



Federal Communications Commission  
Washington, D.C. 20554

June 30, 2020

Mr. Timothy Bransford  
Morgan, Lewis & Bockius LLP  
1111 Pennsylvania Avenue, NW  
Washington, DC 20004

Re: EOS Defense Systems USA, Inc.  
IBFS File No.: SAT-MOD-20200526-00057; Call Sign: S2982

Dear Mr. Bransford:

On May 26, 2020, EOS Defense Systems USA, Inc. (EOS) filed the above-captioned application seeking to modify its license for a medium-earth orbit ("MEO"), non-geostationary satellite orbit ("NGSO") constellation utilizing certain V- and Ka-band frequencies (Call Sign S2982) (the "Audacity Network"). To aid the Commission's evaluation of the application, please provide the following additional information:

1. Section 25.114(c)(4)(vi)(B)<sup>1</sup> of the Commission's rules requires that applicants for space stations in non-geostationary orbits specify for each unique orbital plane the predicted antenna gain contour(s) for each transmit and receive antenna beam for one space station if all space stations are identical in the constellation. In the Schedule S provided by EOS, six transmitting beams and four receiving beams are included, for a total of ten beams. However, there are just four antenna gain contour diagrams attached to the Schedule S, apparently representing only the new feeder link beams. Please provide the required beam diagrams for the remaining six service beams, i.e., SUR1, SUL1, SDR1, SDL1, SDR2 and SDL2. Also, although not strictly required, we would greatly appreciate if you would provide these diagrams in the GIMS readable format as specified in section 25.114(c)(vi)(A).<sup>2</sup>
2. Section 25.114(c)(4)(vi)(D)<sup>3</sup> of the Commission's rules requires that applicants for space stations with steerable beams that are not shapeable, specify the applicable contours, as defined in paragraph (c)(4)(vi)(A) or (c)(4)(vi)(B) of this rule section, with a description of a proposed coverage area for each steerable beam, or provide the contour information described in paragraph (c)(4)(vi)(C) of this section for each steerable beam. For the various service link beams, EOS indicates that the service area will be "global." For the feeder link beams however, EOS entered only "See Gateway Service Area PDF." In examining the associated PDF files, it appears that EOS is planning only a single feeder link site at location along the California coast. Please verify that this interpretation is in fact correct. Otherwise, kindly provide more detailed service area information for these beams. Additionally, if the beams are shapeable, please provide the information required by section 25.114(c)(4)(iv)(C).<sup>4</sup>

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<sup>1</sup> 47 CFR § 25.114(c)(4)(vi)(B).

<sup>2</sup> 47 CFR § 25.114(c)(4)(vi)(A).

<sup>3</sup> 47 CFR § 25.114(c)(4)(vi)(D).

<sup>4</sup> 47 CFR § 25.114(c)(4)(vi)(C).

3. Transmitting beams SDR1 and SDL1 include the frequency band 17.7-17.8 GHz, and Schedule S describes the service area for these beams as “global.” We note however, that the United States Table of Frequency Allocations<sup>5</sup> does not include a space-to-Earth allocation for the FSS in this band. We ask that EOS clarify how it intends to use this frequency band and whether it seeks to use this band only outside of the United States and its Territories. If, instead, EOS seeks a waiver of our rules so that it may operate in this band in the United States and its Territories, please provide appropriate justification for grant of such a waiver. Additionally, in its Technical Narrative EOS states its approach to avoiding interference with GSO systems in the 17.8-18.6 GHz, 19.7-20.2 GHz and 27.5-28.6 GHz bands,<sup>6</sup> but does not discuss GSO networks in the 17.7-17.8 GHz band. We ask that EOS address how it will avoid interference to other authorized U.S.-licensed satellite operators in this band, including DBS space stations and 17/24 GHz BSS operations.

To facilitate the Commission’s timely evaluation of EOS’s application, we ask that you provide the requested information no later than **July 30, 2020**.

Sincerely,

**/s/ Jose P. Albuquerque**

Jose P. Albuquerque  
Chief, Satellite Division  
International Bureau

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<sup>5</sup> 47 CFR § 2.106.

<sup>6</sup> EOS Technical Narrative at 9.