

to meet requirements associated with a nationwide, public safety broadband network. At a minimum, the network must incorporate the following features:

(a) Design for operation over a broadband technology platform that provides mobile voice, video, and data capability that is seamlessly interoperable across public safety local and state agencies, jurisdictions, and geographic areas, and which includes current and evolving state-of-the-art technologies reasonably made available in the commercial marketplace with features beneficial to the public safety community.

(b) Sufficient signal coverage to ensure reliable operation throughout the service area consistent with typical public safety communications systems.

(c) Sufficient robustness to meet the reliability and performance requirements of public safety.

(d) Sufficient capacity to meet the needs of public safety.

(e) Security and encryption consistent with state-of-the-art technologies.

(f) A mechanism to automatically prioritize public safety communications over commercial uses on a real-time basis consistent with the requirements of § 90.1407(c).

(g) Operational capabilities consistent with features and requirements that are typical of current and evolving state-of-the-art public safety systems.

(h) Operational control of the network by the Public Safety Broadband Licensee to the extent necessary to ensure that public safety requirements are met.

§ 90.1407 Spectrum use in the network.

(a) *Spectrum use.* The Shared Wireless Broadband Network will operate using spectrum associated with the Upper 700 MHz D Block license in the 758–763 MHz and 788–793 MHz bands and the Public Safety Broadband License in the adjacent 763–768 MHz and 793–798 MHz bands.

(b) *Access to spectrum in the 763–768 MHz and 793–798 MHz bands.* The Public Safety Broadband Licensee which holds the Public Safety Broadband License, pursuant to part 90 rules, must lease

the spectrum rights associated with this license, pursuant to a spectrum manager leasing arrangement set forth in part 1 subpart X, to the Upper 700 MHz D Block licensee and the Operating Company for the entire remaining term of the Public Safety Broadband License to effectuate the 700 MHz Public/Private Partnership. The Upper 700 MHz D Block licensee and the Operating Company, are the only entities that are eligible to lease the spectrum usage rights associated with the Public Safety Broadband License to operate on the 763–768 and 793–798 MHz bands. If the Upper 700 MHz D Block license is cancelled, this spectrum leasing arrangement will automatically terminate.

(c) *Commercial operations in the 763–768 MHz and 793–798 MHz bands.* Commercial operations in the 763–768 MHz and 793–798 MHz bands through the spectrum manager leasing arrangement shall not cause harmful interference to primary users (*i.e.*, public safety users) and cannot claim protection from harmful interference from the primary public safety operations in the 763–768 MHz and 793–798 MHz bands. The network providing commercial operations in the 763–768 MHz and 793–798 MHz bands through the spectrum manager leasing arrangement must be designed to automatically assign priority to public safety users, to the exclusion and/or immediate preemption of any commercial use on a dynamic, real-time priority basis, and to guarantee that public safety users suffer no harmful interference or interruption or degradation of service due to commercial operations in the 763–768 MHz and 793–798 MHz bands.

(d) Public Safety Broadband Network Operators must use at least 3GPP TS 23.401, V8.8.0 (2009–12), “3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access (Release 8),” December, 2009 (incorporated by reference). The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies

may be inspected at the Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554 or National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. Copies of the 3GPP Standard E-UTRA Release 8 can be obtained from 3GPP Mobile Competence Centre, c/o ETSI, 650, route des Lucioles, 06921 Sophia-Antipolis Cedex, France, Tel: +33 (0)4 92 94 42 00, Fax: +33 4 93 65 47 16, <http://www.3gpp.org>. Later versions of this standard may be employed by Public Safety Broadband Network Operators provided they are backwards-compatible with this version.

(e) Systems in the network must support the following interfaces: Uu—LTE air interface; S6a—Visited MME to Home HSS; S8—Visited SGW to Home PGW; S9—Visited PCRF to Home PCRF for dynamic policy arbitration; S10—MME to MME support for Category 1 handover support; X2—eNodeB to eNodeB; S1-u—between eNodeB and SGW; S1-MME—between eNodeB and MME; S5—between SGW and PGW; S6a—between MME and HSS; S11—between MME and SGW; SGi—between PGW and external PDN; Gx—between PGW and PCRF (for QoS policy, filter policy and charging rules); Rx—between PCRF and AF located in a PDN; Gy/Gz—offline/online charging interfaces.

(f) A Public Safety Broadband Network Operator must submit to the Chief of the Public Safety and Homeland Security Bureau prior to deployment of any Radio Access Network equipment a certification that it will be in compliance with paragraph (e) of this section prior to the date its network achieves service availability.

[72 FR 48863, Aug. 24, 2007, as amended at 76 FR 51272, Aug. 18, 2011]

§ 90.1408 Organization and structure of the 700 MHz public/private partnership.

(a) The Upper 700 MHz D Block licensee and the Network Assets Holder and such other related entities as the Commission may require or allow shall

be formed by the winning bidder of the Upper 700 MHz D Block license. The Upper 700 MHz D Block licensee, the Network Assets Holder, and related entities as the Commission may require or allow must be Special Purpose Bankruptcy Remote Entities formed to hold the license, to hold the shared network assets, or for such other purpose as the Commission may require or allow. The winning bidder of the Upper 700 MHz D Block license shall also form the Operating Company, which must also be a Special Purpose Bankruptcy Remote Entity. Upon issuance of the Upper 700 MHz D Block license, the winning bidder will assign all of its rights and obligations under the NSA to the Upper 700 MHz D Block licensee, Network Assets Holder, the Operating Company, and any other related entities that the Commission may require or allow.

(b) The Upper 700 MHz D Block licensee and other related entities as the Commission may require or allow shall have the obligation to build out the Shared Wireless Broadband Network, as provided for in the NSA or otherwise as authorized by the Commission.

§ 90.1410 Network sharing agreement.

The relationship between the Upper 700 MHz D Block licensee, the Public Safety Broadband Licensee, and related entities as the Commission may require or allow will be governed by the Network Sharing Agreement (NSA) and such other separate agreements as the Commission may require or allow that are negotiated and entered into between the parties. The NSA must, at a minimum, include the following terms:

(a) All of the substantive rights and obligations of the parties relating to the NSA, as established by the Commission concerning the 700 MHz Public/Private Partnership.

(b) Network specifications that comply with § 27.1305 of this chapter.

(c) The definition of “emergency” for purposes of emergency priority access.

(d) All service fees to be imposed for services to public safety, including fees for normal network service and fees for priority access to the D Block spectrum in an emergency.