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December 13, 2013

***By Electronic Filing***

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: SES Government Solutions, Inc. STA Requests to Communicate with O3b,  
File Nos. SES-STA-20131022-00887 & SES-STA-20131022-00888**

Dear Ms. Dortch:

SES Government Solutions, Inc., formerly known as Americom Government Services, Inc. ("SES-GS"), by its attorney and pursuant to Section 1.65 of the Commission's rules, 47 C.F.R. § 1.65, hereby updates the record regarding the above-referenced SES-GS requests for special temporary authority ("STA") to operate an earth station in Bristow, VA that will communicate with the O3b Ka-band non-geostationary orbit satellite fleet. SES-GS has reviewed the supplemental materials O3b has filed in support of its pending applications for a fixed earth station in Bristow<sup>1</sup> and for a blanket license for Earth Stations on Vessels.<sup>2</sup> No substantial changes are required to the SES-GS STA requests in connection with this additional information from O3b. SES-GS, however, wishes to update the cross-references and other information in its STA requests as follows.

1. In the narrative for its 180-day STA request, SES-GS recognized that terrestrial LMDS systems have primary status in the 28.172-28.350 GHz portion of the uplink spectrum O3b has assigned to SES-GS.<sup>3</sup> In order to ensure that the proposed SES-GS operations would not cause harmful interference to LMDS, SES-GS asked Comsearch to notify LMDS systems in the area of the planned SES-GS operations, and Comsearch

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<sup>1</sup> Letter of Joslyn Read, Vice-President, Regulatory Affairs, O3b Limited, to Marlene H. Dortch, Secretary, Federal Communications Commission, File No. SES-LIC-20130618-00516, filed Nov. 22, 2013 ("O3b Bristow Supplement").

<sup>2</sup> Revised Schedule S, File No. SES-AMD-20131025-01138, filed Oct. 25, 2013 ("O3b Revised Schedule S").

<sup>3</sup> SES Government Solutions, Inc., File No. SES-STA-20131022-00887 ("SES-GS STA"), Narrative at 2.

provided a report confirming that none of the LMDS operators raised any objections.<sup>4</sup> In the O3b Bristow Supplement, O3b responded to a question regarding whether O3b's planned operations at Bristow were consistent with prior Commission indications that secondary FSS operations in the 27.6-28.35 GHz band should be limited to gateway-like operations.<sup>5</sup>

SES-GS agrees with O3b that the focus of the Commission's statements regarding FSS operations in the 27.6-28.35 GHz band has been on ensuring that such operations are compatible with LMDS by limiting the number and ubiquity of FSS terminals permitted to use the spectrum. The proposal by SES-GS to operate at a single site that is virtually co-located with the O3b Bristow antenna site is clearly consistent with this underlying rationale. Furthermore, as noted above, LMDS systems in the vicinity of the site have been notified of the proposed SES-GS operations and have not objected. Accordingly, grant of the requested SES-GS STA will not undermine the primary spectrum rights of LMDS systems.

2. The SES-GS STA included an analysis of compliance with ITU uplink EPFD limits designed to protect primary GSO FSS networks in the 28.35-28.4 GHz band.<sup>6</sup> SES-GS referred to the O3b demonstration of compliance with these limits, which was based on the proposed power levels of the O3b Bristow earth station and the angular separation between the O3b and geostationary orbits as viewed from the Earth. In the O3b Bristow Supplement, O3b responded to a question from the Commission staff regarding the EPFD(up) limits in No. 22.5D of the ITU Radio Regulations and provided a more detailed demonstration of its compliance with those limits that is specific to the Bristow antenna site.<sup>7</sup>

SES-GS hereby incorporates by reference the supplemental O3b analysis on compliance with ITU uplink EPFD limits. The SES-GS Bristow antennas will operate at power levels below the levels that O3b used in its supplemental analysis.<sup>8</sup> Accordingly, the conclusion stated in the SES-GS STA Narrative that SES-GS will comply with applicable ITU EPFD(up) limits in the 28.35-28.4 GHz band remains valid.

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<sup>4</sup> See SES-GS STA, Narrative at 2 & Annex 2.

<sup>5</sup> O3b Bristow Supplement at 2-3, response to question 4.

<sup>6</sup> SES-GS STA, Narrative at 2-3 & nn.3-5.

<sup>7</sup> O3b Bristow Supplement at 1-2, response to question 2.

<sup>8</sup> Specifically, SES-GS proposes to operate with a maximum earth station EIRP density that is equivalent to 31.5 dBW/40kHz (SES-GS STA, Narrative at 3 n.5), while O3b is proposing to transmit with a maximum EIRP density equivalent to 34.6 dBW/40kHz (O3b Bristow Supplement at 1).

3. SES-GS incorporated by reference the O3b Schedule S and associated service area definition and beam contour maps.<sup>9</sup> O3b has since provided a revised version of these materials.<sup>10</sup> SES-GS updates its STA request to refer to the revised O3b Schedule S documentation.
4. The SES-GS STA cross-references O3b's demonstration that its system complies with all applicable FCC power flux density ("PFD") limits.<sup>11</sup> The O3b Bristow Supplement confirms that the PFD levels provided in the O3b Revised Schedule S are below the applicable limits in the FCC rules.<sup>12</sup> The proposed SES-GS antennas will operate with O3b downlink signals that are below the maximum EIRP density used by O3b to show its compliance with the Commission's PFD limits. Accordingly, the O3b showing as supplemented supports the conclusion that the planned SES-GS operations will be consistent with Commission limits as well.

SES-GS asks that the Commission update the record relating to the SES-GS STA requests as outlined above. Apart from the foregoing items, SES-GS does not believe that the supplemental O3b materials alter the information on which SES-GS relied in its STA requests.<sup>13</sup>

Please let me know if you have any questions regarding this matter.

Respectfully submitted,

*/s/ Karis A. Hastings*

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<sup>9</sup> SES-GS STA, Narrative at 4.

<sup>10</sup> See O3b Revised Schedule S.

<sup>11</sup> SES-GS STA, Narrative at 5.

<sup>12</sup> O3b Bristow Supplement, Attachment at 6-7 & n.5.

<sup>13</sup> For example, SES-GS incorporated by reference the O3b showing of compliance with ITU EPFD(down) limits, the O3b coordination agreement with the U.S. Government, and the O3b showing in support of a waiver of the Commission's cross-polarization isolation specifications. See SES-GS STA, Narrative at 3, 4 & 7. These references are unchanged.