

EXHIBIT A

Radiation Hazard Report for Spirit River Satellite SSR-01 Dual Array Helical Antenna

The Radio Frequency radiation hazard for a Spirit River Satellite SSR-01 Dual Array Helical Antenna was assessed through monitoring at an installation in Australia by DEFCOMSTA Perth. The antenna to be used at the Intelsat facility in Hagerstown, MD is an identical model.

The report¹ of the measured RadHaz performance of the antenna in Australia concluded that there was no Radiation Hazard for Occupational or Non-Occupational given that the antenna is installed on a pedestal 1.9m above ground level. Table 4 of the report showed that the limits for Occupational and Non-Occupational exposure were met at 0.3m and 0.7m respectively at an input power of 140W at a frequency of 293.425 MHz. These results were obtained with the antenna pointed at its lowest elevation of 3° and were not exceeded at the higher elevations used in normal operations or throughout the azimuth range of the antenna.

The Australian Radiation Hazard standard² is identical³ to the levels given in Table 1(a) of the FCC OET Bulletin 65⁴, but is more stringent for Non-Operational exposure with an averaging time of 6 minutes as opposed to 30 minutes as listed in Table 1(b) of Bulletin 65.

The power levels to be used during the IOT that is the subject of this application will not exceed the level of 140W used during the Australian RadHaz survey. Given that the antenna pedestal is mounted on a platform, there will be no RadHaz to non-occupational persons at ground level or at least 0.7m from the actual antenna. Access to the platform will be restricted to occupational personal, who will be instructed that they must remain more than 0.3m from the actual antenna in order to comply with the RadHaz limit of 1 mW/cm² averaged over 6 minutes. Under these conditions there will be no RadHaz.



¹ DEFCOMSTA Perth RadHaz Survey Report 11 April 2012.

² ARPANSA Radiation Protection Series No.3 – Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency fields – 3 kHz to 300 GHz (2002)

³ The ARPANSA power levels are given in W/m² rather than mW/cm² as used in the OET Bulletin. When converted they are identical, i.e. 10 W/m² = 1 mW/cm² and 2 W/m² = 0.2 mW/cm²

⁴ FCC Office of Engineering & Technology, OET Bulletin 65 Edition 97-01, August 1997