density of +10.0 dBW/4 kHz per carrier and earth station antennas with maximum input power density of -14 dBW/4 kHz will be processed routinely. All applications for analog VSAT networks with maximum outbound downlink power densities of +17.0 dBW/4 kHz per carrier and maximum antenna input power densities of -8.0 dBW/4 kHz shall be processed routinely in accordance with Declaratory Order in the Matter of Routine Licensing of Earth Stations in the 6 GHz and 14 GHz Bands Using Antennas Less than 9 Meters and 5 Meters in Diameter, Respectively, for Both Full Transponder and Narrowband Transmissions, 2 FCC Rcd 2149 (1987) (Declaratory Order).

(a)(2) *Large Networks of Small Antennas operating in the 4/6 GHz frequency bands.* All applications for digital and/or analog operations will be routinely processed provided the network employs antennas that are 4.5 meter or larger in diameter, that are consistent with §25.209, the power levels are consistent with §§25.211(d) and 25.212(d), and frequency coordination has been satisfactorily completed. The use of smaller antennas or non-consistent power levels require the filing of an initial lead application (§25.115(c)(2)) that includes all technical analyses required to demonstrate that unacceptable interference will not be caused to any and all affected adjacent satellite operators by the operation of the nonconforming earth station.

(b) *VSAT networks operating in the 11.7–12.2 GHz and 14.0–14.5 GHz band.* Each applicant for digital and/or analog VSAT network authorization proposing to use transmitted satellite carrier EIRP densities and/or maximum antenna input power in excess of those specified in paragraph (a) of this Section must comply with the procedures set forth in §25.220.

(c) [Reserved]

(d) An application for VSAT authorization shall be filed on FCC Form 312, Main Form and Schedule B.

(e) VSAT operators in the 11.7–12.2 GHz and 14.0–14.5 GHz frequency bands are permitted to use more than one hub earth station in their networks.

(f) VSAT operators in the 11.7–12.2 GHz and 14.0–14.5 GHz frequency bands are permitted to use temporary fixed earth stations as either hub earth stations or remote earth stations in their networks, but must specify the number of temporary fixed earth stations they plan to use in their networks at the time of their applications.

(g) Starting March 10, 2005, all applications for VSAT service in the 12/14 GHz band that meet the following requirements will be routinely processed: (1) The maximum transmitter power spectral density of a digital modulated carrier into any GSO FSS earth station antenna shall not exceed $-14.0 - 10\log(N)$ dB(W/4 kHz). For a VSAT network using frequency division multiple access (FDMA) or time division multiple access (TDMA) technique, N is equal to one. For a VSAT network using code division multiple access (CDMA) technique, N is the maximum number of co-frequency simultaneously transmitting earth stations in the same satellite receiving beam.

(2) The maximum GSO FSS satellite EIRP spectral density of the digital modulated emission shall not exceed 10 dB (W/4kHz) for all methods of modulation and accessing techniques.

(3) The maximum transmitter power spectral density of an analog carrier into any GSO FSS earth station antenna shall not exceed −8.0 dB(W/4kHz) and the maximum GSO FSS satellite EIRP spectral density shall not exceed +17.0 dB(W/4kHz).

(h) VSAT operators licensed pursuant to this section are prohibited from using remote earth stations in their networks that are not designed to stop transmissions from their remote earth stations when synchronization with the target satellite fails.

[56 FR 66001, Dec. 20, 1991, as amended at 62 FR 5929, Feb. 10, 1997; 66 FR 31560, June 12, 2001; 70 FR 32254, June 2, 2005; 70 FR 33376, June 8, 2005]

§25.135 Licensing provisions for earth station networks in the non-voice, non-geostationary mobile-satellite service.

(a) Each applicant for a blanket earth station license in the non-voice, non-geostationary mobile-satellite

service shall demonstrate that transceiver operations will not cause unacceptable interference to other authorized users of the spectrum, based on existing system information publicly available at the Commission at the time of filing, and will comply with operational conditions placed upon the systems with which they are to operate in accordance with §25.142(b). This demonstration shall include a showing as to all the technical parameters, including duty cycle and power limits, under which the individual user transceivers will operate.

(b) Transceiver units associated with the non-voice, non-geostationary mobile-satellite service may not be operated on civil aircraft. All portable or hand-held transceiver units (including transceiver units installed in other devices that are themselves portable or hand-held) having a receiver operating in the 137–138 MHz band shall bear the following statement in a conspicuous location on the device: ''This device may not be operated while on board a civil aircraft. It must be turned off at all times while on board such an aircraft.'' This subsection shall not apply to transceiver units whose receivers are incapable of radiating in the 108–137 MHz frequency bands.

(c) Transceiver units in this service are authorized to communicate with and through U.S. authorized space stations only. No person without an FCC license for such operation may transmit to a space station in this service from anywhere in the United States except to receive service from the holder of a pertinent FCC blanket license or from another party with the permission of such a blanket licensee.

(d) The holder of an FCC blanket license for operation of transceivers for communication via a non-voice, non-geostationary mobile-satellite system shall be responsible for operation of any such transceiver to receive service provided by the blanket licensee or provided by another party with the blanket licensee's consent. Operators of non-voice, non-geostationary mobile-satellite 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 another party with authority for such transceiver operation delegated by such a blanket licensee.

[58 FR 68059, Dec. 23, 1993, as amended at 69 FR 5710, Feb. 6, 2004]

§25.136 Licensing provisions for user transceivers in the 1.6/2.4 GHz, 1.5/1.6 GHz, and 2 GHz Mobile Satellite Services.

In addition to the technical requirements specified in §25.213, earth stations operating in the 1.6/2.4 GHz and 1.5/1.6 GHz Mobile Satellite Services are subject to the following operating conditions:

(a) User transceiver units associated with the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service may not be operated on civil aircraft unless the earth station has a direct physical connection to the aircraft cabin or cockpit communication system.

(b) No person without an FCC license for such operation may transmit to a space station in this service from anywhere in the United States except to receive service from the holder of a pertinent FCC blanket license or from another party with the permission of such a blanket licensee.

(c) The holder of an FCC blanket license for operation of transceivers for communication via a 1.6/2.4 GHz, 1.5/1.6 GHz, or 2 GHz Mobile Satellite Service system shall be responsible for operation of any such transceiver to receive service provided by that licensee or provided by another party with the blanket licensee's consent. Operators of such satellite 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 for transceiver operation or under a service contract with another party with authority for such transmission delegated by such a blanket licensee.

(d) Any mobile earth station (MES) associated with the Mobile Satellite Service operating in the 1530–1544 MHz and 1626.5–1645.5 MHz bands shall have