

Summary of Regulatory Requirement for MVDDS/NGSO Sharing

The FCC identified certain requirements for both MVDDS and NGSO; these are listed in the FCC regulations (Part 101), and adopted in the Second Report and Order for the MVDDS proceeding ET Docket 98-206.

In order to accommodate NGSO FSS systems, MVDDS systems are required:

- To maintain a current internet web site identifying the location, EIRP, height, antenna orientation, antenna pattern and service area for each MVDDS transmitter.
- To Limit radiation according to a 3 km PFD limit of -135 dBW/m^2 in 4 kHz
- To Limit EIRP to -14 dBm
- To not locate transmitters within 10 km of an NGSO FSS terminal, unless NGSO FSS operators provide written permission to waive the 10 km separation requirement.

In order to accommodate MVDDS systems, NGSO FSS systems are required:

- To limit their PFD to levels described in the attached document.

There is no requirement that NGSO FSS systems implement a certain method for avoiding interference. However, the text of the order concludes that NGSO FSS may use frequency diversity to avoid interference from NGSO FSS.

We find that NGSO FSS receivers operating in the 12.2-12.7 GHz band could be designed with "frequency diversity" capability that enables dynamic switching to the lower 11.7-12.2 GHz band for downlink service to avoid potential MVDDS interference in the 12.2-12.7 GHz band.¹

¹ Paragraph 107.