

**§ 25.139**

**47 CFR Ch. I (10–1–04 Edition)**

(1) Co-polarized patterns for each of two orthogonal senses of polarizations in two orthogonal planes of the antenna.

(i) In the azimuth plane, plus and minus 10 degrees and plus and minus 180 degrees.

(ii) In the elevation plane, zero to 30 degrees.

(2) Cross-polarization patterns in the E- and H-planes, plus and minus 10 degrees.

(3) Main beam gain.

(e) Protection of receive earth stations from adjacent satellite interference is based on either the antenna performance specified in §25.209 (a) and (b), or the actual receiving earth station antenna performance, if actual performance provides greater isolation from adjacent satellite interference. For purposes of insuring the correct level of protection, the applicant shall provide, for each earth station antenna type, the antenna performance plots for the 20 GHz band, including the format specified in paragraph (d) of this section.

(f) The earth station licensee shall not transmit towards a GSO FSS satellite unless it has prior authorization from the satellite operator or a space segment vendor authorized by the satellite operator. The specific transmission shall be conducted in accordance with the operating protocol specified by the satellite operator. The holder of an FCC blanket license pursuant to this section shall be responsible for operation of any transceiver to receive GSO FSS service provided by that licensee or provided by another party with the blanket licensee's consent. Operators of GSO FSS systems shall not transmit communications to or from user transceivers in the United States unless such communications are authorized under a service contract with the holder of a pertinent FCC blanket license or under a service contract with another party with authority for such transceiver operation delegated by such a blanket licensee.

(g) A licensee applying to renew its license must include on FCC Form 405

the number of constructed earth stations.

[65 FR 54169, Sept. 7, 2000, as amended at 66 FR 63515, Dec. 7, 2001; 68 FR 16966, Apr. 8, 2003; 69 FR 5710, Feb. 6, 2004]

**§ 25.139 NGSO FSS coordination and information sharing between MVDDS licensees in the 12.2 GHz to 12.7 GHz band.**

(a) NGSO FSS licensees shall maintain a subscriber database in a format that can be readily shared with MVDDS licensees for the purpose of determining compliance with the MVDDS transmitting antenna spacing requirement relating to qualifying existing NGSO FSS subscriber receivers set forth in §101.129 of this chapter. This information shall not be used for purposes other than set forth in §101.129 of this chapter. Only sufficient information to determine compliance with §101.129 of this chapter is required.

(b) Within ten business days of receiving notification of the location of a proposed MVDDS transmitting antenna, the NGSO FSS licensee shall provide sufficient information from the database to enable the MVDDS licensee to determine whether the proposed MVDDS transmitting site meets the minimum spacing requirement.

(c) If the location of the proposed MVDDS transmitting antenna site does not meet the separation requirements of §101.129 of this chapter, then the NGSO FSS licensee shall also indicate to the MVDDS licensee within the same ten day period specified in paragraph (b) of this section whether the proposed MVDDS transmitting site is acceptable at the proposed location.

(d) Nothing in this section shall preclude NGSO FSS and MVDDS licensees from entering into an agreement to accept MVDDS transmitting antenna locations that are shorter-spaced from existing NGSO FSS subscriber receivers than the distance set forth in §101.129 of this chapter.

[67 FR 43037, June 26, 2002, as amended at 68 FR 43945, July 25, 2003]

## SPACE STATIONS

**§ 25.140 Qualifications of fixed-satellite space station licensees.**

(a) New fixed-satellites shall comply with the requirements established in Report and Order, CC Docket No. 81-704 (available at address in § 0.445 of this chapter.) Applications must also meet the requirements in paragraphs (b) through (d) of this section. The Commission may require additional or different information in the case of any individual application. Applications will be unacceptable for filing and will be returned to the applicant if they do not meet the requirements referred to in this paragraph.

(b) Each applicant for a space station authorization in the fixed-satellite service must demonstrate, on the basis of the documentation contained in its application, that it is legally, technically, and otherwise qualified to proceed expeditiously with the construction, launch and/or operation of each proposed space station facility immediately upon grant of the requested authorization. Each applicant must provide the following information:

(1) The information specified in § 25.114; and

(2) An interference analysis to demonstrate the compatibility of its proposed system 2 degrees from any authorized space station. An applicant should provide details of its proposed r.f. carriers which it believes should be taken into account in this analysis. At a minimum, the applicant must include, for each type of r.f. carrier, the link noise budget, modulation parameters, and overall link performance analysis. (See, e.g., appendices B and C to Licensing of Space Stations in the Domestic Fixed-Satellite Service (available at address in § 0.445)).

(c)-(g) [Reserved]

[62 FR 5929, Feb. 10, 1997, as amended at 68 FR 51504, Aug. 27, 2003]

**§ 25.142 Licensing provisions for the non-voice, non-geostationary mobile-satellite service.**

(a) *Space station application requirements.* (1) Each application for a space station system authorization in the non-voice, non-geostationary mobile-satellite service shall describe in detail

the proposed non-voice, non-geostationary mobile-satellite system, setting forth all pertinent technical and operational aspects of the system, and the technical and legal qualifications of the applicant. In particular, each application shall include the information specified in § 25.114. Applicants must also file information demonstrating compliance with all requirements of this section, and showing, based on existing system information publicly available at the Commission at the time of filing, that they will not cause unacceptable interference to any non-voice, non-geostationary mobile-satellite service system authorized to construct or operate.

(2) Applicants for a non-voice, non-geostationary mobile-satellite must identify the power flux density produced at the Earth's surface by each space station of their system in the frequency bands 137-138 MHz and 400.15-401 MHz, to allow determination of whether coordination with terrestrial services is required under international footnotes 599A and 647B of § 2.106 of the Commission's Rules. In addition, applicants must identify the measures they would employ to protect the radio astronomy service in the 150.05-153 MHz and 406.1-410 MHz bands from harmful interference from unwanted emissions.

(3) Emission limitations. (i) Applicants in the non-voice, non-geostationary mobile-satellite service shall show that their space stations will not exceed the emission limitations of § 25.202(f) (1), (2) and (3), as calculated for a fixed point on the Earth's surface in the plane of the space station's orbit, considering the worst-case frequency tolerance of all frequency determining components, and maximum positive and negative Doppler shift of both the uplink and downlink signals, taking into account the system design.

(ii) Applicants in the non-voice, non-geostationary mobile-satellite service shall show that no signal received by their satellites from sources outside of their system shall be retransmitted with a power flux density level, in the worst 4 kHz, higher than the level described by the applicants in paragraph (a)(2) of this section.

(4) [Reserved]