

EXHIBIT A APPLICATION

In this application, DIRECTV Enterprises, LLC (“DIRECTV”) seeks to reinstate authority to operate a Ka-band earth station in Big Lake, MN, which is used to uplink programming to satellites for backhaul to DIRECTV’s processing centers. DIRECTV has operated this earth station continuously since June 19, 2007, under call sign E070074. Through an administrative oversight, the license lapsed before DIRECTV sought renewal.¹ Accordingly, in this application, DIRECTV seeks an identical license to replace the one that recently lapsed. Grant of this application will serve the public interest by enabling DIRECTV to continue uplinking video programming for incorporation into DIRECTV’s direct-to-home video service, avoiding interruption to subscribers who depend on this service.

COMPLIANCE WITH SECTION 25.203(k)

In this application, DIRECTV requests authority that includes Ka-band ALSAT as a point of communication, pursuant to the *Ka-Band ALSAT Order* adopted by the Commission.² This earth station will transmit in the 29.25-29.5 GHz band, which is allocated on a co-primary basis to both GSO/FSS and NGSO/MSS feeder links. As required under Section 25.203(k) of the Commission’s rules, and as directed in footnote 31 to the *Ka-Band ALSAT Order*, DIRECTV demonstrates below that the operation of this earth station with an ALSAT designation will not cause interference to co-primary, co-frequency feeder link operations.

In 2011, DIRECTV applied for and received Ka-band ALSAT authority for several earth station antennas.³ In the applications to modify the licenses for those antennas, DIRECTV included an extensive analysis that showed that there would not be unacceptable interference to co-frequency NGSO MSS feeder link operations from the operation of those antennas. In order to demonstrate that operation of the currently applied-for earth station will not cause unacceptable interference to co-primary, co-frequency feeder link operations, DIRECTV notes the following points:

- The previous license for this earth station included Ka-band ALSAT as a point of communication.
- The earth station antenna that is the subject of this application is even larger than the DIRECTV Ka-band ALSAT earth station antennas that were licensed in 2011, meaning that it will have an even narrower main beam.
- The DIRECTV Ka-band antennas licensed in 2011 with an ALSAT designation are located approximately 175-200 km from the closest NGSO MSS feeder link site. The

¹ DIRECTV is currently operating pursuant to special temporary authority. See IBFS File No. SES-STA-20220722-00794 (granted July 28, 2022).

² See 2006 Biennial Regulatory Review – Revision of Part 25, 25 FCC Rcd. 1542 (2010) (“*Ka-Band ALSAT Order*”).

³ See IBFS File Nos. SES-MFS-20111104-01314, -01315, -01317, -01320, -01322, -01324.

antenna that is the subject of this application is more than 2000 km away from the nearest NGSO MSS feeder link site.

- As is stated in Recommendation ITU-R S.1419, “Interference mitigation techniques to facilitate coordination between non-geostationary-satellite orbit Mobile-Satellite Service feeder link and geostationary-satellite orbit Fixed-Satellite Service networks in the bands 19.3-19.7 GHz and 29.1-29.5 GHz,” geographical separation of approximately 225 km between GSO FSS and NGSO MSS earth stations is generally considered sufficient to ensure compatible GSO/NGSO operations.
- The Ka-band antenna that is the subject of this application is already authorized to operate in the subject frequency bands and has been doing so for several years without incident.

Taken together, the above factors demonstrate that the operations of the applied-for Ka-band ALSAT earth station antenna will not cause interference to co-primary, co-frequency feeder link operations.