**REQUEST FOR SPECIAL TEMPORARY AUTHORITY**

SES Government Solutions, Inc. ("SES-GS") respectfully requests special temporary authority ("STA") for a period of 30 days beginning April 2, 2019, to demonstrate antennas to representatives of the U.S. Federal Bureau of Investigation. The demonstrations will take place at the SES-GS earth station in Bristow, VA using a fixed configuration. The antennas will communicate in conventional Ku-band frequencies with the SES-15 spacecraft at 129.15° W.L. (Call Sign S2951).[1]

The antennas to be demonstrated are:

1. Kymeta 0.7 meter (two units)
2. AvL Model 715 0.75 meter
3. GetSat MilliSAT LM 0.52 meter

Technical information regarding the proposed operations of these antennas is provided in Annex 1 hereto. The Commission has previously licensed the Kymeta antenna,[2] and SES-GS is providing in Annex 1 antenna patterns showing that the AvL and GetSat antennas comply with Section 25.209 of the Commission's rules.

Grant of the requested STA is in the public interest because it will allow federal law enforcement representatives to evaluate the benefits of these antennas to support their intelligence requirements. Furthermore, the proposed operations in the conventional Ku-band will be limited and will not cause harmful interference to any terrestrial or satellite operators. SES-GS will conduct the demonstrations on an unprotected, non-interference basis.

For the foregoing reasons, SES-GS respectfully requests that the Commission grant it a 30-day STA to demonstrate antennas with the SES-15 satellite beginning April 2, 2019.

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[1] *SES Satellites Gibraltar Ltd*., Call Sign S2951, File Nos. SAT-MPL-20160718-00063, granted Dec. 14, 2016 & SAT-MPL-20170914-00130, granted Nov. 22, 2017.

[2] *Kymeta Corp*., Call Sign E170070, File No. SES-MOD-20171027-01255, granted May 8, 2018.

Annex 1: Operational Parameters

Contact: Ross Yovanovitch, 703-895-4825, ross.yovanovitch@ses-gs.com

Location: 8000 Gainsford Ct, Bristow, VA 20136

38° 46' 59" N.L.; 77° 34' 25" W.L. (WGS84)

Site elevation above mean sea level: 88 meters

Antenna height above ground level: 0.7 meters

Antenna height above mean sea level: 88.7 meters

Transmit frequencies: 14-14.5 GHz

Receive frequencies: 11.7-12.2 GHz

Polarization: horizontal and vertical

Satellite: SES-15 at 129.15° W.L.

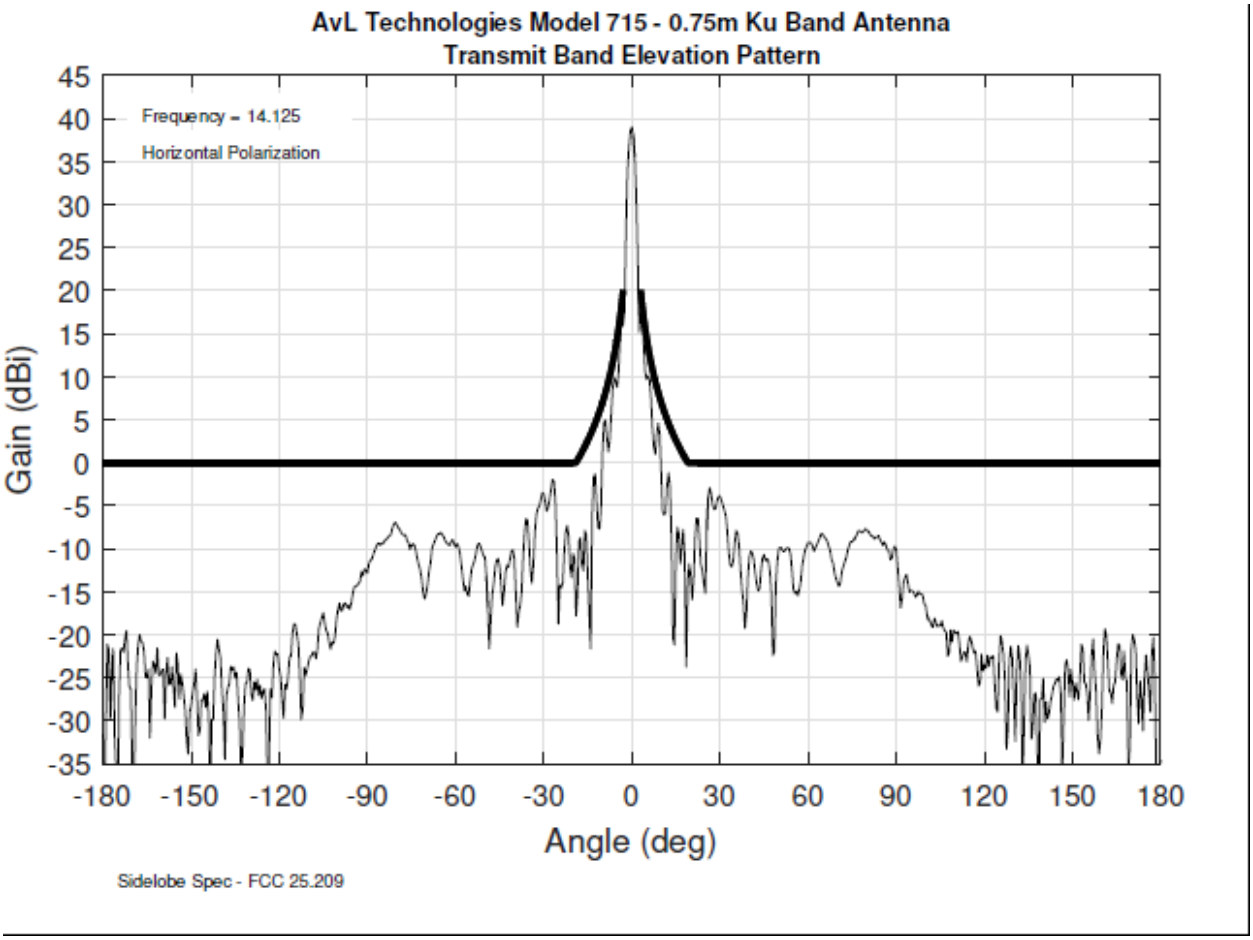
Azimuth angle: 243.6°

Elevation angle: 20.9°

Maximum EIRP density toward the horizon: -26 dBW/4 kHz

| Parameter | Kymeta | AvL | GetSat |
|---|---|---|---|
| Transmit Gain @ 14.25 GHz, dBi | 32.5 | 39.0 | 30.5 |
| Receive Gain @ 11.95 GHz, dBi | 33.0 | 37.5 | 29.4 |
| Total input power at the flange, W | 4.1 | 1.4 | 1.2 |
| Total EIRP for all carriers, dBW | 46.5 | 52.9 | 45.9 |
| Emission designator | 3M60G1D | 2M70G1D | 3M60G1D |
| Max. EIRP per carrier, dBW | 45.3 | 55.4 | 54.8 |
| Max. EIRP density per carrier, dBW/4 kHz | 9.28 | 19.38 | 18.78 |

AvL Antenna Pattern



# GetSat Antenna Pattern