

From: Steven Hemple

To: Leann Nguyen

Date: May 16, 2017

Subject: Request for Info - File # 0264-EX-CN-2017

Message:

Ms. Nguyen,

- International Bureau (IB) worst-case analysis shows that this test terminal with an altitude of 40 feet (12.2 meters) would exceed the EPDF limit set in RR 22.5D (-162 dB(W/m²), 100% of the time in a 40-kHz referenced bandwidth. ViaSat needs to be aware that IB is processing several NGSO applications that will operate at low earth orbit (LEO) in the uplink 27.5-30 GHz band.

-- Please elaborate on how this experiment would exceed the limits in RR 22.5D. RR22.5D sets the EPFD limits "produced at any point in the geostationary-satellite orbit by emissions from all earth stations in a non-geostationary-satellite system". This experimental request does not require communication with a non-geostationary-satellite.

-In Exhibit A, last section title "RF Radiation Compliance", it states that the maximum power from the terminal will be 0.31 W ERP; however, the Form 442 indicates a 5 W ERP. Can Viasat please confirm the ERP value being request?

-- The requested transmit ERP is 5W. The power from the signal source required to generate an ERP of 5 W is 0.31 mW.

- Is the CW signal being swept through a frequency ranges or is the signal being transmitted in incremental steps throughout a frequency range?
Please provide the frequency ranges and how the CW signal is being transmitted in this test.

--The CW signal is stepped through the frequency range. The frequency range being requested is 17.5 - 30 GHz.

-Can the transmit terminal is pointed below the horizon?

-- The terminal does not point below the horizon.

Best Regards,

Steven Hemple