minimum, NGSO hand-over and satellite switching strategies, NGSO satellite antenna gain patterns, and NGSO earth station antenna gain patterns. In particular, each NGSO FSS applicant must explain the switching protocols it uses to avoid transmitting while passing through the geostationary satellite orbit arc, or provide an explanation as to how the PFD limits in \$25,208 are met without using geostationary satellite orbit arc avoidance. In addition, each NGSO FSS applicant must provide the orbital parameters contained in Section A.4 of Annex 2A to Appendix 4 of the ITU Radio Regulations (2008). Further, each NGSO FSS applicant must provide a sufficient technical showing to demonstrate that the proposed non-geostationary satellite orbit system meets the PFD limits contained in §25.208, as applicable, and

- (4) [Reserved]
- (j)-(l) [Reserved]

[66 FR 10619, Feb. 16, 2001, as amended at 67 FR 53510, Aug. 16, 2002; 68 FR 16447, Apr. 4, 2003; 68 FR 43946, July 25, 2003; 68 FR 51505, Aug. 27, 2003; 69 FR 31302, June 3, 2004; 70 FR 59277, Oct. 12, 2005; 78 FR 8423, Feb. 6, 2013; 79 FR 8320, Feb. 12, 2014; 81 FR 55333, Aug. 18, 2016]

§25.147 [Reserved]

§ 25.148 Licensing provisions for the Direct Broadcast Satellite Service.

- (a) License terms. License terms for DBS facilities are specified in §25.121(a).
- (b) Due diligence. (1) All persons granted DBS authorizations shall proceed with due diligence in constructing DBS systems. Permittees shall be required to complete contracting for construction of the satellite station(s) within one year of the grant of the authorization. The satellite stations shall also be required to be in operation within six years of the authorization grant.
- (2) In addition to the requirements stated in paragraph (b)(1) of this section, all persons who receive new or additional DBS authorizations after January 19, 1996 shall complete construction of the first satellite in their respective DBS systems within four years of grant of the authorization. All satellite stations in such a DBS system

shall be in operation within six years of the grant of the authorization.

- (3) DBS licensees shall be required to proceed consistent with all applicable due diligence obligations, unless otherwise determined by the Commission upon proper showing in any particular case. Transfer of control of the authorization shall not be considered to justify extension of these deadlines.
- (c) Geographic service requirements. Those entities acquiring DBS authorizations after January 19, 1996, or who after January 19, 1996 modify a previous DBS authorization to launch a replacement satellite, must provide DBS service to Alaska and Hawaii where such service is technically feasible from the authorized orbital location. This requirement does not apply to DBS satellites authorized to operate at the 61.5° W.L. orbital location. DBS applicants seeking to operate from locations other than 61.5° W.L. who do not provide service to Alaska and Hawaii, must provide technical analyses to the Commission demonstrating that such service is not feasible as a technical matter, or that while technically feasible such services would require so many compromises in satellite design and operation as to make it economically unreasonable.
- (d) DBS subject to competitive bidding. Mutually exclusive initial applications to provide DBS are subject to competitive bidding procedures. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this part.
- (e) DBS long form application. Winning bidders are subject to the provisions of §1.2107 of this chapter except that in lieu of a FCC Form 601 each winning bidder shall submit the long-form satellite service application (FCC Form 312) within thirty (30) days after being notified by Public Notice that it is the winning bidder. Each winning bidder will also be required to submit by the same deadline the information described in §25.215 (Technical) and §25.601 (EEO), and in paragraph (f) of this section. Each winner also will be required to file, by the same deadline, a signed statement describing its efforts to date and future plans to come into compliance with any applicable

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spectrum limitations, if it is not already in compliance. Such information shall be submitted pursuant to the procedures set forth in §25.114 and any associated Public Notices.

(f) Technical qualifications. DBS operations must be in accordance with the sharing criteria and technical characteristics contained in Appendices 30 and 30A of the ITU's Radio Regulations. Operation of systems using differing technical characteristics may be permitted, with adequate technical showing, and if a request has been made to the ITU to modify the appropriate Plans to include the system's technical parameters.

[67 FR 51113, Aug. 7, 2002]

§ 25.149 Application requirements for ancillary terrestrial components in Mobile-Satellite Service networks operating in the 1.5./1.6 GHz and 1.6/2.4 GHz Mobile-Satellite Service.

- (a) Applicants for ancillary terrestrial component authority shall demonstrate that the applicant does or will comply with the following through certification or explanatory technical exhibit, as appropriate:
- (1) ATC shall be deployed in the forward-band mode of operation whereby the ATC mobile terminals transmit in the MSS uplink bands and the ATC base stations transmit in the MSS downlink bands in portions of the 1626.5–1660.5 MHz/1525–1559 MHz bands (L-band) and the 1610–1626.5 MHz/2483.5–2500 MHz bands.

NOTE TO PARAGRAPH (a)(1): An L-band MSS licensee is permitted to apply for ATC authorization based on a non-forward-band mode of operation provided it is able to demonstrate that the use of a non-forward-band mode of operation would produce no greater potential interference than that produced as a result of implementing the rules of this section.

- (2) ATC operations shall be limited to certain frequencies:
 - (i) [Resreved]
- (ii) In the 1626.5–1660.5 MHz/1525–1559 MHz bands (L-band), ATC operations are limited to the frequency assignments authorized and internationally coordinated for the MSS system of the MSS licensee that seeks ATC authority.

- (iii) In the 1610–1626.5 MHz/2483.5–2500 MHz bands, ATC operations are limited to the 1610–1617.775 MHz, 1621.35–1626.5 MHz, and 2483.5–2495 MHz bands and to the specific frequencies authorized for use by the MSS licensee that seeks ATC authority.
- (3) ATC operations shall not exceed the geographical coverage area of the Mobile-Satellite Service network of the applicant for ATC authority.
- (4) ATC base stations shall comply with all applicable antenna and structural clearance requirements established in part 17 of this chapter.
- (5) ATC base stations and mobile terminals shall comply with part 1 of this chapter, Subpart I—Procedures Implementing the National Environmental Policy Act of 1969, including the guidelines for human exposure to radio frequency electromagnetic fields as defined in §§1.1307(b) and 1.1310 of this chapter for PCS networks.
- (6) ATC base station operations shall use less than all available MSS frequencies when using all available frequencies for ATC base station operations would exclude otherwise available signals from MSS space-stations.
- (b) Applicants for an ancillary terrestrial component shall demonstrate that the applicant does or will comply with the following criteria through certification:
- (1) Geographic and temporal coverage.(i) [Reserved]
- (ii) For the L-band, an applicant must demonstrate that it can provide space-segment service covering all 50 states, Puerto Rico, and the U.S. Virgin Islands one-hundred percent of the time, unless it is not technically possible for the MSS operator to meet the coverage criteria from its orbital position.
- (iii) For the 1.6/2.4 GHz Mobile-Satellite Service bands, an applicant must demonstrate that it can provide space-segment service to all locations as far north as 70° North latitude and as far south as 55° South latitude for at least seventy-five percent of every 24-hour period, i.e., that at least one satellite will be visible above the horizon at an elevation angle of at least 5° for at least 18 hours each day, and on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin