



December 28, 2022

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

Re: Request for Special Temporary Authority to Operate a Ku-band ESIM Terminal
with NGSO FSS System Satellites

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests 30 days of Special Temporary Authority ("STA"),¹ commencing upon grant, but no later than January 17, 2023, to operate a 0.46 m square Ku-band earth station in motion ("ESIM") terminal with non-geostationary orbit ("NGSO") fixed-satellite service ("FSS") system satellites for testing and demonstrations.² The proposed operations will occur while the airplane is on the tarmac at the San Juan Airport (SJU) in San Juan, Puerto Rico, as well as inflight. Inflight testing operations will occur over the continental United States, Puerto Rico and U.S. territories in the greater Caribbean area, and international waters. Testing will not occur over foreign territories or waters.

Intelsat requests to operate the ESIM terminal in 11700-12200 MHz (downlink) and 14000-14500 MHz (uplink) and to communicate with WorldVu Satellites Limited's NGSO FSS System (Call Sign S2963). In support of this request, Intelsat herein attaches additional technical information, off-axis EIRP spectral density plots, and a Radiation Hazard Report as Exhibits A-C, respectively.

The 24x7 contact information for the proposed operations is: Angela Wheeler, Director, Network Operations Center, at (404) 381-2820 or angela.wheeler@intelsat.com.

In the extremely unlikely event that harmful interference should occur due to transmissions to or from its antenna, Intelsat will take all reasonable steps to eliminate the interference.

¹ Intelsat has filed its STA request, FCC Form 159, the filing fee, and this supporting letter electronically via the International Bureau's Filing System.

² The proposed aeronautical operations will confirm with the coordination agreement between Intelsat and National Aeronautics and Space Administration.

The proposed operations will enable Intelsat to test new equipment. Accordingly, grant of this request is in the public interest.

Respectfully submitted,

/s/ Cynthia J. Grady

Cynthia J. Grady
Assistant General Counsel
Intelsat US LLC

cc: Franco Hinojosa

EXHIBIT A

Intelsat License LLC
Request for Special Temporary Authority to Operate Ku-band Flat Panel Antennas

Antenna Description	Ball Aerospace 9x9 Subarray Gen II 3S
Antenna Size (m)	0.46 m ²
Transmit Frequencies (MHz)	14000-14500
Receive Frequencies (MHz)	11700-12200
Emission Designator(s)	125MG7D
Polarization	Linear
Bandwidth	125 MHz
Transmit Gain	36.8 dBi at 14.3 GHz (boresight) 32.6 dBi at 14.3 GHz (25° elevation angle)
Maximum EIRP per Carrier (dBW)	51.7
Maximum EIRP Density per Carrier (dBW/4 kHz)	15 dBW/4 kHz at 14.0 GHz 15.4 dBW/4 kHz at 14.5 GHz
Site Locations and Latitude/Longitude (NAD83)	San Juan Airport (SJU) in San Juan, Puerto Rico 18° 26' 16.08" N, 66° 0' 20.52" W Inflight over the continental United States, Puerto Rico and U.S. territories in the greater Caribbean area, and international waters
Satellite Point(s) of Communication, Call Sign	WorldVu Satellites Limited NGSO FSS System (Call Sign S2963)