

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

December 11, 2019

David S. Keir Lerman Center PLLC 2001 L Street, NW Suite 400 Washington, D.C. 20036

Re: Kinéis

IBFS File No. SAT-PDR-20191011-001131

Call Sign: S3054

Dear Mr. Keir:

On October 11, 2019, Kinéis filed the above-captioned Petition for Declaratory Ruling requesting U.S. market access for a non-voice, non-geostationary (NVNG) mobile-satellite service (MSS) system in the 399.9-400.05 MHz, 400.15-401 MHz, 401-403 MHz, 156.7625-162.0375 MHz, and 2200.0-2290.0 MHz frequency bands. To assist in the Satellite Division's review of Kinéis's petition, please provide the information requested below.<sup>2</sup>

- 1. Please confirm or clarify the proposed scope of propulsion operations, and in particular please indicate whether propulsion will be used for orbit raising following deployment, orbit lowering for purposes of shortening orbital lifetime at end-of-life, and any other planned operations.<sup>3</sup> If propulsion will be used for purposes of orbit-raising, please indicate the lowest initial altitude at which satellite operations might occur.
- 2. Please indicate the anticipated time frame for finalizing the Orbital Debris Assessment Report.
- 3. Please provide the accuracy with which orbital parameters will be maintained, as specified in 47 C.F.R. § 25.114(d)(14)(iii) and including eccentricity. We note the text at page 6 of the Preliminary Orbital Debris Assessment Report ("[a]n apogee at 673 km and perigee at an upper limit of 656 km were used") imply an eccentricity value, but it is unclear whether this figure is applicable to the 650 km orbital altitude used elsewhere in the application, which appears to be a mean or "nominal" value. Please clarify. Has the target mission altitude range been finalized?
- 4. Please provide an analysis of orbital lifetime and collision risk for a satellite that does not deploy solar arrays, antennas, or other deployable appendages. Please indicate the reliability of deployment for any deployable appendages that alter satellite cross-section, and the basis for that estimate of reliability.

<sup>&</sup>lt;sup>1</sup> Section 25.137 of the Commission's rules specifies that a petition for declaratory ruling is the means to request U.S. market access through any type of non-U.S. licensed space station in any frequency band. Accordingly, we have changed Kinéis's IBFS file number from a Letter of Intent (LOI) to a Petition for Declaratory Ruling (PDR).

<sup>&</sup>lt;sup>2</sup> 47 CFR § 25.111(a).

<sup>&</sup>lt;sup>3</sup> In the Exhibit entitled "Preliminary Orbital Debris Assessment Report," there is a statement that "[a]n electrical propulsion system (one thruster) is used for initial orbit disposal and orbit station keeping." Preliminary Orbital Debris Assessment Report at 2. An additional statement indicates that the propulsion system can be used for collision avoidance. Id.

- 5. Please state whether you consider 55-60 a reasonable estimate for the number of satellites to be launched (25 initial satellites, 25 replacements satellites, plus 5-10 replacement satellites) for this constellation over a 15-year period. Please provide an estimate for the aggregate collision risk with objects 10 cm or larger for the number of satellites anticipated to be launched during the constellation's initial 15-year period of deployment and operation.
- 6. In the Schedule S and Technical Annex, Kinéis states that its system will utilize uplink frequencies in the 156.7625-162.0375 MHz frequency band to provide AIS, ASM, and VDES services.<sup>4</sup> Please clarify whether Kinéis's operations in the 156.7625-162-0375 MHz frequency band will be on a receive basis only or if Kinéis will be transmitting these signals from its Earth stations or mobile radio chipset beacons.

The requested information must be submitted no later than **January 13, 2020**. Failure to do so may result in the dismissal of Kinéis's Petition pursuant to Section 25.112(c) of the Commission's rules.<sup>5</sup>

Sincerely,

Jose P. Albuquerque
Chief, Satellite Division
International Bureau

<sup>&</sup>lt;sup>4</sup> See Petition, Schedule S at 2; Technical Annex at 3.

<sup>&</sup>lt;sup>5</sup> See 47 C.F.R. § 25.112(c).