will be operating under the authority of Colombia, a WTO member country, and therefore is exempt from the requirement to make a showing of effective competitive opportunities. 47 C.F.R. § 25.137(a)(2).

<sup>7</sup> *SES-10 Petition*, Technical Appendix.

were proposed, the Commission has granted STA without requiring a market access showing under Section 25.137 or full technical data as required by Section 25.114.<sup>8</sup>

For the foregoing reasons, SES Americom respectfully requests special temporary authority for its earth station to receive a beacon signal from SES-10 in the conventional Ka-band as part of the satellite's IOT activities for a period of up to 30 days, as described herein. Grant of the requested authority will facilitate comprehensive testing of the satellite before it begins commercial operations.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Petra A. Vorwig

Of Counsel

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<sup>8</sup> See, e.g., Hawaii Pacific Teleport, L.P., File No. SES-STA-20131030-00914 (Call Sign E030115), granted Nov. 18, 2013 (granting authority for earth station to provide TT&C services to ASTRA 3A operating at 176.85° W.L.); PanAmSat Licensee Corp., File Nos. SES-STA-20090922-01211 (Call Sign E4132) & SES-STA-20090922-01212 (Call Sign E040125), both grant-stamped Oct. 16, 2009 (granting authority for earth stations to communicate with foreign-licensed NSS-12 spacecraft for purposes of providing launch and early operations services).

## Attachment 1

**Call Sign:** New earth station

### Site Details

**Contact Information:**

David Coyle  
805-386-2712

**Address:**

5990 Solano Verde Dr.  
Somis, California  
93066

**Geographic Coordinates:**

Latitude: 34° 19' 31.77" N

Longitude: 118° 59' 44.38"W

**Site Elevation:**

308.0 meters

### Antenna Details

Antenna ID: SMKA-1  
Manufacture/Model: Vertex/RSI 100V  
Antenna Size: 5.6m  
Antenna Gain Receive: 58.48 dBi at 19700.3 MHz  
Height Above Ground Level: 6.0 meters  
Height Above Sea Level: 314.0 meters  
Total Input Power at the Flange: Not applicable in receive-only mode  
Total EIRP for all Carriers: Not applicable in receive-only mode

### IOT Operational Details

Frequency (MHz)	Transmit/Receive	Polarization	Emissions Designator	Max EIRP per Carrier (dBW)	Max EIRP Density per Carrier (dBW/4kHz)
19700.30	R	Left Hand Circular polarized LHCP	100KG7W	19.5	19.5

### Section 25.140 Certifications

SES Americom certifies that SES-10's operations in the conventional Ka-band will not generate a power flux-density at the Earth's surface in excess of  $-118$  dBW/m<sup>2</sup>/MHz. There are no associated uplink operations in the Ka-band.