

From: Mariah Shuman

To: Nimesh Sangani

Date: April 26, 2019

Subject: Application

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Message:

1) What is the size of the proposed antenna(s)? Please submit antenna's pattern performances.

The size of the proposed antennas are:

• 12 dB/K Dual Parabolic Antenna: .75 meters

• 15 dB/K Dual Parabolic Antenna: 1.0 meters

OneWeb notes the Commission has not adopted antenna performance standards rules applicable to NGSO user terminals.<sup>1</sup> As such, OneWeb respectfully submits that the antenna pattern performance requirements in Section 25.209 of the Commission's rules are inapplicable to this experimental license application.

2) Please submit a radiation hazard of the proposed antennas.

The applicable radiation hazard reports are attached as Appendix A and Appendix B.

3) Please demonstrate that the proposed operations in the 14.0-14.5 GHz band will meet the equivalent power Flux-density levels of 47 CFR § 25.208(k) and the Table 22-2 of Article 22, Section II of the ITU radio Regulations. Please provide a detail calculation, including data/number/value and formula that used to calculate the EPFD for each frequency band, emissions and its associated power:

Frequency	Station Class	Emission Designator	Authorized Power
• 14-14.5 GHz	FX	20M0G7D	2.22kW (ERP)
• 14-14.5 GHz	FX	40M0G7D	4.42kW (ERP)

As part of its application for U.S. market access, OneWeb provided an EPFDup demonstration and also submitted user terminal EIRP masks in .MDB files.<sup>2</sup> OneWeb is attaching a portion of that demonstration, which specifies OneWeb's EPFD compliance in the 14.0-14.5 GHz band, as Appendix C.

4) Please certify that the proposed operations and the communications between earth stations and satellites are in compliance with all existing and future coordination.

OneWeb certifies that the proposed operations will be in compliance with OneWeb's existing and future coordination agreements.

1 See Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters, 32 FCC Rcd 7809, ¶¶ 54-55 (2017) (noting the Commission had "previously declined to adopt off-axis power limits on NGSO FSS earth stations" and again declining to do so).

2 See WorldVu Satellites Limited, Petition for a Declaratory Ruling Granting Access to the U.S. Market for the OneWeb System, IBFS File No. SAT-LOI-20160428-00041, Technical Narrative at A1-16–A1-17 (filed Apr. 28, 2016).