

SHOWING REQUIRED UNDER SECTION 25.203(K)

In this application, DIRECTV Enterprises, LLC (“DIRECTV”) seeks to add an additional Ka-band transmit antenna to an existing DIRECTV Ka-band uplink facility. Under Section 25.203(k) of the Commission’s rules, an earth station applicant that proposes to operate in a shared frequency band in which an NGSO system is licensed for feeder links must demonstrate that its proposed operations will not cause unacceptable interference to that system. Iridium Satellite LLC (“Iridium”) is licensed for feeder links in the 29.25-29.3 GHz band, which is also being requested for the new antenna that is the subject of this application.

DIRECTV notes that there are already three Ka-band antennas licensed to transmit across the 29.25-29.3 GHz band at the uplink facility in question. In fact, the new antenna that is the subject of this application will operate in nearly the same location as the existing antennas.¹ In addition, the new antenna is physically and electrically identical to the three existing operational antennas, and the communications parameters being requested (*i.e.*, emission designators, max transmit power, points of communication, etc.) are also identical to those for which the currently operating antennas are authorized. Finally, the antenna subject to this application will be located over 1600 km away from any existing operational NGSO feeder link facility, which essentially eliminates any possibility of interference to such NGSO systems.² In these circumstances, DIRECTV submits that any change in the overall existing interference environment for Iridium’s NGSO system arising from the addition of this new transmit antenna would be *de minimus* and, as such, a detailed interference evaluation is unnecessary.

¹ The coordinates of the new antenna are within 1.2 degree of longitude and are the same latitude as those of an existing Ka-band antenna already operating at this site (*i.e.*, E080056).

² Note that Recommendation ITU-R S.1419 “Interference Mitigation Techniques to Facilitate Coordination Between non-GSO MSS Feeder Links and GSO FSS Networks in the Bands 19.3-19.7 GHz and 29.1-29.5 GHz” refers to a separation of two degrees of latitude (*i.e.*, approximately 225 km) between non-GSO and GSO facilities as being sufficient to provide the necessary geographic isolation to allow sharing of the band to take place.