

## Federal Communications Commission Washington, D.C. 20554

August 2, 2021

Mr. Shawn Marcum Lynk Global, Inc. 510 N Washington St. Suite 200 Falls Church, VA 22046 smarcum@lynk.world

Ms. Lynne Montgomery Counsel to Lynk Global, Inc. Wilkinson Barker Knauer, LLP 1800 M Street, NW Suite 800N Washington, DC 20036 Imontgomery@wbklaw.com

Re: Lynk Global, Inc., IBFS File No. SAT-LOA-20210511-00064; Call Sign: S3087

Dear Mr. Marcum and Ms. Montgomery:

On May 11, 2021, Lynk Global, Inc. filed the above referenced application requesting authority to launch and operate ten non-geostationary orbit space stations for the provision of mobile-satellite services (MSS). Please provide the following additional information in order to assist in the processing of this application:

- 1. Please indicate when the required ITU materials (spacecap, GIMS database, compatibility analysis for operations under ITU Radio Regulation 4.4, etc.) will be provided to the FCC. Additionally, attached is a template for the ITU Cost Recovery letter, which should be completed and submitted in lieu of the letter previously submitted by Lynk.
- 2. Please indicate the GPS receiving frequencies for Lynk's satellites.
- 3. In the Schedule S, the PFD provided for the 2200-2290 MHz downlink exceeds the ITU limits by ~30 dB. Please provide an explanation and/or justification.
- 4. Please provide the EPFD for the 20.1-20.2 GHz downlink.
- 5. Starting on page 26 of the Orbital Debris Assessment Report (ODAR), the total time in orbit appears to vary between 6 and 13 years (5 years station-keeping, 1 to 8 years passive decay.) This would not be consistent with the eligibility rule for the streamlined small satellite process, 47 CFR 25.122(c)(2), which states the total in-orbit lifetime for any individual space station will be six years or less. Please clarify the total in-orbit lifetime for Lynk's satellites, including under worst-case scenarios, and address whether there are any circumstances in which the planned satellites would not meet this eligibility rule.
- 6. Please provide any additional justification for consideration of the proposed MSS space stations as ones that do not "materially constrain" the operations of other systems. See 47 CFR 25.122(c)(9).

- 7. Please provide written confirmation from the operator of the Globalstar constellation that it is aware of and plans to operate with the frequencies specified (or a corrected range of frequencies) for operation with that system. (On page 12 of the narrative, Lynk lists the transmit frequency to the Globalstar constellation as 2483.5-2500 MHz and the receive from the constellation as 1613.75-1616.88 MHz, which is inconsistent with the capabilities of the Globalstar system. The frequency ranges specified are also outside the ranges typically specified for inter-satellite link operations with the Globalstar system.)
- 8. In the ODAR, two area-to-mass (A-to-M) values are provided: 0.017 m<sup>2</sup>/kg and 0.028 m<sup>2</sup>/kg. Please describe what flight profiles these two A-to-M values represent, and indicate whether these two profiles are the only intended configurations in which the spacecraft will be flown during the course of orbital lifetime.
- 9. On page 17 of the ODAR, the graphs are labeled as "SSO" while the inclination is listed as 53 degrees. Please explain or correct the discrepancy.
- 10. Page 15 of the ODAR states that for station-kept satellites at end-of-life, remaining fuel can be used to lower the altitude of the satellites over the course of days or weeks. What apogee/perigee will the spacecraft be lowered to in order to achieve this timeframe? Additionally, please indicate the fuel reserve that will be budgeted for this operation, and address whether it is sufficient.
- 11. How much time will be required from receipt of a Conjunction Data Message to determine if a maneuver is required?
- 12. Are the propulsive Lynk satellites able to effect a 10 km change within 48 hours? If not, please provide the time required to achieve a level of risk reduction of one-and-a-half orders of magnitude below the mitigation action threshold. If Lynk has not adopted a mitigation action threshold, please use a 1E-5 threshold.

Please submit the requested information by **August 27, 2021**. See 47 CFR § 25.112(c).

Sincerely,

Karl A. Kensinger Chief, Satellite Division

Karl A. Kensinger

International Bureau