REQUEST FOR SPECIAL TEMPORARY AUTHORITY
NARRATIVE STATEMENT

(1) Contact Information

If there are any questions regarding this application, please contact:

Name:	Blake Wiles
Title:	Market Access Manager, North America
Mailing Address:	1785 Greensboro Station Place, Tower 3, McLean, VA 22102
Email Address:	bwiles@oneweb.net
Phone:	(571) 814-3115

(2) Explanation of why Experimental Authorization is Needed

WorldVu Satellites Limited ("Eutelsat OneWeb") seeks special temporary authority ("STA") for 3 months beginning December 13, 2023, or as soon as possible thereafter, to showcase connectivity with user terminals using the operational satellites of the Eutelsat OneWeb non-geostationary, fixed-satellite service ("NGSO FSS") constellation.[1]

(3) Description of Operations to be Conducted and its Purpose

Eutelsat OneWeb seeks experimental authority to showcase the performance characteristics of the user terminal specified in Sections 5 – 7 of this narrative. These over-the-air tests will be conducted using satellites in the authorized Eutelsat OneWeb NGSO FSS constellation for the purpose of demonstrating multiple functions of the antenna, including: (i) tracking and connectivity capabilities, (ii) handover between satellites; (iii) half-duplex operation and time synchronization; and (iv) throughput speed versus modulation. Completion of these trials will enable Eutelsat OneWeb to showcase its , thereby benefiting its customers around the world.

For all operations, Eutelsat OneWeb will comply with the radiofrequency radiation exposure limits in 47 CFR § 1.1310 and all recommended measures in OET Bulletin 65. All proposed operations involving these earth stations will be conducted by Eutelsat OneWeb on a non-interference basis in the Ku-band.

(4) Time and Dates of Proposed Operation

Eutelsat OneWeb requests experimental authority for a period of 3 months, beginning December 13, 2023.

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[1] The Eutelsat OneWeb NGSO FSS system was granted U.S. market access by the Commission in June 2017. *See WorldVu Satellites Limited, Petition for a Declaratory Ruling Granting Access to the U.S. Market for the OneWeb NGSO FSS System*, Order and Declaratory Ruling, 32 FCC Rcd 5366 (2017) ("OneWeb Market Access Grant").

(5) Classes of Station

Antenna 1: Fixed
Antenna 2: Fixed, Mobile (Maritime)

(6) Description of the Locations

Trial 1: Lafayette, LA
Latitude: 30.27139 N
Longitude: 92.03863 W

Trial 2: The second trial will comprise of two stages:
Stage 1: Fixed testing at the facility in Lafeyette specified above.
Stage 2: Testing aboard a maritime vessel departing Staten Island, NY voyaging to Providence, RI, and then up to 300 miles off the coast line between the two.

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

Manufacturer: Kymeta
Model: u8
Number of Units: 2

Note: This antenna has already been licensed by the Commission as indicated in ICFS Call Sign E170070.

(8) Requested Frequencies

Transmit: 14.0 - 14.5 GHz
Receive: 10.7 - 12.7 GHz

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

EIRP: 36.6 dBW

(10) Emission designator (see §2.201 of this chapter) or describe emission (bandwidth, modulation, etc.).

Emission Designator: 250MG7D, 125MG7D
Transmit bandwidth: 2.16 – 18 MHz
Transmit gain: 34.5 dBi at 14.5 GHz
Modulation: QPSK, 8PSK, and 16QAM
Frequency Tolerance (+/-): 0.0000007 %

(11) Overall height 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 overall height of the antennas above ground (or above existing structures) will not exceed 5 meters.

(12) Supplemental Technical Data for Antenna Registration.

Parameters		Ku-band Antenna
Beam Width at Half Power Point	Horizontal Plane	3.0° at 14.25 GHz
	Vertical Plane	3.0° to 3.4° at 14.25 GHz
Orientation in Horizontal Plane		0° – 360°
Orientation in Vertical Plane		37° – 90°
Antenna Size	Diameter	0.82 m

(13) Point of Contact for Tests

In the event any harmful interference has been identified in relation to these tests, the point of contact who can immediately cease operations of the experimental ESA terminals is as follows.

Primary

Name: Chris Taylor
Title: Director of Operations & Infrastructure
Phone: 337-291-6535
Email: ctaylor@getgds.com

Secondary

Name: Mathew Plunkett
Title: Associate Director of Infrastructure
Phone: 337-291-6533
Email: mathewp@getgds.com