

summed across all carriers or frequency channels, shall not exceed the limit specified in paragraph (a) of this section, as applicable. The directional antenna gain shall be computed as follows:

(i) The directional gain, in dBi, shall be calculated as the sum of 10 log (number of array elements or staves) plus the directional gain, in dBi, of the individual element or stave having the highest gain.

(ii) A lower value for the directional gain than that calculated in paragraph (b)(2)(i) of this section will be accepted if sufficient evidence is presented, *e.g.*, due to shading of the array or coherence loss in the beam-forming.

(3) If a transmitter employs an antenna that operates simultaneously on multiple directional beams using the same or different frequency channels and if transmitted beams overlap, the power shall be reduced to ensure that the aggregate power from the overlapping beams does not exceed the limit specified in paragraph (b)(2) of this section. In addition, the aggregate power transmitted simultaneously on all beams shall not exceed the limit specified in paragraph (b)(2) of this section by more than 8 dB.

(4) Transmitters that emit a single directional beam shall operate under the provisions of paragraph (b)(2) of this section.

(c) Mobile and portable stations are limited to 1 watt/25 MHz EIRP. In any event, the peak EIRP density shall not exceed 40 milliwatts in any one-megahertz slice of spectrum.

§ 90.1323 Emission limits.

(a) The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth.

(b) When an emission outside of the authorized bandwidth causes harmful

interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

§ 90.1331 Restrictions on the operation of base and fixed stations.

(a)(1) Except as provided in paragraph (a)(2) of this section, base and fixed stations may not be located within 150 km of any grandfathered satellite earth station operating in the 3650–3700 MHz band. The coordinates of these stations are available at <http://www.fcc.gov/ib/sd/3650/>.

(2) Base and fixed stations may be located within 150 km of a grandfathered satellite earth station provided that the licensee of the satellite earth station and the 3650–3700 MHz licensee mutually agree on such operation.

(3) Any negotiations to enable base or fixed station operations closer than 150 km to grandfathered satellite earth stations must be conducted in good faith by all parties.

(b) (1) Except as specified in paragraph (b)(2) of this section, base and fixed stations may not be located within 80 km of the following Federal Government radiolocation facilities:

St. Inigoes, MD—38° 10' N., 76°, 23' W.
Pascagoula, MS—30° 22' N., 88°, 29' W.
Pensacola, FL—30° 21' 28" N., 87°, 16' 26" W.

NOTE: Licensees installing equipment in the 3650–3700 MHz band should determine if there are any nearby Federal Government radar systems that could affect their operations. Information regarding the location and operational characteristics of the radar systems operating adjacent to this band are provided in NTIA TR-99-361.

(2) Requests for base or fixed station locations closer than 80 km to the Federal Government radiolocation facilities listed in paragraph (b)(1) of this section will only be approved upon successful coordination by the Commission with NTIA through the Frequency Assignment Subcommittee of the Interdepartmental Radio Advisory Committee.

§ 90.1333 Restrictions on the operation of mobile and portable stations.

(a) Mobile and portable stations may operate only if they can positively receive and decode an enabling signal transmitted by a base station.

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(b) Any mobile/portable stations may communicate with any other mobile/portable stations so long as each mobile/portable can positively receive and decode an enabling signal transmitted by a base station.

(c) Airborne operations by mobile/portable stations is prohibited.

§ 90.1335 RF safety.

Licensees in the 3650–3700 MHz band are subject to the exposure requirements found in §1.1307(b), 2.1091 and 2.1093 of our Rules.

§ 90.1337 Operation near Canadian and Mexican borders.

(a) Fixed devices generally must be located at least 8 kilometers from the U.S./Canada or U.S./Mexico border if the antenna of that device looks within the 160° sector away from the border. Fixed devices must be located at least 56 kilometers from each border if the antenna looks within the 200° sector towards the border.

(b) Fixed devices may be located nearer to the U.S./Canada or U.S./Mexico border than specified in paragraph (a) of this section only if the Commission is able to coordinate such use with Canada or Mexico, as appropriate.

(c) Licensees must comply with the requirements of current and future agreements with Canada and Mexico regarding operation in U.S./Canada and U.S./Mexico border areas.

Subpart AA—700 MHz Public/Private Partnership

SOURCE: 72 FR 48863, Aug. 24, 2007, unless otherwise noted.

§ 90.1401 Purpose and scope.

The purpose of this subpart, in conjunction with subpart N of part 27, is to establish rules and procedures relating to the 700 MHz Public/Private Partnership entered between the winning bidder for the Upper 700 MHz D Block license, the Upper 700 MHz D Block licensee, the Network Assets Holder, the Operating Company, the Public Safety Broadband Licensee, and other related entities as the Commission may require or allow. Pursuant to this partnership, the Upper 700 MHz D Block licensee and the Operating Company will

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be responsible for constructing and operating a nationwide, shared interoperable wireless broadband network used to provide a commercial service and a broadband network service for public safety entities. The shared network assets will be held by the Network Assets Holder, and the Shared Wireless Broadband Network will operate on both the commercial spectrum licensed to the Upper 700 MHz D Block licensee and the public safety broadband spectrum licensed to the Public Safety Broadband Licensee. This subpart of the part 90 rules sets forth specific provisions relating to the Public Safety Broadband License and the Public Safety Broadband Licensee with respect to the 700 MHz Public/Private Partnership. Subpart N of the part 27 rules sets forth related provisions applicable to the Upper 700 MHz D Block license, the Upper 700 MHz D Block licensee and other related entities as the Commission may require or allow, with respect to the 700 MHz Public/Private Partnership.

§ 90.1403 Public safety broadband license conditions.

(a) The Public Safety Broadband Licensee shall comply with all of the applicable requirements set forth in this subpart and shall comply with the terms of the Network Sharing Agreement and such other agreements as the Commission may require or allow.

(b) The responsibilities of the Public Safety Broadband Licensee shall include the following:

(1) Negotiation of the NSA and such other agreements as the Commission may require or allow with the winning bidder at auction for the Upper 700 MHz D Block license, pursuant to the requirements set forth in § 90.1410.

(2) General administration of access to the 763–768 MHz and 793–798 MHz bands by individual public safety entities, including assessment of usage fees and related frequency coordination duties.

(3) Regular interaction with and promotion of the needs of the public safety entities with respect to access and use of the 763–768 MHz and 793–798 MHz bands, within the technical and operational confines of the NSA.