

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

In the Matter of Application by	)	
	)	
SES AMERICOM, INC.	)	Call Signs E920698, E9494,
	)	KA288 & KB27
For Special Temporary Authority to	)	
Communicate with SES-3 to Perform TT&C	)	
And In-Orbit Testing at 77.25° W.L.	)	

**REQUEST FOR SPECIAL TEMPORARY AUTHORITY**

By this application, SES Americom, Inc. (“SES Americom,” doing business as “SES WORLD SKIES”),<sup>1</sup> respectfully requests earth station special temporary authority (“STA”) for a period of up to 30 days to permit SES WORLD SKIES to communicate with the SES-3 spacecraft in order to provide Tracking, Telemetry and Command (“TT&C”) and perform in-orbit testing (“IOT”) in the C- and Ku-bands at 77.25° W.L. Specifically, SES WORLD SKIES requests: (1) authority to perform TT&C in order to position SES-3 at 77.25° W.L. following launch of the spacecraft; (2) authority to perform TT&C and the proposed IOT with SES-3 while it is located at 77.25° W.L.; and (3) authority to perform TT&C in order to drift SES-3 away from 77.25° W.L. after the proposed IOT. SES WORLD SKIES requests that the STA period begin twelve days following the launch of SES-3, which is currently scheduled for February 2011. The call signs of the earth stations for which STA is requested are listed in the caption above.

---

<sup>1</sup> SES WORLD SKIES is the commercial brand name for the integrated operations of two indirect subsidiaries of SES S.A.: SES Americom and New Skies Satellites B.V. (effective January 1, 2009). The brand name does not affect the underlying legal entities that hold Commission authorizations or U.S. market access rights.

SES Americom's affiliate, SES ASTRA S.A. ("SES ASTRA"), holds an authorization from the Luxembourg Ministry of State, Office of Media and Communications<sup>2</sup> for the SES-3 spacecraft. SES ASTRA has requested that SES WORLD SKIES assist with providing TT&C and performing IOT of the spacecraft to permit evaluation of the SES-3 C- and Ku-band payloads prior to commercial operation of the satellite. SES WORLD SKIES requests authority to test the C-band and Ku-band payloads of SES-3 at 77.25° W.L. and to perform TT&C using certain Ku-band frequencies before, during and after IOT. As discussed below, communications with SES-3 at 77.25° W.L. will not adversely affect the operation of any adjacent satellites. SES-3 is scheduled for launch in February 2011, and SES WORLD SKIES seeks action on this request to accommodate that schedule.

***Grant of STAs Will Serve the Public Interest.*** Grant of SES WORLD SKIES' request to test SES-3 at the 77.25° W.L. orbital position is in the public interest. By testing SES-3 at this location, SES WORLD SKIES will minimize the risk of interference and be able to ensure that SES-3 is fully operational before the satellite commences providing commercial services.

***No Harmful Interference to Other Spacecraft.*** Transmissions associated with TT&C and IOT of SES-3 will not cause harmful interference to the operations of any other spacecraft due to orbital angular separation, frequency diversity and/or geographically diverse beam coverage. SES WORLD SKIES has also commenced coordinating the proposed TT&C and IOT operations with other C- and Ku-band satellites positioned near 77.25° W.L., including Brasilsat B3, Simon Bolivar, Horizons 2, and EchoStar 1. In order to avoid the C-band TT&C

---

<sup>2</sup> Ministère d'État, Service des Médias et des Communications of the Grand Duchy of Luxembourg.

frequencies in use on EchoStar 1 at the nominal 77° W.L. orbital location, SES WORLD SKIES will perform TT&C only in the Ku-band while SES-3 is positioned at or near 77.25° W.L.

***No Harmful Interference to C-band Terrestrial Services.*** Transmissions associated with IOT of SES-3 will not cause harmful interference to any co-primary terrestrial services in the conventional C-band. The C-band earth station to be used for in-orbit testing of the satellite has been coordinated to communicate with satellites in an arc that includes 77.25° W.L. The earth station will not exceed the maximum output EIRP density specified in its license.

In addition, and in any event, SES WORLD SKIES will conduct all IOT operations on a non-harmful interference basis, and will cease transmissions promptly in the event any harmful interference is caused by such operations.

***Waiver Requests.*** SES WORLD SKIES requests limited waivers of the Commission's requirements in connection with the instant STA request. Grant of these waivers 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>3</sup>

SES WORLD SKIES requests a waiver of Section 25.137 and the other Commission rules cross-referenced therein. SES WORLD SKIES seeks special temporary authority in connection with TT&C and IOT for SES-3, a foreign-licensed spacecraft. Section 25.137 requires that applicants proposing to use U.S.-licensed earth stations to

---

<sup>3</sup> *PanAmSat Licensee Corp.*, 17 FCC Rcd 10483, 10492 (Sat. Div. 2002) (footnotes omitted).

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 and the milestone and bond obligations in Sections 25.164 and 25.165.

By its terms, Section 25.137 is inapplicable to the instant STA request. The rule’s requirements come into play only when a non-U.S.-licensed satellite is to be used to “serve the United States.”<sup>4</sup> Here, the SES WORLD SKIES earth stations will be used solely for TT&C and IOT, not for commercial operations. Thus, SES WORLD SKIES is not seeking to have its earth stations communicate with SES-3 for purposes of providing U.S. service within the meaning of Section 25.137.

To the extent the Commission disagrees, SES WORLD SKIES 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.”<sup>5</sup> Because no commercial services are contemplated here, the requested STA does not raise any concerns about competitive equality.<sup>6</sup>

Similarly, waiver is consistent with the purposes of the milestone and bond requirements. Those rules are intended to deter speculative applications and the warehousing of

---

<sup>4</sup> 47 C.F.R. § 25.137(a).

<sup>5</sup> *Id.*

<sup>6</sup> In any event, the SES-3 spacecraft is authorized by Luxembourg, 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).

orbital locations that occurs when scarce orbit and spectrum resources are assigned to an applicant that does not implement service.<sup>7</sup> SES WORLD SKIES seeks to communicate with SES-3 only for a limited time period in order to allow testing of the spacecraft and does not seek regular authority for space station operations. As a result, the Commission's policies against speculation and warehousing are not implicated here.

Finally, strict adherence with Section 25.114's requirements for detailed technical information is unnecessary and would be unduly burdensome. SES WORLD SKIES proposes only temporary communications with the SES-3 spacecraft, and the relevant technical characteristics of those communications are described herein. The planned transmissions are being coordinated with nearby satellite operators, consistent with industry practice, and will be conducted on a non-harmful interference basis. In these circumstances, no valid purpose would be served by requiring a complete description of the SES-3 spacecraft.

SES WORLD SKIES' request is consistent with Commission precedent. In similar cases in which temporary communications by U.S. earth stations with a foreign-licensed satellite 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, and without imposing milestone or bond requirements.<sup>8</sup>

---

<sup>7</sup> *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 (2003) at ¶¶ 167 & 175.

<sup>8</sup> *See, e.g.*, 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).

***Protective Conditions.*** SES WORLD SKIES seeks authority to communicate with SES-3 for purposes of TT&C and C-band and Ku-band IOT at 77.25° W.L., and to drift the satellite away once such testing is completed, subject to the following (or similar) conditions:

- (a) SES WORLD SKIES will coordinate its drift and test operations with all potentially affected operating satellite networks.
- (b) During the drift of SES-3 to and away from 77.25° W.L., communications with SES-3 will be in the designated TT&C frequencies only.
- (c) No harmful interference will be caused to any lawfully operating satellite network or radio communication system and SES WORLD SKIES' operations will cease immediately upon notification of harmful interference. Further, SES WORLD SKIES shall notify the Commission in writing that it has received such a notification within 14 days of receipt.
- (d) SES WORLD SKIES will accept interference from any lawfully operating satellite network or radio communication system.
- (e) Testing authority is limited to the conventional C- and Ku-band frequencies at the 77.25° W.L. orbital location.
- (f) Communications with the SES-3 space station at 77.25° W.L. are limited to TT&C and in-orbit testing, and shall not include any provision of commercial services.
- (g) The authorization is subject to change in any of its terms or cancellation in its entirety at any time upon reasonable notice, but without hearing, if in the opinion of the Commission, circumstances require.
- (h) The temporary authority will commence 12 days after the SES-3 launch and terminate 30 days from that date.
- (i) The 24/7 point of contact for SES WORLD SKIES during IOT and drift maneuvers is Dave Westlund, (805) 217-4415, dave.westlund@ses.com.

SES WORLD SKIES hereby certifies that no party to this application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

For the foregoing reasons, SES WORLD SKIES respectfully requests special temporary authority to communicate with SES-3 for a period of up to 30 days, commencing 12 days after the launch of SES-3, in order to provide TT&C and perform in-orbit testing as described herein. Grant of the requested authority will permit testing of the spacecraft prior to commercial operation.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Daniel C.H. Mah

Of Counsel  
Karis A. Hastings  
Hogan Lovells US LLP  
555 Thirteenth Street, N.W.  
Washington, D.C. 20004-1109  
Tel: (202) 637-5600

Daniel C. H. Mah  
Regulatory Counsel  
SES Americom, Inc.  
Four Research Way  
Princeton, NJ 08540

Dated: October 1, 2010

## ATTACHMENT 1

This attachment provides information in support of applications of SES Americom, Inc. (doing business as “SES WORLD SKIES”) for earth station special temporary authority in connection with: (1) the proposed in-orbit testing (“IOT”) of the SES-3 spacecraft at 77.25° W.L.; and (2) Tracking, Telemetry, and Command (“TT&C”) to position SES-3 at 77.25° W.L. and drift the spacecraft away following completion of the proposed IOT. The following SES WORLD SKIES earth stations will be used for IOT and TT&C functions:

<b>Call Sign</b>	<b>Location</b>	<b>Function</b>	<b>Frequencies</b>
E920698	Woodbine, MD	Ku-band TT&C	Ku-band TT&C --Command: 14499.0 MHz --Beacons/Telemetry: 11701.0 MHz 12199.0 MHz
E9494	Vernon Valley, NJ	Ku-band TT&C	Ku-band TT&C --Command: 14499.0 MHz --Beacons/Telemetry: 11701.0 MHz 12199.0 MHz
KB27	Somis, CA	C-band IOT at 77.25° W.L.	C-band IOT -- 3700-4200 MHz; 5925-6425 MHz
KA288	Somis, CA	Ku-band IOT at 77.25° W.L.	Ku-band IOT -- 11.7-12.2 GHz; 14.0-14.5 GHz

The proposed IOT of SES-3 will involve verifying the performance characteristics of the C- and Ku-band transponders and antenna patterns and will utilize in some cases saturating CW carriers in those bands. The IOT will include the following tests: satellite power amplifier transfer characteristics; satellite transponder characteristics; antenna mapping; and EIRP and SFD, amplitude linearity, group delay amplitude response, polarization isolation, and attenuator checks. The earth stations utilized for the performance of the IOT will not exceed the maximum output EIRP density specified in their respective licenses.

The transmissions for TT&C and IOT will conform to the Commission’s technical rules with one exception. The use of a CW carrier during C-band IOT will result in



satellite emissions in the 3700 - 4200 MHz frequency band that exceed the Commission's PFD limits on the earth's surface in Section 25.208(a). However, the duration of the test involving CW carriers is very short (in the order of 2 to 3 minutes, and certainly less than 5 minutes). SES WORLD SKIES will cease transmissions in the event of any report of harmful interference.