

(iii) That a system proposed to operate using non-geostationary satellites be capable of providing Mobile-Satellite Service on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin Islands, i.e., that at least one satellite will be visible above the horizon at an elevation angle of at least 5° at all times within the described geographic areas; and

(iv) That a system only using geostationary orbit satellites, at a minimum, be capable of providing Mobile-Satellite Service on a continuous basis throughout the 50 states, Puerto Rico, and the U.S. Virgin Islands, if technically feasible.

(v) That operations will not cause unacceptable interference to other authorized users of the spectrum. In particular, each application in the 1.6/2.4 GHz frequency bands shall demonstrate that the space station(s) comply with the requirements specified in §25.213.

(c) *Safety and distress communications.*

(1) Stations operating in the 1.6/2.4 GHz Mobile-Satellite Service and 2 GHz Mobile-Satellite Service that are voluntarily installed on a U.S. ship or are used to comply with any statute or regulatory equipment carriage requirements may also be subject to the requirements of sections 321(b) and 359 of the Communications Act of 1934. Licensees are advised that these provisions give priority to radio communications or signals relating to ships in distress and prohibits a charge for the transmission of maritime distress calls and related traffic.

(2) Licensees offering distress and safety services should coordinate with the appropriate search and rescue organizations responsible for the licensees service area.

(d) Prohibition of certain agreements. No license shall be granted to any applicant for a space station in the Mobile-Satellite Service operating at 1610-1626.5 MHz/2483.5-2500 MHz if that applicant, or any persons or companies controlling or controlled by the applicant, shall acquire or enjoy any right, for the purpose of handling traffic to or from the United States, its territories or possession, to construct or operate space segment or earth stations, or to interchange traffic, which is denied to any other United States company by

reason of any concession, contract, understanding, or working arrangement to which the Licensee or any persons or companies controlling or controlled by the Licensee are parties.

[59 FR 53328, Oct. 21, 1994, as amended at 61 FR 9945, Mar. 12, 1996; 62 FR 5930, Feb. 10, 1997; 65 FR 59143, Oct. 4, 2000; 68 FR 33649, June 5, 2003; 68 FR 47858, Aug. 12, 2003; 68 FR 51504, Aug. 27, 2003; 70 FR 59277, Oct. 12, 2005; 78 FR 8267, Feb. 5, 2013; 78 FR 8422, Feb. 6, 2013; 79 FR 8320, Feb. 12, 2014; 81 FR 55333, Aug. 18, 2016]

§25.144 Licensing provisions for the 2.3 GHz satellite digital audio radio service.

(a) Qualification Requirements:

(1) [Reserved]

(2) General Requirements: Each application for a system authorization in the satellite digital audio radio service in the 2310-2360 MHz band shall describe in detail the proposed satellite digital audio radio system, setting forth all pertinent technical and operational aspects of the system, and the technical, legal, and financial qualifications of the applicant. In particular, applicants must file information demonstrating compliance with §25.114 and all of the requirements of this section.

(3) Technical Qualifications: In addition to the information specified in paragraph (a)(1) of this section, each applicant shall:

(i) Demonstrate that its system will, at a minimum, service the 48 contiguous states of the United States (full CONUS);

(ii) Certify that its satellite DARS system includes a receiver that will permit end users to access all licensed satellite DARS systems that are operational or under construction; and

(b) Milestone requirements. Each applicant for system authorization in the satellite digital audio radio service must demonstrate within 10 days after a required implementation milestone as specified in the system authorization, and on the basis of the documentation contained in its application, certify to the Commission by affidavit that the milestone has been met or notify the Commission by letter that it has not been met. At its discretion, the

Commission may require the submission of additional information (supported by affidavit of a person or persons with knowledge thereof) to demonstrate that the milestone has been met. The satellite DARS milestones are as follows, based on the date of authorization:

(1) One year: Complete contracting for construction of first space station or begin space station construction;

(2) Two years: If applied for, complete contracting for construction of second space station or begin second space station construction;

(3) Four years: In orbit operation of at least one space station; and

(4) Six years: Full operation of the satellite system.

(c) [Reserved]

(d) The license term for each digital audio radio service satellite and any associated terrestrial repeaters is specified in § 25.121.

(e) *SDARS Terrestrial Repeaters.* (1) Only entities holding or controlling SDARS space station licenses may construct and operate SDARS terrestrial repeaters and such construction and operation is permitted only in conjunction with at least one SDARS space station that is concurrently authorized and transmitting directly to subscribers.

(2) SDARS terrestrial repeaters will be eligible for blanket licensing only under the following circumstances:

(i) The SDARS terrestrial repeaters will comply with all applicable power limits set forth in § 25.214(d)(1) of this chapter and all applicable out-of-band emission limits set forth in § 25.202(h)(1) and (h)(2).

(ii) The SDARS terrestrial repeaters will meet all applicable requirements in part 1, subpart I, and part 17 of this chapter. Operators of SDARS terrestrial repeaters must maintain demonstrations of compliance with part 1, subpart I, of this chapter and make such demonstrations available to the Commission upon request within three business days.

(iii) The SDARS terrestrial repeaters will comply with all requirements of all applicable international agreements.

(3) After May 20, 2010, SDARS licensees shall, before deploying any new, or

modifying any existing, terrestrial repeater, notify potentially affected WCS licensees pursuant to the procedure set forth in § 25.263.

(4) SDARS terrestrial repeaters are restricted to the simultaneous retransmission of the complete programming, and only that programming, transmitted by the SDARS licensee's satellite(s) directly to the SDARS licensee's subscribers' receivers, and may not be used to distribute any information not also transmitted to all subscribers' receivers.

(5) Operators of SDARS terrestrial repeaters are prohibited from using those repeaters to retransmit different transmissions from a satellite to different regions within that satellite's coverage area.

(6) Operators of SDARS terrestrial repeaters are required to comply with all applicable provisions of part 1, subpart I, and part 17 of this chapter.

(7)(i) Each SDARS terrestrial repeater transmitter utilized for operation under this paragraph must be of a type that has been authorized by the Commission under its certification procedure.

(ii) In addition to the procedures set forth in subpart J of part 2 of this chapter, power measurements for SDARS repeater transmitters may be made in accordance with a Commission-approved average power technique. Peak-to-average power ratio (PAPR) measurements for SDARS repeater transmitters should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that the PAPR will not exceed 13 dB for more than 0.1 percent of the time or another Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

(iii) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

(8) Applications for blanket authority to operate terrestrial repeaters must be filed using Form 312, except that Schedule B to Form 312 need not be filed. Such applications must also include the following information as an attachment:

(i) The space station(s) with which the terrestrial repeaters will communicate, the frequencies and emission designators of such communications, and the frequencies and emission designators used by the repeaters to retransmit the received signals.

(ii) The maximum number of terrestrial repeaters that will be deployed under the authorization at 1) power levels equal to or less than 2-watt average EIRP, and 2) power levels greater than 2-watt average EIRP (up to 12-kW average EIRP).

(iii) A certification of compliance with the requirements of § 25.144(e)(1) through (7).

(9) SDARS terrestrial repeaters that are ineligible for blanket licensing must be authorized on a site-by-site basis. Applications for site-by-site authorization must be filed using Form 312, except that Schedule B need not be provided. Such applications must also include the following information, as an attachment:

(i) The technical information for each repeater required to be shared with potentially affected WCS licensees as part of the notification requirement set forth in § 25.263(c)(2).

(ii) The space station(s) with which the terrestrial repeaters will communicate, the frequencies and emission designators of such communications, and the frequencies and emission designators used by the repeaters to retransmit the received signals.

[62 FR 11105, Mar. 11, 1997, as amended at 68 FR 51504, Aug. 27, 2003; 70 FR 32254, June 2, 2005; 75 FR 45067, Aug. 2, 2010; 79 FR 8320, Feb. 12, 2014]

§ 25.145 Licensing provisions for the FSS in the 18.3–20.2 GHz and 28.35–30.0 GHz bands.

(a) [Reserved]

(b) *System License.* Applicants authorized to construct and launch a system of technically identical non-geostationary satellite orbit satellites will be awarded a single “blanket” license

covering a specified number of space stations to operate in a specified number of orbital planes.

(c) In addition to providing the information specified in § 25.114, each non-geostationary satellite orbit applicant shall demonstrate the following:

(1) That the proposed system is capable of providing Fixed-Satellite Service to all locations as far north as 70° North Latitude and as far south as 55° South Latitude for at least 75% of every 24-hour period; and

(2) That the proposed system is capable of providing Fixed-Satellite Service on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin Islands.

(3) [Reserved]

(d) [Reserved]

(e) *Prohibition of certain agreements.* No license shall be granted to any applicant for a space station in the FSS operating in portions of the 18.3–20.2 GHz and 28.35–30.0 GHz bands if that applicant, or any persons or companies controlling or controlled by the applicant, shall acquire or enjoy any right, for the purpose of handling traffic to or from the United States, its territories or possessions, to construct or operate space segment or earth stations, or to interchange traffic, which is denied to any other United States company by reason of any concession, contract, understanding, or working arrangement to which the Licensee or any persons or companies controlling or controlled by the Licensee are parties.

[62 FR 61456, Nov. 18, 1997, as amended at 65 FR 54171, Sept. 7, 2000; 66 FR 63515, Dec. 7, 2001; 67 FR 39310, June 7, 2002; 68 FR 16966, Apr. 8, 2003; 68 FR 51505, Aug. 27, 2003; 68 FR 59129, Oct. 14, 2003; 70 FR 59277, Oct. 12, 2005; 78 FR 8423, Feb. 6, 2013; 79 FR 8320, Feb. 12, 2014; 81 FR 55333, Aug. 18, 2016]

§ 25.146 Licensing and operating rules for the NGSO FSS in the 10.7–14.5 GHz bands.

(a) A comprehensive technical showing shall be submitted for the proposed non-geostationary satellite orbit Fixed-Satellite Service (NGSO FSS) system in the 10.7–14.5 GHz bands. The technical information shall demonstrate that the proposed NGSO FSS system would not exceed the validation equivalent power flux-density (EPFD) limits as specified in § 25.208 (g), (k),