

**SES Government Solutions, Inc. (“SES-GS”)
Application for Experimental Special Temporary Authority**

Narrative Statement

(1) Name, address, phone number (also e-mail address and facsimile number, if available) of the applicant.

SES-GS Representative and Stop Buzzer Contact:

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(2) Description of why an STA is needed.

SES Government Solutions, Inc. (“SES-GS”), a wholly-owned subsidiary of SES S.A. (“SES”) and an affiliate of O3b Limited (“O3b”), provides satellite solutions to U.S. government customers to meet mission critical needs. SES-GS seeks an experimental special temporary authority (“STA”) in order to test and demonstrate a multi-band terminal that will communicate with the O3b non-geostationary orbit (“NGSO”) satellite system in the Ka-band.¹

Specifically, SES-GS requests STA to perform testing and demonstration of the 1.25-meter Intellian X130D antenna with the O3b network to assess the antenna’s suitability to support operations on U.S. Navy vessels deployed around the world. O3b has been authorized under call sign WL2XXO to test and demonstrate this antenna in the Ka-band at two locations,² and SES-GS incorporates the information O3b provided by reference herein. The antenna will communicate with O3b’s Ka-band NGSO satellite constellation using spectrum in which NGSO operations have sole primary status, transmitting in the 28.6-29.1 GHz frequencies and receiving in the 18.8-19.3 GHz frequencies.

(3) Time and Date of Proposed Operation

SES-GS requests expedited processing to allow testing to begin by May 16, 2022. The timing is driven by the need to support U.S. Navy personnel around the world. The terminal will be used to upload and download files and data at higher speeds and lower

¹ The FCC has granted market access to the current O3b 20 satellite constellation and authorized the expansion of the constellation to up to 42 satellites. See *O3b Limited*, Order and Declaratory Ruling, 33 FCC Rcd 5508 (2018) (“O3b Market Access Grant”).

² See *O3b Limited*, Call Sign WL2XXO, File No. 0331-EX-CN-2021 (the “WL2XXO License”).

latencies than previously possible. With this type of capability, U.S. Navy personnel will be better connected, providing a higher probability of mission success as well as morale, welfare and recreation connectivity if needed. SES-GS is seeking to expedite the testing and demonstration process in order to speed the delivery of this valuable service to U.S. Navy personnel.

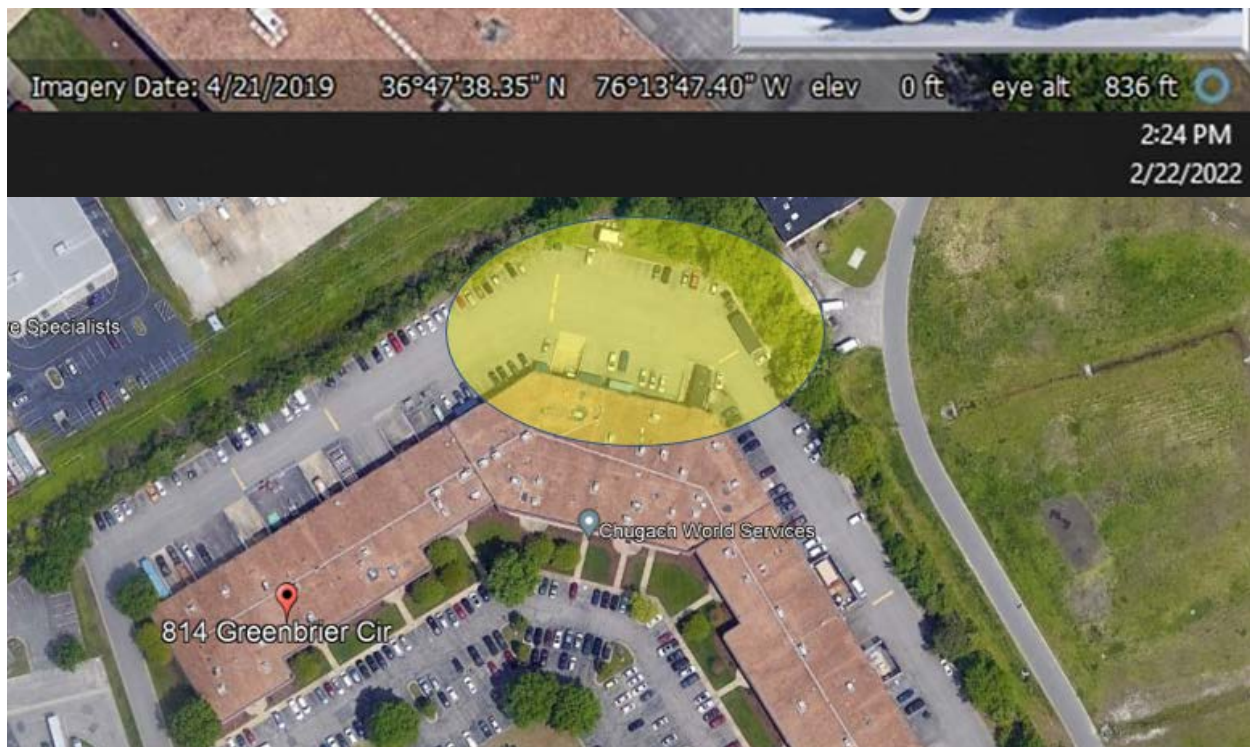
(4) Class(es) of station (fixed, mobile, fixed and mobile) and call sign of station (if applicable).

The transmitting antenna will operate as a fixed satellite earth station.

(5) Description of the location(s) and, if applicable, geographical coordinates of the proposed operation.

SES-GS will operate the terminal in fixed mode at 814 Greenbrier Circle, Chesapeake, VA. The coordinates are: 36° 47' 38" N; 76° 13' 47" W

A map of the site is provided below.



(6) Transmit equipment to be used, including name of manufacturer, model, and number of units.

Intellian Model X130D, 2 units.

(7) Maximum effective radiated power (ERP) or equivalent isotropically radiated power (EIRP).

The maximum transmitted EIRP will be 61.5 dBW, the transmitted power is 20 Watts, and the peak ERP is 860993.8 Watts.

For all operations, SES-GS will comply with the radiofrequency radiation exposure limits in 47 C.F.R. § 1.1310 and apply the measures recommended in the FCC's OET Bulletin 65 to ensure compliance.

(8) Emission Designator

54M0G7W

(9) Overall height of antenna of antenna structure above the ground (if greater than 6 meters above the ground or an existing structure, see part 17 of this Chapter concerning notification to the FAA).

The antenna's overall height above ground level will be less than 6 meters.

(10) Directional Antenna Characteristics

Width of the antenna beam in degrees at the half-power point	1.6 degrees
Orientation of the antenna in the horizontal plane	Azimuth sweep range is from 169.1 degrees to 208.5 degrees
Orientation of the antenna in the vertical plane	Elevation will vary from 26.6 degrees to 31.3 degrees across the pass

Antenna performance data and test reports for the terminal were provided in Annex A of the WL2XXO License application and are incorporated by reference herein.