



Recommendation SFCG 18-2

**MINIMUM EARTH STATION G/T REQUIREMENTS FOR
RECEPTION OF NON-GEOSTATIONARY EESS IN THE 8025-8400
MHz BANDS**

The SFCG,

CONSIDERING

- a) that the 8025 – 8400 MHz band is extensively used by the Earth exploration-satellite service for space-to-Earth transmissions;
- b) that the ITU has defined PFD limits on the Earth's surface in the RR No. **21.16** for the purpose of facilitating sharing between EESS and terrestrial services in the 8025-8400 MHz band, with which all spacecraft must comply;
- c) that the space-to-Earth links in the 8025-8400 MHz band typically operate with suppressed carrier modulation and uncoded BER's between 10^{-3} and 10^{-5} , with 3 dB of link margin;
- d) that with existing ITU PFD limits, an earth station G/T greater than or equal to 25 dB/K will achieve the performance in considering c);

RECOMMENDS

that users of the 8025-8400 MHz band utilise earth stations with a G/T of 25 dB/K or more.