



October 13, 2020

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Supplement to Experimental License Application, File No. 0730-EX-CN-2020

Dear Ms. Dortch:

Intelsat Licensee LLC, as debtor in possession (“Intelsat”), herein provides the following response to the Federal Communications Commission’s (“FCC”) September 17, 2020 and October 9, 2020 inquiries on the above referenced application. Additionally, Intelsat’s response reflects further refinements to the area of operation that have evolved since the application was submitted. Specifically, based on on-going design and operational considerations, Intelsat (i) updates the proposed areas of operation for the high-altitude platform (“HAPS”) and the user terminals to reflect a slight shift to the east; (ii) provides a more precise feeder link station location (within the originally filed area); and (iii) updates the preferred feeder link uplink center frequency from a 4680 MHz center preferred frequency with 30 MHz to a 4685 MHz center preferred frequency with 30 MHz.

In its application, Intelsat selected fixed operation for the nature of the experimental operation and provided a radius of where that fixed location could be located because the FCC defines HAPS as a station in the Fixed Service.¹ While the exact location of the HAPS has not been finalized, the HAPS will be a fixed point within the blue shaded area illustrated in the figure below, which is defined by a center point at 33.14N, -113.88W and a 22 km radius. Until the exact HAPS center location is known, Intelsat proposes the identified shaded blue zone as the possible location for the HAPS center point. Intelsat is currently working to determine the exact location and expects to have the location selected in early 2021.

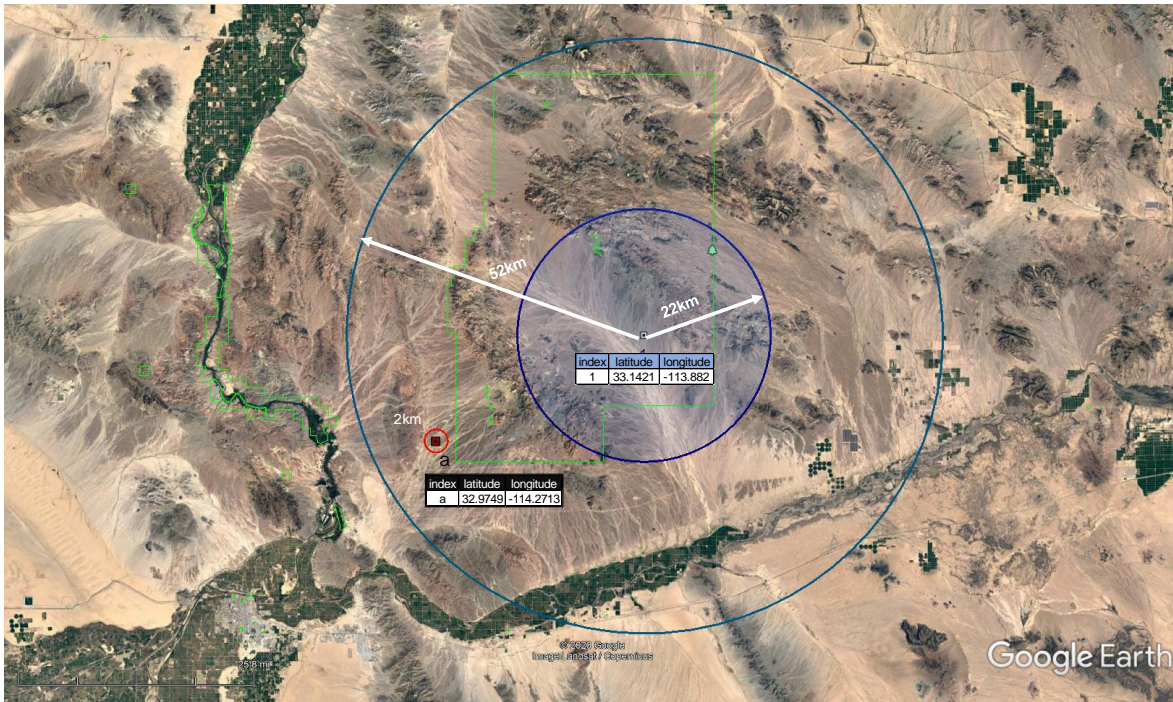
The operating area where the mobile user terminals will be located, shown as the blue circle in the figure below, is defined by a center point at 33.14N, -113.88W and a 52 km radius. The mobile user terminals are mobile (not fixed or portable) and will operate anywhere within the blue circle.

The feeder link station will be at a fixed location during the testing and was previously proposed to be located at a fixed point within a 70 km radius of the HAPS center point. Since filing its application, Intelsat has significantly narrowed the potential location of the feeder link station—the station will be located within a 2 km radius of 32.97N, -114.27W, which is illustrated by the red circle in the figure below. The feeder link station will be fixed, meaning that it will not be transportable to another location within the red circle.

¹ The HAPS is an unmanned aircraft and will be operated by Airbus.

For the ground testing the HAPS and user terminals on the ground will also be located inside 2 km radius from the feeder link station.

Additionally, the proposed feeder link ground antenna is 1.8 m. Considering the mast length from the ground to the focal point of the antenna, the antenna height above ground level during transmission will be approximately 2 m.



Please direct any questions regarding this supplement or the above referenced application to the undersigned at (703) 559-6949.

Respectfully submitted,

/s/ Cynthia J. Grady
Cynthia J. Grady
Senior Counsel
Intelsat US LLC

cc: Behnam Ghaffari