Federal Communications Commission

§25.134 Licensing provisions for Very Small Aperture Terminal (VSAT) and C-band Small Aperture Terminal (CSAT) networks.

(a)(1) [Reserved]

(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 $(\S25.115(c)(2))$ 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 non-conforming earth station.

(b) VSAT networks operating in the 12/ 14 GHz band. An applicant for a VSAT network authorization proposing to operate with transmitted power spectral density and/or antenna input power in excess of the values specified in paragraph (g) of this section must comply with the requirements 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 networks operating in the 12/14 GHz bands may use more than one hub earth station, and the hubs may be sited at different locations.

(f) 12/14 GHz VSAT operators may use temporary fixed earth stations as hub earth stations or remote earth stations in their networks, but must specify, in their license applications, the number of temporary fixed earth stations they plan to use.

(g) Applications for VSAT operation in the 12/14 GHz bands that meet the following requirements will be routinely processed:

(1) Equivalent antenna diameter is 1.2 meters or more and the application includes certification of conformance with relevant antenna performance standards in §25.209 pursuant to §25.132(a)(1). (2) The maximum transmitter power spectral density of a digital modulated carrier into any GSO FSS earth station antenna does not exceed $-14.0 - 10\log(N) dB(W/4 kHz)$. For a VSAT network using a frequency division multiple access (FDMA) or a time division multiple access (TDMA) technique, N is equal to one. For a VSAT network using a code division multiple access (CDMA) technique, N is the maximum number of co-frequency simultaneously transmitting earth stations in the same satellite receiving beam.

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

(4) Any earth station applicant filing an application to operate a VSAT network in the 12/14 GHz bands and planning to use a contention protocol must certify that its contention protocol usage will be reasonable.

(5) The maximum transmitter power spectral density of an analog carrier into any GSO FSS earth station antenna does not exceed -8.0 dB(W/4kHz) and the maximum GSO FSS satellite EIRP spectral density does 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 transmission when synchronization to signals from 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; 73 FR 70900, Nov. 24, 2008; 78 FR 8421, Feb. 6, 2013; 79 FR 8318, Feb. 12, 2014]

EFFECTIVE DATE NOTE: At 74 FR 9962, Mar. 9, 2009, §25.134 paragraph (g)(4), which contains information collection and recordkeeping requirements, became effective with approval by the Office of Management and Budget for a period of three years.

§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