§ 25.260 Time sharing between DoD meteorological satellite systems and non-voice, non-geostationary satellite systems in the 400.15–401 MHz band.

(a) The space stations of a non-voice, non-geostationary Mobile-Satellite Service (NVNG MSS) system time-sharing downlink spectrum in the 400.15–401.0 MHz band with Department of Defense (DoD) satellites shall not transmit signals into the “protection areas” of the DoD satellites.

(1) The protection area for such a DoD satellite is the area on the Earth’s surface in which the DoD satellite is in line of sight from the ground at an elevation angle of five degrees or more above the horizon.

(2) An NVNG MSS space station shall not transmit in the 400.15–401 MHz band when at a line-of-sight elevation angle of zero degrees or more from any point on the ground within the protected area of a DoD satellite operating in that band.

(3) An NVNG MSS licensee is responsible for obtaining the ephemeris data necessary for compliance with this restriction. The ephemeris information must be updated system-wide at least once per week. For calculation required for compliance with this restriction an NVNG MSS licensee shall use an orbital propagator algorithm with an accuracy equal to or greater than the NORAD propagator used by DoD.

(b) An NVNG licensee time sharing spectrum in the 400.15–401 MHz band must establish a 24-hour per day contact person and telephone number so that claims of harmful interference into DoD earth stations and other operational issues can be reported and resolved expeditiously. This contact information must be made available to DoD or its designee. If the NTIA notifies the Commission that DoD is receiving unacceptable interference from a NVNG licensee, the Commission will require such NVNG licensee to terminate its interfering operations immediately unless it demonstrates to the Commission’s reasonable satisfaction, and that of NTIA, that it is not responsible for causing harmful interference into the worldwide DoD system. A NVNG licensee assumes the risk of any liability or damage that it and its directors, officers, employees, affiliates, agents and subcontractors may incur or suffer in connection with an interruption of its Mobile-Satellite Service, in whole or in part, arising from or relating to its compliance or noncompliance with the requirements of this paragraph.

(c) Each satellite in a NVNG licensee’s system time-sharing spectrum with DoD in the 400.15–401 MHz band shall automatically turn off and cease satellite transmissions if, after 72 consecutive hours, no reset signal is received from the NVNG licensee’s gateway earth station and verified by the satellite. All satellites in such NVNG licensee’s system shall be capable of instantaneous shutdown on any sub-band upon command from such NVNG licensee’s gateway earth station.

(d) Initially, a NVNG licensee time-sharing spectrum with DoD in the 400.15–401 MHz band shall be able to change the frequency on which its system satellites are operating within 125 minutes of receiving notification from a DoD required frequency change in the 400.15–401 MHz band. Thereafter, when a NVNG licensee constructs additional gateway earth stations located outside of North and South America, it shall use its best efforts to decrease to 90 minutes the time required to implement a DoD required frequency change. A NVNG licensee promptly shall notify the Commission and NTIA of any decrease in the time it requires to implement a DoD required frequency change. (e) Once a NVNG licensee demonstrates to DoD that it is capable of implementing a DoD required frequency change within the time required under paragraph (d) of this section, thereafter, such NVNG licensee shall demonstrate its capability to implement a DoD required frequency change only once per year at the instruction of DoD. Such demonstrations shall occur during off-peak hours, as determined by the NVNG licensee, unless otherwise agreed by the NVNG licensee and DoD. Such NVNG licensee will coordinate with DoD in establishing a plan for such a demonstration. In the event that a NVNG licensee fails to demonstrate to DoD that it is capable of implementing a
DoD required frequency change in accordance with a demonstration plan established by DoD and the NVNG licensee, upon the Commission’s receipt of a written notification from NTIA describing such failure, the Commission shall impose additional conditions or requirements on the NVNG licensee’s authorization as may be necessary to protect DoD operations in the 400.15–401 MHz downlink band until the Commission is notified by NTIA that the NVNG licensee has successfully demonstrated its ability to implement a DoD required frequency change. Such additional conditions or requirements may include, but are not limited to, requiring such NVNG licensee immediately to terminate its operations interfering with the DoD system.


(a) Applicable NGSO FSS Bands. The coordination procedures in this section apply to non-Federal-Government NGSO FSS satellite networks operating in the following assigned frequency bands: The 28.6–29.1 GHz or 18.8–19.3 GHz frequency bands.

(b) Definition of ‘‘In-line interference events.’’ For purposes of this section, an ‘‘in-line interference event’’ is defined as the interference associated with an occurrence of any physical alignment of space stations of two or more satellite networks with an operating Earth station of one of these networks in such a way that the angular separation between operational links of the two networks is less than 10° as measured at the Earth station.

(c) Default procedure. If no agreed coordination exists between two or more satellite networks, then the bands will be divided among the affected satellite networks involved in an in-line interference event in accordance with the following procedure:

(1) Each of n (number of) satellite networks involved in a particular in-line interference event shall select 1/n of the assigned spectrum available in each frequency band for its home base spectrum. The selection order for each satellite network shall be determined by and be in accordance with the date that the first space station in each satellite network is launched and operating:

(2) The affected space station(s) of the respective satellite networks shall only operate in the selected (1/n) spectrum associated with its satellite network, its home base spectrum, for the duration of the in-line interference event;

(3) All affected space station(s) may resume operations throughout the assigned frequency bands once the angular separation between the affected space stations in the in-line interference event is again greater than 10°.

(d) Coordination procedure. Any coordination procedure agreed among the affected operating satellite networks, which allows operations of the satellite networks when each network’s respective space stations are within the 10 degree avoidance angle associated with an in-line interference event, shall supersede the default procedure of paragraph (c) of this section. Coordination may be effected using information relating to the space stations and the parameters of one or more typical earth stations. All parties are required to coordinate in good faith.


§ 25.262 Licensing and domestic coordination requirements for 17/24 GHz BSS space stations.

(a) Except as described in paragraphs (b), (c) or (e) of this section, applicants seeking to operate a space station in the 17/24 GHz BSS must locate that space station at one of the orbital positions described in Appendix F of the Report and Order adopted May 2, 2007, IB Docket No. 06–123, FCC 07–76.

(b) An applicant may be authorized to operate a 17/24 GHz BSS space station at an orbital location described in Appendix F as set forth in paragraph (a) of this section, or at a location with a geocentric angular separation of one degree or less from an Appendix F location, and may operate at the maximum power flux density limits defined in §25.208(c) and (w) of this part, without