Federal Communications Commission

U.S.C. 310, is eligible to hold a license under this part.

[70 FR 61059, Oct. 20, 2005]

§24.15 License period.

Licenses for service areas will be granted for ten year terms from the date of original issuance or renewal.

Subpart C—Technical Standards

§ 24.50 Scope.

This subpart sets forth the technical requirements for use of the spectrum and equipment in the personal communications services.

§24.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part and each transmitter marketed, as set forth in §2.803 of this chapter, must be of a type that has been authorized by the Commission under its certification procedure for use under this part.

(b) 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.

[58 FR 59183, Nov. 8, 1993. Redesignated at 59 FR 18499, Apr. 19, 1994, as amended at 63 FR 36604, July 7, 1998; 85 FR 18150, Apr. 1, 2020]

§24.52 RF exposure.

Licensees and manufacturers shall ensure compliance with the Commission's radio frequency exposure requirements in §§1.1307(b), 2.1091, and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements. Technical information showing the basis for this statement must be submitted to the Commission upon request.

[85 FR 18150, Apr. 1, 2020]

§ 24.53 Calculation of height above average terrain (HAAT).

- (a) HAAT is determined by subtracting average terrain elevation from antenna height above mean sea level.
- (b) Average terrain elevation shall be calculated using elevation data from a 30 arc second or better Digital Elevation Models (DEMs). DEM data is available from United States Geological Survey (USGS). The data file shall be identified. If 30 arc second data is used, the elevation data must be processed for intermediate points using interpolation techniques; otherwise, the nearest point may be used. If DEM data is not available, elevation data from the Defense Mapping Agency's Digital Chart of the World (DCW) may be used.
- (c) Radial average terrain elevation is calculated as the average of the elevation along a straight line path from 3 to 16 kilometers extending radially from the antenna site. At least 50 evenly spaced data points for each radial shall be used in the computation.
- (d) Average terrain elevation is the average of the eight radial average terrain elevations (for the eight cardinal radials).
- (e) The position location of the antenna site shall be determined to an accuracy of no less than ± 5 meters in both the horizontal (latitude and longitude) and vertical (ground elevation) dimensions with respect to the National Geodetic Reference System.

 $[58~\mathrm{FR}~59183,~\mathrm{Nov.}~8,~1993;~59~\mathrm{FR}~15269,~\mathrm{Mar.}~31,~1994]$

§ 24.55 Antenna structures; air navigation safety.

Licensees that own their antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, each FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues

§ 24.100

to meet the requirements of part 17 of this chapter. See § 17.6 of this chapter.

- (a) Marking and lighting. Antenna structures must be marked, lighted and maintained in accordance with part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration.
- (b) Maintenance contracts. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that was continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

[61 FR 4366, Feb. 6, 1996]

Subpart D—Narrowband PCS

§24.100 Scope.

This subpart sets out the regulations governing the licensing and operations of personal communications services authorized in the 901–902, 930–931, and 940–941 MHz bands (900 MHz band).

§24.101 [Reserved]

§24.102 Service areas.

Narrowband PCS service areas are nationwide, regional, and Major Trading Areas (MTAs), as defined in this section. MTAs are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38–39 (MTA Map). Rand McNally organizes the 50 States and the District of Columbia into 47 MTAs. The MTA Map is available for public inspection in the FCC's Library, Room TW-B505, 445 12th Street SW, Washington, D.C.

- (a) The nationwide service area consists of the fifty states, the District of Columbia, American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and United States Virgin Islands.
- (b) The regional service areas are defined as follows:
- (1) Region 1 (Northeast): The Northeast Region consists of the following MTAs: Boston-Providence, Buffalo-

Rochester, New York, Philadelphia, and Pittsburgh.

- (2) Region 2 (South): The South Region consists of the following MTAs: Atlanta, Charlotte-Greensboro-Greenville-Raleigh, Jacksonville, Knoxville, Louisville-Lexington-Evansville, Nashville, Miami-Fort Lauderdale, Richmond-Norfolk, Tampa-St. Petersburg-Orlando, and Washington-Baltimore; and, Puerto Rico and United States Virgin Islands.
- (3) Region 3 (Midwest): The Midwest Region consists of the following MTAs: Chicago, Cincinnati-Dayton, Cleveland, Columbus, Des Moines-Quad Cities, Detroit, Indianapolis, Milwaukee, Minneapolis-St. Paul, and Omaha.
- (4) Region 4 (Central): The Central Region consists of the following MTAs: Birmingham, Dallas-Fort Worth, Denver, El Paso-Albuquerque, Houston, Kansas City, Little Rock, Memphis-Jackson, New Orleans-Baton Rouge, Oklahoma City, San Antonio, St. Louis, Tulsa, and Wichita.
- (5) Region 5 (West): The West Region consists of the following MTAs: Honolulu, Los Angeles-San Diego, Phoenix, Portland, Salt Lake City, San Francisco-Oakland-San Jose, Seattle (including Alaska), and Spokane-Billings; and, American Samoa, Guam, and the Northern Mariana Islands.
- (c) The MTA service areas are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38–39, with the following exceptions and additions:
- (1) Alaska is separated from the Seattle MTA and is licensed separately.
- (2) Guam and the Northern Mariana Islands are licensed as a single MTA-like area.
- (3) Puerto Rico and the United States Virgin Islands are licensed as a single MTA-like area.
- (4) American Samoa is licensed as a single MTA-like area.

[59 FR 14118, Mar. 25, 1994, as amended at 59 FR 46199, Sept. 7, 1994; 65 FR 35852, June 6, 2000]

§24.103 Construction requirements.

(a) Nationwide narrowband PCS licensees shall construct base stations that provide coverage to a composite area of 750,000 square kilometers or