programmers that are less than 50 percent of direct costs or from paying qualified programmers for the use of their programming.

(iv) DBS providers shall reserve discrete channels and offer these to qualifying programmers at consistent times to fulfill the reservation requirement described in these rules.

(6) *Public file.* (i) In addition to the political file requirements in §25.701(d), each DBS provider shall keep and permit public inspection of a complete and orderly record of:

(A) Quarterly measurements of channel capacity and yearly average calculations on which it bases its four percent reservation, as well as its response to any capacity changes;

(B) A record of entities to whom noncommercial capacity is being provided, the amount of capacity being provided to each entity, the conditions under which it is being provided and the rates, if any, being paid by the entity;

(C) A record of entities that have requested capacity, disposition of those requests and reasons for the disposition.

(ii) All records required by this paragraph shall be placed in a file available to the public as soon as possible and shall be retained for a period of two years.

(7) *Effective date.* DBS providers are required to make channel capacity available pursuant to this section upon the effective date. Programming provided pursuant to this rule must be available to the public no later than six months after the effective date.

[69 FR 23157, Apr. 28, 2004, as amended at 72 FR 50033, Aug. 29, 2007; 78 FR 8431, Feb. 6, 2013]

PART 27—MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

Subpart A—General Information

Subpart B—Applications and Licenses

Subpart C—Technical Standards

Subpart D—Competitive Bidding Procedures for the 2305–2320 MHz and 2345–2360 MHz Bands

Subpart E—Application, Licensing, and Processing Rules for WCS

Subpart F—Competitive Bidding Procedures for the 698–806 MHz Band

Subpart G—Guard Band Service (746–747/776–777 MHz and 762–764/792–794 MHz Bands)

Subpart H—Competitive Bidding Procedures for the 698–746 MHz Band

Subpart I—1.4 GHz Band

Subpart J—1670–1675 MHz Band

Subpart K—1915–1920 MHz and 1995–2000 MHz

Subpart L—1695–1710 MHz, 1710–1755 MHz, 1755–1780 MHz, 2110–2155 MHz, 2155–2180 MHz, 2180–2200 MHz Bands

AUTHORITY: 47 U.S.C. 154, 301, 302a, 303, 307, 309, 332, 336, 337, 1403, 1404, 1451, and 1452, unless otherwise noted.

SOURCE: 62 FR 9658, Mar. 3, 1997, unless otherwise noted.

Subpart A—General Information

§ 27.1 Basis and purpose.

This section contains the statutory basis for this part of the rules and provides the purpose for which this part is issued.

(a) *Basis.* The rules for miscellaneous wireless communications services (WCS) in this part are promulgated under the provisions of the Communications Act of 1934, as amended, that vest authority in the Federal Communications Commission to regulate radio transmission and to issue licenses for radio stations.

(b) *Purpose.* This part states the conditions under which spectrum is made available and licensed for the provision

of wireless communications services in the following bands.

(1) 2305–2320 MHz and 2345–2360 MHz.

(2) 746–758 MHz, 775–788 MHz, and 805–806 MHz.

(3) 698–746 MHz.

(4) 1390–1392 MHz.

(5) 1392–1395 MHz and 1432–1435 MHz.

(6) 1670–1675 MHz.

(7) 1915–1920 MHz and 1995–2000 MHz.

(8) 1710–1755 MHz and 2110–2155 MHz.

(9) 2495–2690 MHz.

(10) 2000–2020 MHz and 2180–2200 MHz.

(11) 1695–1710 MHz.

(12) 1755–1780 MHz.

(13) 2155–2180 MHz.

(14) Spectrum in the 470–698 MHz UHF band that has been reallocated and redesignated for flexible fixed and mobile use pursuant to section 6403 of the Spectrum Act. The specific frequencies and number of channel blocks will be determined in light of further proceedings pursuant to Docket No. 12–268 and the rule will be updated accordingly pursuant to a future public notice.

(c) *Scope.* The rules in this part apply only to stations authorized under this part.

[62 FR 9658, Mar. 3, 1997, as amended at 65 FR 3144, Jan. 20, 2000; 65 FR 17601, Apr. 4, 2000; 67 FR 5510, Feb. 6, 2002; 67 FR 41854, June 20, 2002; 69 FR 5714, Feb. 6, 2004; 69 FR 72031, Dec. 10, 2004; 69 FR 77949, Dec. 29, 2004; 72 FR 48843, Aug. 24, 2007; 77 FR 62462, Oct. 15, 2012; 78 FR 8267, Feb. 5, 2013; 78 FR 50254, Aug. 16, 2013; 79 FR 32410, June 4, 2014; 79 FR 48536, Aug. 15, 2014]

§ 27.2 Permissible communications.

(a) *Miscellaneous wireless communications services.* Except as provided in paragraph (b) or (d) of this section and subject to technical and other rules contained in this part, a licensee in the frequency bands specified in § 27.5 may provide any services for which its frequency bands are allocated, as set forth in the non-Federal Government column of the Table of Allocations in § 2.106 of this chapter (column 5).

(b) *775–776 MHz and 805–806 MHz bands.* Operators in the 775–776 MHz and 805–806 MHz bands may not employ a cellular system architecture. A cellular system architecture is defined, for purposes of this part, as one that consists of many small areas or cells (segmented from a larger geographic service area), each of which uses its own base station, to enable frequencies to be reused at relatively short distances.

(c) *Satellite DARS.* Satellite digital audio radio service (DARS) may be provided using the 2310–2320 and 2345–2360 MHz bands. Satellite DARS service shall be provided in a manner consistent with part 25 of this chapter.

(d) *2000–2020 MHz and 2180–2200 MHz bands.* Operators in the 2000–2020 MHz and 2180–2200 MHz bands may not provide the mobile-satellite service under the provisions of this part; rather, mobile-satellite service shall be provided in a manner consistent with part 25 of this chapter.

(e) *716–722 MHz and 722–728 MHz bands.* The 716–722 and 722–728 MHz frequencies may not be used for uplink transmission and must be used only for downlink transmissions.

[65 FR 3144, Jan. 20, 2000, as amended at 65 FR 17601, Apr. 4, 2000; 72 FR 48843, Aug. 24, 2007; 78 FR 8267, Feb. 5, 2013; 78 FR 66316, Nov. 5, 2013]

§ 27.3 Other applicable rule parts.

Other FCC rule parts applicable to the Wireless Communications Service include the following:

(a) *Part 0.* This part describes the Commission's organization and delegations of authority. Part 0 of this chapter also lists available Commission publications, standards and procedures for access to Commission records, and location of Commission Field Offices.

(b) *Part 1.* This part includes rules of practice and procedure for license applications, adjudicatory proceedings, procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; competitive bidding procedures; and the environmental requirements that, together with the procedures specified in § 17.4(c) of this chapter, if applicable, must be complied with prior to the initiation of construction. Subpart F includes the rules for the Wireless Telecommunications Services and the procedures for filing electronically via the ULS.

(c) *Part 2.* This part contains the Table of Frequency Allocations and special requirements in international

regulations, recommendations, agreements, and treaties. This part also contains standards and procedures concerning the marketing and importation of radio frequency devices, and for obtaining equipment authorization.

(d) *Part 5*. This part contains rules prescribing the manner in which parts of the radio frequency spectrum may be made available for experimentation.

(e) *Part 15*. This part sets forth the requirements and conditions applicable to certain radio frequency devices.

(f) *Part 17*. This part contains requirements for the construction, marking and lighting of antenna towers, and the environmental notification process that must be completed before filing certain antenna structure registration applications.

(g) *Part 20*. This part sets forth the requirements and conditions applicable to commercial mobile radio service providers.

(h) *Part 22*. This part sets forth the requirements and conditions applicable to public mobile services.

(i) *Part 24*. This part sets forth the requirements and conditions applicable to personal communications services.

(j) *Part 25*. This part contains the requirements for satellite communications, including satellite DARS.

(k) *Part 51*. This part contains general duties of telecommunications carriers to provide for interconnection with other telecommunications carriers.

(l) *Part 64*. This part sets forth the requirements and conditions applicable to telecommunications carriers under the Communications Assistance for Law Enforcement Act.

(m) *Part 68*. This part contains technical standards for connection of terminal equipment to the telephone network.

(n) *Part 73*. This part sets forth the requirements and conditions applicable to radio broadcast services.

(o) *Part 74*. This part sets forth the requirements and conditions applicable to experimental radio, auxiliary, special broadcast and other program distributional services.

(p) *Part 90*. This part sets forth the requirements and conditions applicable to private land mobile radio services.

(q) *Part 101*. This part sets forth the requirements and conditions applicable to fixed microwave services.

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 68954, Dec. 14, 1998; 65 FR 3144, Jan. 20, 2000; 67 FR 5510, Feb. 6, 2002; 69 FR 5714, Feb. 6, 2004; 69 FR 72031, Dec. 10, 2004; 70 FR 61059, Oct. 20, 2005; 77 FR 3955, Jan. 26, 2012]

§ 27.4 Terms and definitions.

600 MHz service. A radiocommunication service licensed pursuant to this part for the frequency bands specified in § 27.5(l).

Advanced Wireless Service (AWS). A radiocommunication service licensed pursuant to this part for the frequency bands specified in § 27.5(h), 27.5(j), or 27.5(k).

Affiliate. This term shall have the same meaning as that for ''affiliate'' in part 1, § 1.2110(b)(5) of this chapter.

Assigned frequency. The center of the frequency band assigned to a station.

Attended operation. Operation of a station by a designated person on duty at the place where the transmitting apparatus is located with the transmitter in the person's plain view.

Authorized bandwidth. The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater.

Average terrain. The average elevation of terrain between 3 and 16 kilometers from the antenna site.

Base station. A land station in the land mobile service.

Booster service area. A geographic area to be designated by an applicant for a booster station, within which the booster station shall be entitled to protection against interference as set forth in this part. The booster service area must be specified by the applicant so as not to overlap the booster service area of any other booster authorized to or proposed by the applicant. However, a booster station may provide service to receive sites outside of its booster service area, at the licensee's risk of interference. The booster station must be capable of providing substantial service within the designated booster service area.

Broadband Radio Service (BRS). A radio service using certain frequencies

in the 2150–2162 and 2496–2690 MHz bands which can be used to provide fixed and mobile services, except for aeronautical services.

Broadcast services. This term shall have the same meaning as that for ''broadcasting'' in section 3(6) of the Communications Act of 1934, *i.e.,* ''the dissemination of radio communications intended to be received by the public, directly or by the intermediary of relay stations.'' 47 U.S.C. 153(6).

Commercial EBS licensee. A licensee authorized to operate on EBS channels pursuant to the provisions of § 27.1201(c) contained in the edition of 47 CFR parts 20 to 39, revised as of October 1, 2005, or §§ 74.990 through 74.992 contained in the edition of 47 CFR parts 70 to 79, revised as of October 1, 2004, of this chapter, and that does not meet the eligibility requirements of § 27.1201(a).

Documented complaint. A complaint that a party is suffering from non-consensual interference. A documented complaint must contain a certification that the complainant has contacted the operator of the allegedly offending facility and tried to resolve the situation prior to filing. The complaint must then specify the nature of the interference, whether the interference is constant or intermittent, when the interference began and the site(s) most likely to be causing the interference. The complaint should be accompanied by a videotape or other evidence showing the effects of the interference. The complaint must contain a motion for a temporary order to have the interfering station cease transmitting. The complaint must be filed with the Secretary's office and served on the allegedly offending party.

Educational Broadband Service (EBS). A fixed or mobile service, the licensees of which are educational institutions or non-profit educational organizations, and intended primarily for video, data, or voice transmissions of instructional, cultural, and other types of educational material to one or more receiving locations.

Effective Radiated Power (ERP) (in a given direction). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Equivalent Isotropically Radiated Power (EIRP). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Fixed service. A radio communication service between specified fixed points.

Fixed station. A station in the fixed service.

Land mobile service. A mobile service between base stations and land mobile stations, or between land mobile stations.

Land mobile station. A mobile station in the land mobile service capable of surface movement within the geographic limits of a country or continent.

Land station. A station in the mobile service not intended to be used while in motion.

Lower Band Segment (LBS). Segment of the BRS/EBS band consisting of channels in the frequencies 2496–2572 MHz.

Middle Band Segment (MBS). Segment of the BRS/EBS band consisting of channels in the frequencies 2572–2614 MHz.

Mobile service. A radio communication service between mobile and land stations, or between mobile stations.

Mobile station. A station in the mobile service intended to be used while in motion or during halts at unspecified points.

National Geodetic Reference System (NGRS). The name given to all geodetic control data contained in the National Geodetic Survey (NGS) data base. (Source: National Geodetic Survey, U.S. Department of Commerce)

Point-to-point Broadband station. A Broadband station that transmits a highly directional signal from a fixed transmitter location to a fixed receive location.

Portable device. Transmitters designed to be used within 20 centimeters of the body of the user.

Post-auction transition period. The 39-month period commencing upon the public release of the Channel Reassignment Public Notice as defined in § 73.3700(a) of this chapter.

Public Safety Broadband Licensee. The licensee of the Public Safety Broadband License in the 763–768 MHz and 793–798 MHz bands.

Radiodetermination. The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

Radiolocation. Radiodetermination used for purposes other than those of radionavigation.

Radiolocation land station. A station in the radiolocation service not intended to be used while in motion.

Radiolocation mobile station. A station intended to be used while in motion or during halts at unspecified points.

Radionavigation. Radiodetermination used for the purpose of navigation, including obstruction warning.

Remote control. Operation of a station by a designated person at a control position from which the transmitter is not visible but where suitable control and telemetering circuits are provided which allow the performance of the essential functions that could be performed at the transmitter.

Satellite Digital Audio Radio Service (satellite DARS). A radiocommunication service in which compact disc quality programming is digitally transmitted by one or more space stations.

Sectorization. The use of an antenna system at any broadband station, booster station and/or response station hub that is capable of simultaneously transmitting multiple signals over the same frequencies to different portions of the service area and/or simultaneously receiving multiple signals over the same frequencies from different portions of the service area.

Spectrum Act. The term *Spectrum Act* means Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. 112–96).

Studio to transmitter link (STL). A directional path used to transmit a signal from a station's studio to its transmitter.

Temporary fixed broadband station. A broadband station used for the transmission of material from temporary unspecified points to a broadband station.

Time division multiple access (TDMA). A multiple access technique whereby users share a transmission medium by being assigned and using (one-at-a-time) for a limited number of time division mulitplexed channels; implies that several transmitters use one channel for sending several bit streams.

Time division multiplexing (TDM). A multiplexing technique whereby two or more channels are derived from a transmission medium by dividing access to the medium into sequential intervals. Each channel has access to the entire bandwidth of the medium during its interval. This implies that one transmitter uses one channel to send several bit streams of information.

Unattended operation. Operation of a station by automatic means whereby the transmitter is turned on and off and performs its functions without attention by a designated person.

Universal Licensing System. The Universal Licensing System (ULS) is the consolidated database, application filing system, and processing system for all Wireless Radio Services. ULS supports electronic filing of all applications and related documents by applicants and licensees in the Wireless Radio Services, and provides public access to licensing information.

Upper 700 MHz D Block license. The Upper 700 MHz D Block license is the nationwide license associated with the 758–763 MHz and 788–793 MHz bands.

Upper Band Segment (UBS). Segment of the BRS/EBS band consisting of channels in the frequencies 2614–2690 MHz

Wireless communications service. A radiocommunication service licensed pursuant to this part for the frequency bands specified in § 27.5.

[62 FR 9658, Mar. 3, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 27.4, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

§ 27.5 Frequencies.

(a) *2305–2320 MHz and 2345–2360 MHz bands.* The following frequencies are available for WCS in the 2305–2320 MHz and 2345–2360 MHz bands:

(1) Two paired channel blocks are available for assignment on a Major Economic Area basis as follows:

Block A: 2305–2310 and 2350–2355 MHz; and
Block B: 2310–2315 and 2355–2360 MHz.

(2) Two unpaired channel blocks are available for assignment on a Regional Economic Area Grouping basis as follows:

Block C: 2315–2320 MHz; and
Block D: 2345–2350 MHz.

(b) *746–758 MHz, 775–788 MHz, and 805–806 MHz bands.* The following frequencies are available for licensing pursuant to this part in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands:

(1) Two paired channels of 1 megahertz each are available for assignment in Block A in the 757–758 MHz and 787–788 MHz bands.

(2) Two paired channels of 1 megahertz each are available for assignment in Block B in the 775–776 MHz and 805–806 MHz bands.

(3) Two paired channels of 11 megahertz each are available for assignment in Block C in the 746–757 MHz and 776–787 MHz bands. In the event that no licenses for two channels in this Block C are assigned based on the results of the first auction in which such licenses were offered because the auction results do not satisfy the applicable reserve price, the spectrum in the 746–757 MHz and 776–787 MHz bands will instead be made available for assignment at a subsequent auction as follows:

(i) Two paired channels of 6 megahertz each available for assignment in Block C1 in the 746–752 MHz and 776–782 MHz bands.

(ii) Two paired channels of 5 megahertz each available for assignment in Block C2 in the 752–757 MHz and 782–787 MHz bands.

(c) *698–746 MHz band.* The following frequencies are available for licensing pursuant to this part in the 698–746 MHz band:

(1) Three paired channel blocks of 12 megahertz each are available for assignment as follows:

Block A: 698–704 MHz and 728–734 MHz;
Block B: 704–710 MHz and 734–740 MHz; and
Block C: 710–716 MHz and 740–746 MHz.

(2) Two unpaired channel blocks of 6 megahertz each are available for assignment as follows:

Block D: 716–722 MHz; and
Block E: 722–728 MHz.

(d) *1390–1392 MHz band.* The 1390–1392 MHz band is available for assignment on a Major Economic Area basis.

(e) *The paired 1392–1395 and 1432–1435 MHz bands.* The paired 1392–1395 MHz and 1432–1435 MHz bands are available for assignment on an Economic Area Grouping basis as follows: Block A: 1392–1393.5 MHz and 1432–1433.5 MHz; and Block B: 1393.5–1395 MHz and 1433.5–1435 MHz.

(f) *1670–1675 MHz band.* The 1670–1675 MHz band is available for assignment on a nationwide basis.

(g) [Reserved]

(h) *1710–1755 MHz, 2110–2155 MHz, 1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands.* The following frequencies are available for licensing pursuant to this part in the 1710–1755 MHz, 2110–2155 MHz, 1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands:

(1) Four paired channel blocks of 10 megahertz each are available for assignment as follows:

Block A: 1710–1720 MHz and 2110–2120 MHz;
Block B: 1720–1730 MHz and 2120–2130 MHz;
Block F: 1745–1755 MHz and 2145–2155 MHz; and
Block J: 1770–1780 MHz and 2170–2180 MHz.

(2) Six paired channel blocks of 5 megahertz each are available for assignment as follows:

Block C: 1730–1735 MHz and 2130–2135 MHz;
Block D: 1735–1740 MHz and 2135–2140 MHz;
Block E: 1740–1745 MHz and 2140–2145 MHz;
Block G: 1755–1760 MHz and 2155–2160 MHz;
Block H: 1760–1765 MHz and 2160–2165 MHz; and
Block I: 1765–1770 MHz and 2165–2170 MHz.

(3) One unpaired block of 5 megahertz and one unpaired block of 10 megahertz each are available for assignment as follows:

Block A1: 1695–1700 MHz
Block B1: 1700–1710 MHz.

NOTE TO PARAGRAPH (h). Licenses to operate in the 1695–1710 MHz and 1755–1780 MHz bands are subject to the condition that the licensee must not cause harmful interference to an incumbent Federal entity relocating from these bands under an approved Transition Plan. This condition remains in effect until NTIA terminates the applicable authorization of the incumbent Federal entity.

(i) *Frequency assignments for the BRS/EBS band.* (1) Pre-transition frequency assignments.

BRS Channel 1: 2150–2156 MHz or 2496–2500 MHz

BRS Channel 2: 2156–2162 MHz or 2686–2690 MHz
BRS Channel 2A: 2156–2160 MHz
EBS Channel A1: 2500–2506 MHz
EBS Channel B1: 2506–2512 MHz
EBS Channel A2: 2512–2518 MHz
EBS Channel B2: 2518–2524 MHz
EBS Channel A3: 2524–2530 MHz
EBS Channel B3: 2530–2536 MHz
EBS Channel A4: 2536–2542 MHz
EBS Channel B4: 2542–2548 MHz
EBS Channel C1: 2548–2554 MHz
EBS Channel D1: 2554–2560 MHz
EBS Channel C2: 2560–2566 MHz
EBS Channel D2: 2566–2572 MHz
EBS Channel C3: 2572–2578 MHz
EBS Channel D3: 2578–2584 MHz
EBS Channel C4: 2584–2590 MHz
EBS Channel D4: 2590–2596 MHz
BRS Channel E1: 2596–2602 MHz
BRS Channel F1: 2602–2608 MHz
BRS Channel E2: 2608–2614 MHz
BRS Channel F2: 2614–2620 MHz
BRS Channel E3: 2620–2626 MHz
BRS Channel F3: 2626–2632 MHz
BRS Channel E4: 2632–2638 MHz
BRS Channel F4: 2638–2644 MHz
EBS Channel G1: 2644–2650 MHz
BRS Channel H1: 2650–2656 MHz
EBS Channel G2: 2656–2662 MHz
BRS Channel H2: 2662–2668 MHz
EBS Channel G3: 2668–2674 MHz
BRS Channel H3: 2674–2680 MHz
EBS Channel G4: 2680–2686 MHz
I Channels: 2686–2690 MHz

(2) *Post transition frequency assignments.* The frequencies available in the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) are listed in this section in accordance with the frequency allocations table of § 2.106 of this chapter.

(i) Lower Band Segment (LBS): The following channels shall constitute the Lower Band Segment:

BRS Channel 1: 2496–2502 MHz or 2150–2156 MHz
EBS Channel A1: 2502–2507.5 MHz
EBS Channel A2: 2507.5–2513 MHz
EBS Channel A3: 2513–2518.5 MHz
EBS Channel B1: 2518.5–2524 MHz
EBS Channel B2: 2524–2529.5 MHz
EBS Channel B3: 2529.5–2535 MHz
EBS Channel C1: 2535–2540.5 MHz
EBS Channel C2: 2540.5–2546 MHz
EBS Channel C3: 2546–2551.5 MHz
EBS Channel D1: 2551.5–2557 MHz
EBS Channel D2: 2557–2562.5 MHz
EBS Channel D3: 2562.5–2568 MHz
EBS Channel JA1: 2568.00000–2568.33333 MHz
EBS Channel JA2: 2568.33333–2568.66666 MHz
EBS Channel JA3: 2568.66666–2569.00000 MHz
EBS Channel JB1: 2569.00000–2569.33333 MHz
EBS Channel JB2: 2569.33333–2569.66666 MHz
EBS Channel JB3: 2569.66666–2570.00000 MHz
EBS Channel JC1: 2570.00000–2570.33333 MHz
EBS Channel JC2: 2570.33333–2570.66666 MHz
EBS Channel JC3: 2570.66666–2571.00000 MHz
EBS Channel JD1: 2571.00000–2571.33333 MHz
EBS Channel JD2: 2571.33333–2571.66666 MHz
EBS Channel JD3: 2571.66666–2572.00000 MHz

(ii) Middle Band Segment (MBS): The following channels shall constitute the Middle Band Segment:

EBS Channel A4: 2572–2578 MHz
EBS Channel B4: 2578–2584 MHz
EBS Channel C4: 2584–2590 MHz
EBS Channel D4: 2590–2596 MHz
EBS Channel G4: 2596–2602 MHz
BRS/EBS Channel F4: 2602–2608 MHz
BRS/EBS Channel E4: 2608–2614 MHz

(iii) Upper Band Segment (UBS): The following channels shall constitute the Upper Band Segment:

BRS Channel KH1: 2614.00000–2614.33333 MHz.
BRS Channel KH2: 2614.33333–2614.66666 MHz.
BRS Channel KH3: 2614.66666–2615.00000 MHz.
EBS Channel KG1: 2615.00000–2615.33333 MHz.
EBS Channel KG2: 2615.33333–2615.66666 MHz.
EBS Channel KG3: 2615.66666–2616.00000 MHz.
BRS Channel KF1: 2616.00000–2616.33333 MHz.
BRS Channel KF2: 2616.33333–2616.66666 MHz.
BRS Channel KF3: 2616.66666–2617.00000 MHz.
BRS Channel KE1: 2617.00000–2617.33333 MHz.
BRS Channel KE2: 2617.33333–2617.66666 MHz.
BRS Channel KE3: 2617.66666–2618.00000 MHz.
BRS Channel 2: 2618–2624 MHz or 2156–2162 MHz.
BRS Channel 2A: 2618–2624 MHz or 2156–2160 MHz.
BRS/EBS Channel E1: 2624–2629.5 MHz.
BRS/EBS Channel E2: 2629.5–2635 MHz.
BRS/EBS Channel E3: 2635–2640.5 MHz.
BRS/EBS Channel F1: 2640.5–2646 MHz.
BRS/EBS Channel F2: 2646–2651.5 MHz.
BRS/EBS Channel F3: 2651.5–2657 MHz.
BRS Channel H1: 2657–2662.5 MHz.
BRS Channel H2: 2662.5–2668 MHz.
BRS Channel H3: 2668–2673.5 MHz.
EBS Channel G1: 2673.5–2679 MHz.
EBS Channel G2: 2679–2684.5 MHz.
EBS Channel G3: 2684.5–2690 MHz.

NOTE TO PARAGRAPH (i)(2): No 125 kHz channels are provided for channels in operation in this service. The 125 kHz channels previously associated with these channels have been reallocated to Channel G3 in the upper band segment.

(3) During the transition (see §§ 27.1230–27.1239) EBS and BRS licensees may exchange channels to effectuate the transition of the 2.5 GHz band in a given BTA.

(4) A temporary fixed broadband station may use any available broadband channel on a secondary basis, except

that operation of temporary fixed broadband stations is not allowed within 56.3 km (35 miles) of Canada.

(5)(i) A point-to-point EBS station on the E and F-channel frequencies, may be involuntarily displaced by a BRS applicant or licensee, provided that suitable alternative spectrum is available and that the BRS entity bears the expenses of the migration. Suitability of spectrum will be determined on a case-by-base basis; at a minimum, the alternative spectrum must be licensable by broadband operators on a primary basis (although it need not be specifically allocated to the broadband service), and must provide a signal that is equivalent to the prior signal in picture quality and reliability, unless the broadband licensee will accept an inferior signal. Potential expansion of the BRS licensee may be considered in determining whether alternative available spectrum is suitable.

(ii) If suitable alternative spectrum is located pursuant to paragraph (h)(6)(i) of this section, the initiating party must prepare and file the appropriate application for the new spectrum, and must simultaneously serve a copy of the application on the EBS licensee to be moved. The initiating party will be responsible for all costs connected with the migration, including purchasing, testing and installing new equipment, labor costs, reconfiguration of existing equipment, administrative costs, legal and engineering expenses necessary to prepare and file the migration application, and other reasonable documented costs. The initiating party must secure a bond or establish an escrow account to cover reasonable incremental increase in ongoing expenses that may fall upon the migrated licensee. The bond or escrow account should also account for the possibility that the initiating party subsequently becomes bankrupt. If it becomes necessary for the Commission to assess the sufficiency of a bond or escrow amount, it will take into account such factors as projected incremental increase in electricity or maintenance expenses, or relocation expenses, as relevant in each case.

(iii) The EBS licensee to be moved will have a 60-day period in which to oppose the involuntary migration. The broadband party should state its opposition to the migration with specificity, including engineering and other challenges, and a comparison of the present site and the proposed new site. If involuntary migration is granted, the new facilities must be operational before the initiating party will be permitted to begin its new or modified operations. The migration must not disrupt the broadband licensee's provision of service, and the broadband licensee has the right to inspect the construction or installation work.

(j) *2000–2020 MHz and 2180–2200 MHz bands.* The following frequencies are available for licensing pursuant to this part in the 2000–2020 MHz and 2180–2200 MHz (AWS–4) bands:

(1) Two paired channel blocks of 10 megahertz each are available for assignment as follows: Block A: 2000–2010 MHz and 2180–2190 MHz; and Block B: 2010–2020 MHz and 2190–2200 MHz.

(2) [Reserved]

(k) *1915–1920 MHz and 1995–2000 MHz bands.* The paired 1915–1920 MHz and 1995–2000 MHz bands are available for assignment on an Economic Area (EA) basis.

(l) *600 MHz band.* In accordance with the terms and conditions established in Docket No. 12–268, pursuant to section 6403 of the Spectrum Act, paired channel blocks of 5 + 5 megahertz are available for assignment on a Partial Economic Area basis. The specific frequencies and number of channel blocks will be determined in light of further proceedings pursuant to Docket No. 12–268 and the rule will be updated accordingly pursuant to a future public notice.

[62 FR 9658, Mar. 3, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 27.5, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov.*

§ 27.6 Service areas.

(a) WCS service areas include Economic Areas (EAs), Major Economic Areas (MEAs), Regional Economic Area Groupings (REAGs), cellular markets comprising Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs), and a nationwide area. MEAs and REAGs are defined in the Table

immediately following paragraph (a)(1) of this section. Both MEAs and REAGs are based on the U.S. Department of Commerce's EAs. *See* 60 FR 13114 (March 10, 1995). In addition, the Commission shall separately license Guam and the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands, American Samoa, and the Gulf of Mexico, which have been assigned Commission-created EA numbers 173–176, respectively. The nationwide area is composed of the contiguous 48 states, Alaska, Hawaii, the Gulf of Mexico, and the U.S. territories. Maps of the EAs, MEAs, MSAs, RSAs, and REAGs and the FEDERAL REGISTER Notice that established the 172 EAs are available for public inspection and copying at the Reference Information Center, Consumer and Governmental Affairs Bureau, Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554.

(1) The 52 MEAs are composed of one or more EAs and the 12 REAGs are composed of one or more MEAs, as defined in the table below:

REAGs	MEAs	EAs
1 (Northeast)	1 (Boston)	1–3.
	2 (New York City)	4–7, 10.
	3 (Buffalo)	8.
	4 (Philadelphia)	11–12.
2 (Southeast)	5 (Washington)	13–14.
	6 (Richmond)	15–17, 20.
	7 (Charlotte-Greensboro-Greenville-Raleigh).	18–19, 21–26, 41–42, 46.
	8 (Atlanta)	27–28, 37–40, 43.
	9 (Jacksonville)	29, 35.
	10 (Tampa-St. Petersburg-Orlando)	30, 33–34.
	11 (Miami)	31–32.
3 (Great Lakes)	12 (Pittsburgh)	9, 52–53.
	13 (Cincinnati-Dayton)	48–50.
	14 (Columbus)	51.
	15 (Cleveland)	54–55.
	16 (Detroit)	56–58, 61–62.
	17 (Milwaukee)	59–60, 63, 104–105, 108.
	18 (Chicago)	64–66, 68, 97, 101.
	19 (Indianapolis)	67.
	20 (Minneapolis-St. Paul)	106–107, 109–114, 116.
	21 (Des Moines-Quad Cities)	100, 102–103, 117.
4 (Mississippi Valley)	22 (Knoxville)	44–45.
	23 (Louisville-Lexington-Evansville)	47, 69–70, 72.
	24 (Birmingham)	36, 74, 78–79.
	25 (Nashville)	71.
	26 (Memphis-Jackson)	73, 75–77.
	27 (New Orleans-Baton Rouge)	80–85.
	28 (Little Rock)	90–92, 95.
	29 (Kansas City)	93, 99, 123.
	30 (St. Louis)	94, 96, 98.
5 (Central)	31 (Houston)	86–87, 131.
	32 (Dallas-Fort Worth)	88–89, 127–130, 135, 137–138.
	33 (Denver)	115, 140–143.
	34 (Omaha)	118–121.
	35 (Wichita)	122.
	36 (Tulsa)	124.
	37 (Oklahoma City)	125–126.
	38 (San Antonio)	132–134.
	39 (El Paso-Albuquerque)	136, 139, 155–157.
	40 (Phoenix)	154, 158–159.
6 (West)	41 (Spokane-Billings)	144–147, 168.
	42 (Salt Lake City)	148–150, 152.
	43 (San Francisco-Oakland-San Jose)	151, 162–165.
	44 (Los Angeles-San Diego)	153, 160–161.
	45 (Portland)	166–167.
	46 (Seattle)	169–170.
7 (Alaska)	47 (Alaska)	171.
8 (Hawaii)	48 (Hawaii)	172.
9 (Guam and the Northern Mariana Islands).	49 (Guam and the Northern Mariana Islands).	173.
10 (Puerto Rico and U.S. Virgin Islands)	50 (Puerto Rico and U.S. Virgin Islands)	174.
11 (American Samoa)	51 (American Samoa)	175.
12 (Gulf of Mexico)	52 (Gulf of Mexico)	176.

(2) The Gulf of Mexico EA extends from 12 nautical miles off the U.S. Gulf coast outward into the Gulf.

(b) *746–758 MHz, 775–788 MHz, and 805–806 MHz bands.* WCS service areas for the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands are as follows.

(1) Service areas for Block A in the 757–758 MHz and 787–788 MHz bands and Block B in the 775–776 MHz and 805–806 MHz bands are based on Major Economic Areas (MEAs), as defined in paragraphs (a)(1) and (a)(2) of this section.

(2) Service areas for Block C in the 746–757 MHz and 776–787 MHz bands are based on Regional Economic Area Groupings (REAGs) as defined by paragraph (a) of this section. In the event that no licenses with respect to service areas for Block C in the 746–757 MHz and 776–787 MHz bands are assigned based on the results of the first auction in which such licenses are offered because the auction results do not satisfy the applicable reserve price, then service areas for the spectrum at 746–757 MHz and 776–787 MHz will instead be available for assignment as follows:

(i) Service areas for Block C1 in the 746–752 MHz and 776–782 MHz bands are based on Economic Areas (EAs) as defined in paragraph (a) of this section.

(ii) Service areas for Block C2 in the 752–757 MHz and 782–787 MHz bands are based on Regional Economic Area Groupings (REAGs) as defined by paragraph (a) of this section.

(c) *698–746 MHz band.* WCS service areas for the 698–746 MHz band are as follows:

(1) Service areas for Block A in the 698–704 MHz and 728–734 MHz bands and Block E in the 722–728 MHz band are based on Economic Areas (EAs) as defined in paragraph (a) of this section.

(2) Service areas for Block B in the 704–710 MHz and 734–740 MHz bands and Block C in the 710–716 MHz and 740–746 MHz bands are based on cellular markets comprising Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs) as defined by Public Notice Report No. CL–92–40 ''Common Carrier Public Mobile Services Information, Cellular MSA/RSA Markets and Counties,'' dated January 24, 1992, DA 92–109, 7 FCC Rcd 742 (1992), with the following modifications:

(i) The service areas of cellular markets that border the U.S. coastline of the Gulf of Mexico extend 12 nautical miles from the U.S. Gulf coastline.

(ii) The service area of cellular market 306 that comprises the water area of the Gulf of Mexico extends from 12 nautical miles off the U.S. Gulf coast outward into the Gulf.

(3) Service areas for Block D in the 716–722 MHz band are based on Economic Area Groupings (EAGs) as defined by the Federal Communications Commission. *See* 62 FR 15978 (April 3, 1997) extended with the Gulf of Mexico. *See also* paragraphs (a)(1) and (a)(2) of this section and 62 FR 9636 (March 3, 1997), in which the Commission created an additional four economic area-like areas for a total of 176. Maps of the EAGs and the FEDERAL REGISTER notice that established the 172 Economic Areas (EAs) are available for public inspection and copying at the Reference Center, Room CY A–257, 445 12th St., SW., Washington, DC 20554. These maps and data are also available on the FCC Web site at *http://www.fcc.gov/oet/info/maps/areas/*.

(i) There are 6 EAGs, which are composed of multiple EAs as defined in the table below:

Economic area groupings	Name	Economic areas
EAG001	Northeast	1–11, 54.
EAG002	Mid-Atlantic	12–26, 41, 42, 44–53, 70.
EAG003	Southeast	27–40, 43, 69, 71–86, 88–90, 95, 96, 174, 176 (part).
EAG004	Great Lakes	55–68, 97, 100–109.
EAG005	Central/Mountain	87, 91–94, 98, 99, 110–146, 148, 149, 152, 154–159, 176 (part).
EAG006	Pacific	147, 150, 151, 153, 160–173, 175.

NOTE 1 TO PARAGRAPH (c)(3)(i): Economic Area Groupings are defined by the Federal Communications Commission; *see* 62 FR 15978 (April 3, 1997) extended with the Gulf of Mexico.

NOTE 2 TO PARAGRAPH (c)(3)(i): Economic Areas are defined by the Regional Economic Analysis Division, Bureau of Economic Analysis, U.S. Department of Commerce February 1995 and extended by the Federal Communications Commission, *see* 62 FR 9636 (March 3, 1997).

(ii) For purposes of paragraph (c)(3)(i) of this section, EA 176 (the Gulf of Mexico) will be divided between EAG003 (the Southeast EAG) and EAG005 (the Central/Mountain EAG) in accordance with the configuration of the Eastern/Central and Western Planning Area established by the Mineral Management Services Bureau of the Department of the Interior (MMS). That portion of EA 176 contained in the Eastern and Central Planning Areas as defined by MMS will be included in EAG003; that portion of EA 176 contained in the Western Planning Area as defined by MMS will be included in EAG005. Maps of these areas may be found on the MMS Web site: *http://www.gomr.mms.gov/homepg/offshore/offshore.html*.

(d) *1390–1392 MHz band.* Service areas for the 1390–1392 MHz band is based on Major Economic Areas (MEAs), as defined in paragraphs (a)(1) and (a)(2) of this section.

(e) *The paired 1392–1395 and 1432–1435 MHz bands.* Service areas for the paired 1392–1395 and 1432–1435 MHz bands are as follows. Service areas for Block A in the 1392–1393.5 MHz and 1432–1433.5 MHz bands and Block B in the 1393.5–1395 MHz and 1433.5–1435 MHz bands are based on Economic Area Groupings (EAGs) as defined in paragraph (c)(3) of this section.

(f) *1670–1675 MHz band.* Service areas for the 1670–1675 MHz band are available on a nationwide basis.

(g) [Reserved]

(h) 1710–1755 and 2110–2155 MHz bands. AWS service areas for the 1710–1755 MHz and 2110–2155 MHz bands are as follows:

(1) Service areas for Block A (1710–1720 MHz and 2110–2120 MHz) are based on cellular markets comprising Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs) as defined by Public Notice Report No. CL–92–40 ''Common Carrier Public Mobile Services Information, Cellular MSA/RSA Markets and Counties,'' dated January 24, 1992, DA 92–109, 7 FCC Rcd 742 (1992), with the following modifications:

(i) The service areas of cellular markets that border the U.S. coastline of the Gulf of Mexico extend 12 nautical miles from the U.S. Gulf coastline.

(ii) The service area of cellular market 306 that comprises the water area of the Gulf of Mexico extends from 12 nautical miles off the U.S. Gulf coast outward into the Gulf.

(2) Service areas for Blocks B (1720–1730 MHz and 2120–2130 MHz) and C (1730–1735 MHz and 2130–2135 MHz) are based on Economic Areas (EAs) as defined in paragraph (a) of this section.

(3) Service areas for blocks D (1735–1740 MHz and 2135–2140 MHz), E (1740–1745 MHz and 2140–2145 MHz) and F (1745–1755 MHz and 2145–2155 MHz) are based on Regional Economic Area Groupings (REAGs) as defined by paragraph (a) of this section.

(i) *2000–2020 MHz and 2180–2200 MHz bands.* AWS service areas for the 2000–2020 MHz and 2180–2200 MHz bands are based on Economic Areas (EAs) as defined in paragraph (a) of this section.

(j) *1915–1920 MHz and 1995–2000 MHz bands.* AWS service areas for the 1915–1920 MHz and 1995–2000 MHz bands are based on Economic Areas (EAs) as defined in paragraph (a) of this section.

(k) *1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands.* AWS service areas for the 1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands are as follows:

(1) Service areas for Block G (1755–1760 MHz and 2155–2160 MHz) are based on cellular markets comprising Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs) as defined by Public Notice Report No. CL–92–40 ''Common Carrier Public Mobile Services Information, Cellular MSA/RSA Markets and Counties,'' dated January 24, 1992, DA 92–109, 7 FCC Rcd 742 (1992), with the following modifications:

(i) The service areas of cellular markets that border the U.S. coastline of the Gulf of Mexico extend 12 nautical miles from the U.S. Gulf coastline.

(ii) The service area of cellular market 306 that comprises the water area of the Gulf of Mexico extends from 12 nautical miles off the U.S. Gulf coast outward into the Gulf.

(2) Service areas for Blocks H (1760–1765 MHz and 2160–2165 MHz), I (1765–1770 MHz and 2165–2170 MHz), J (1770–1780 MHz and 2170–2180 MHz), A1 (1695–

1700 MHz) and B1 (1700–1710 MHz) are based on Economic Areas (EAs) as defined in paragraph (a) of this section.

(l) *600 MHz band.* Service areas for the 600 MHz band are based on Partial Economic Areas (PEAs), as defined by Public Notice: ''Wireless Telecommunications Bureau Provides Details About Partial Economic Areas,'' DA 14–759, dated June 2, 2014. The service areas of PEAs that border the U.S. coastline of the Gulf of Mexico extend 12 nautical miles from the U.S. Gulf coastline. The service area of the Gulf of Mexico PEA that comprises the water area of the Gulf of Mexico extends from 12 nautical miles off the U.S. Gulf coast outward into the Gulf. Maps of the PEAs and the FEDERAL REGISTER notice that established the 416 PEAs are available for public inspection and copying at the Reference Center, Room CY A–257, 445 12th St. SW., Washington, DC 20554. These maps and data are also available on the FCC Web site at: *http://www.fcc.gov/oet/info/maps/areas/.* The specific title, reference number, and date of the public notice will be determined in light of further proceedings pursuant to Docket No. 12–268 and the rule will be updated accordingly.

[62 FR 9658, Mar. 3, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 27.6, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

§ 27.9 Operation of certificated signal boosters.

Individuals and non-individuals may operate certificated Consumer Signal Boosters on frequencies regulated under this part provided that such operation complies with all applicable rules under this part and § 20.21 of this chapter. Failure to comply with all applicable rules voids the authority to operate a signal booster.

[78 FR 21564, Apr. 11, 2013]

Subpart B—Applications and Licenses

§ 27.10 Regulatory status.

The following rules apply concerning the regulatory status in the frequency bands specified in § 27.5.

(a) *Single authorization.* Authorization will be granted to provide any or a combination of the following services in a single license: common carrier, non-common carrier, private internal communications, and broadcast services. A licensee may render any kind of communications service consistent with the regulatory status in its license and with the Commission's rules applicable to that service. An applicant or licensee may submit a petition at any time requesting clarification of the regulatory status for which authorization is required to provide a specific communications service.

(b) *Designation of regulatory status in initial application.* An applicant shall specify in its initial application if it is requesting authorization to provide common carrier, non-common carrier, private internal communications, or broadcast services, or a combination thereof.

(c) *Amendment of pending applications.* The following rules apply to amendments of a pending application.

(1) Any pending application may be amended to:

(i) Change the carrier regulatory status requested, or

(ii) Add to the pending request in order to obtain common carrier, non-common carrier, private internal communications, or broadcast services status, or a combination thereof, in a single license.

(2) Amendments to change, or add to, the carrier regulatory status in a pending application are minor amendments filed under § 1.927 of this chapter.

(d) *Modification of license.* The following rules apply to amendments of a license.

(1) A licensee may modify a license to:

(i) Change the regulatory status authorized, or

(ii) Add to the status authorized in order to obtain a combination of services of different regulatory status in a single license.

(2) Applications to change, or add to, the carrier status in a license are modifications not requiring prior Commission authorization. The licensee must notify the Commission within 30 days of the change. If the change results in

the discontinuance, reduction, or impairment of an existing service, the licensee is subject to the provisions of § 27.66.

[65 FR 3146, Jan. 20, 2000, as amended at 65 FR 17602, Apr. 4, 2000; 67 FR 5510, Feb. 6, 2002; 67 FR 41854, June 20, 2002; 68 FR 66286, Nov. 25, 2003; 72 FR 27709, May 16, 2007]

§ 27.11 Initial authorization.

(a) An applicant must file a single application for an initial authorization for all markets won and frequency blocks desired. Initial authorizations shall be granted in accordance with § 27.5. Applications for individual sites are not required and will not be accepted, except where required for environmental assessments, in accordance with §§ 1.1301 through 1.1319 of this chapter.

(b) *2305–2320 MHz and 2345–2360 MHz bands.* Initial authorizations for the 2305–2320 MHz and 2345–2360 MHz bands shall be for 10 megahertz of spectrum in accordance with § 27.5(a).

(1) Authorizations for Blocks A and B will be based on Major Economic Areas (MEAs), as specified in § 27.6(a)(1).

(2) Authorizations for Blocks C and D will be based on Regional Economic Area Groupings (REAGs), as specified in § 27.6(a)(2).

(c) *746–758 MHz, 775–788 MHz, and 805–806 MHz bands.* Initial authorizations for the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands shall be for paired channels of 1, 5, 6, or 11 megahertz of spectrum in accordance with § 27.5(b).

(1) Authorizations for Block A, consisting of two paired channels of 1 megahertz each, will be based on those geographic areas specified in § 27.6(b)(1).

(2) Authorizations for Block B, consisting of two paired channels of 1 megahertz each, will be based on those geographic areas specified in § 27.6(b)(1).

(3) Authorizations for Block C, consisting of two paired channels of 11 megahertz each, will be based on those geographic areas specified in § 27.6(b)(2). In the event that no licenses granting authorizations for Block C, consisting of two paired channels of 11 megahertz each, are assigned based on the results of the first auction in which such licenses are offered because the auction results do not satisfy the applicable reserve price, then the authorizations for the spectrum in the 746–757 MHz and 776–787 MHz bands will instead be as follows:

(i) Authorizations for Block C1, consisting of two paired channels of 6 megahertz each in the 746–752 MHz and 776–782 MHz bands, will be based on those geographic areas specified in § 27.6(b)(2)(i).

(ii) Authorizations for Block C2, consisting of two paired channels of 5 megahertz each in the 752–757 MHz and 782–787 MHz bands, will be based on those geographic areas specified in § 27.6(b)(2)(ii).

(d) *698–746 MHz band.* Initial authorizations for the 698–746 MHz band shall be for 6 or 12 megahertz of spectrum in accordance with § 27.5(c).

(1) Authorizations for Block A, consisting of two paired channels of 6 megahertz each, will be based on those geographic areas specified in § 27.6(c)(1).

(2) Authorizations for Block B, consisting of two paired channels of 6 megahertz each, will be based on those geographic areas specified in § 27.6(c)(2).

(3) Authorizations for Block C, consisting of two paired channels of 6 megahertz each, will be based on those geographic areas specified in § 27.6(c)(2).

(4) Authorizations for Block D, consisting of an unpaired channel block of 6 megahertz, will be based on those geographic areas specified in § 27.6(c)(3).

(5) Authorizations for Block E, consisting of an unpaired channel block of 6 megahertz, will be based on those geographic areas specified in § 27.6(c)(1).

(e) *1390–1392 MHz band.* Initial authorizations for the 1390–1392 MHz band shall be for 2 megahertz of spectrum in accordance with § 27.5(d). Authorizations will be based on Major Economic Areas (MEAs), as specified in § 27.6(d).

(f) *The paired 1392–1395 MHz and 1432–1435 MHz bands.* Initial authorizations for the paired 1392–1395 MHz and 1432–1435 MHz bands shall be for 3 megahertz of paired spectrum in accordance with § 27.5(e). Authorization for Blocks A and B will be based on Economic Areas Groupings (EAGs), as specified in § 27.6(e).

(g) *1670–1675 MHz band.* Initial authorizations for the 1670–1675 MHz band shall be for 5 megahertz of spectrum in

accordance with §27.5(f). Authorizations will be on a nationwide basis.

(h) [Reserved]

(i) *1710–1755 MHz and 2110–2155 MHz bands.* Initial authorizations for the 1710–1755 MHz and 2110–2155 MHz bands shall be for 5 or 10 megahertz of spectrum in each band in accordance with §27.5(h) of this part.

(1) Authorizations for Block A, consisting of two paired channels of 10 megahertz each, will be based on those geographic areas specified in §27.6(h)(1).

(2) Authorizations for Block B, consisting of two paired channels of 10 megahertz each, will be based on those geographic areas specified in §27.6(h)(2).

(3) Authorizations for Block C, consisting of two paired channels of 5 megahertz each, will be based on those geographic areas specified in §27.6(h)(2).

(4) Authorizations for Blocks D, consisting of two paired channels of 5 megahertz each, will be based on those geographic areas specified in §27.6(h)(3).

(5) Authorizations for Blocks E, consisting of two paired channels of 5 megahertz each, will be based on those geographic areas specified in §27.6(h)(3).

(6) Authorizations for Block F, consisting of two paired channels of 10 megahertz each, will be based on those geographic areas specified in §27.6(h)(3).

(j) *1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz bands.* (1) Initial authorizations for the 1695–1710 MHz band shall be based on the frequency blocks specified in §27.5(h)(3) and the corresponding service area specified in §27.6(k)(2).

(2) Initial authorizations for the 1755–1780 MHz and 2155–2180 MHz shall be based on the paired frequency blocks specified in §27.5(h)(1) and (2) and the corresponding service areas specified in §27.6(k)(1) and (2).

(k) *600 MHz band.* Initial authorizations for the 600 MHz band will be based on Partial Economic Areas (PEAs), as specified in §27.6(1), and, shall be paired channels that each consist of a 5 megahertz channel block in the 600 MHz downlink band, paired with a 5 megahertz channel block in the 600 MHz uplink band. The specific frequencies and number of channel blocks will be determined in light of further proceedings pursuant to Docket No. 12–268 and the rule will be updated accordingly pursuant to a future public notice.

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 68954, Dec. 14, 1998; 65 FR 3146, Jan. 20, 2000; 67 FR 5511, Feb. 6, 2002; 67 FR 41854, June 20, 2002; 69 FR 5715, Feb. 6, 2004; 69 FR 39867, July 1, 2004; 69 FR 77950, Dec. 29, 2004; 70 FR 58065, Oct. 5, 2005; 72 FR 48845, Aug. 24, 2007; 79 FR 597, Jan. 6, 2014; 79 FR 32410, June 4, 2014; 79 FR 48536, Aug. 15, 2014]

§27.12 Eligibility.

(a) Except as provided in paragraph (b) and in §§27.604, 27.1201, and 27.1202, any entity other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, is eligible to hold a license under this part.

(b) A person described in 47 U.S.C. 1404(c) is ineligible to hold a license that is required by 47 U.S.C. Chapter 13 (Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. 112–96, 125 Stat. 156 (2012)) to be assigned by a system of competitive bidding under §309(j) of the Communications Act, 47 U.S.C. 309(j).

[78 FR 50254, Aug. 16, 2013]

§27.13 License period.

(a) *2305–2320 MHz and 2345–2360 MHz bands.* Initial WCS authorizations for the 2305–2320 MHz and 2345–2360 MHz bands will have a term not to exceed ten years from the date of original issuance or renewal.

(b) *698–763 MHz, 776–793, 775–776, and 805–806 MHz bands.* Initial authorizations for the 698–758 MHz and 776–788 MHz bands will extend for a term not to exceed ten years from June 13, 2009, except that initial authorizations for a part 27 licensee that provides broadcast services, whether exclusively or in combination with other services, will not exceed eight years. Initial authorizations for the 775–776 MHz and 805–806 MHz bands shall not exceed April 27, 2015. Licensees that initiate the provision of a broadcast service, whether exclusively or in combination with other services, may not provide this service

for more than eight years or beyond the end of the license term if no broadcast service had been provided, whichever period is shorter in length.

(c) *1390–1392 MHz band.* Initial authorizations for the 1390–1392 MHz band will have a term not to exceed ten years from the date of initial issuance or renewal.

(d) *The paired 1392–1395 and 1432–1435 MHz bands.* Initial WCS authorizations for the paired 1392–1395 MHz and 1432–1435 MHz bands will have a term not to exceed ten years from the date of initial issuance or renewal.

(e) *1670–1675 MHz band.* Initial authorizations for the 1670–1675 MHz band will have a term not to exceed ten years from the date of initial issuance or renewal.

(f) [Reserved]

(g) *1710–1755 MHz and 2110–2155 MHz bands.* Authorizations for the 1710–1755 MHz and 2110–2155 MHz bands will have a term not to exceed ten years from the date of initial issuance or renewal, except that authorizations issued on or before December 31, 2009, shall have a term of fifteen years.

(h) *BRS and EBS.* BRS and EBS authorizations shall have a term not to exceed ten years from the date of original issuance or renewal. Unless otherwise specified by the Commission, incumbent BRS authorizations shall expire on May 1 in the year of expiration.

(i) *2000–2020 MHz and 2180–2200 MHz bands.* Authorizations for the 2000–2020 MHz and 2180–2200 MHz bands will have a term not to exceed ten years from the date of issuance or renewal.

(j) *1915–1920 MHz and 1995–2000 MHz bands.* Authorizations for 1915–1920 MHz and 1995–2000 MHz bands will have a term not to exceed ten years from the date of issuance or renewal.

(k) *1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands.* Authorizations for the 1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands will have a term not to exceed twelve (12) years from the date of issuance and ten (10) years from the date of any subsequent license renewal.

(l) *600 MHz band.* Authorizations for the 600 MHz band will have an initial term not to exceed twelve years from the date of issuance and ten years from the date of any subsequent license renewal.

[65 FR 3146, Jan. 20, 2000]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 27.13, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

§ 27.14 Construction requirements; Criteria for renewal.

(a) AWS and WCS licensees, with the exception of WCS licensees holding authorizations for the 600 MHz band, Block A in the 698–704 MHz and 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block E in the 722–728 MHz band, Block C, C1 or C2 in the 746–757 MHz and 776–787 MHz bands, Block A in the 2305–2310 MHz and 2350–2355 MHz bands, Block B in the 2310–2315 MHz and 2355–2360 MHz bands, Block C in the 2315–2320 MHz band, and Block D in the 2345–2350 MHz band, and with the exception of licensees holding AWS authorizations in the 1915–1920 MHz and 1995–2000 MHz bands, the 2000–2020 MHz and 2180–2200 MHz bands, or 1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz bands, must, as a performance requirement, make a showing of ''substantial service'' in their license area within the prescribed license term set forth in § 27.13. ''Substantial service'' is defined as service which is sound, favorable and substantially above a level of mediocre service which just might minimally warrant renewal. Failure by any licensee to meet this requirement will result in forfeiture of the license and the licensee will be ineligible to regain it.

(b) A renewal applicant involved in a comparative renewal proceeding shall receive a preference, commonly referred to as a renewal expectancy, which is the most important comparative factor to be considered in the proceeding, if its past record for the relevant license period demonstrates that:

(1) The renewal applicant has provided ''substantial'' service during its past license term; and

(2) The renewal applicant has substantially complied with applicable FCC rules, policies and the Communications Act of 1934, as amended.

(c) In order to establish its right to a renewal expectancy, a WCS renewal applicant involved in a comparative renewal proceeding must submit a showing explaining why it should receive a renewal expectancy. At a minimum, this showing must include:

(1) A description of its current service in terms of geographic coverage and population served;

(2) An explanation of its record of expansion, including a timetable of new construction to meet changes in demand for service;

(3) A description of its investments in its WCS system; and

(4) Copies of all FCC orders finding the licensee to have violated the Communications Act or any FCC rule or policy; and a list of any pending proceedings that relate to any matter described in this paragraph.

(d) In making its showing of entitlement to a renewal expectancy, a renewal applicant may claim credit for any system modification applications that were pending on the date it filed its renewal application. Such credit will not be allowed if the modification application is dismissed or denied.

(e) Comparative renewal proceedings do not apply to WCS licensees holding authorizations for Block A in the 698–704 MHz and 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block C in the 710–716 MHz and 740–746 MHz bands, Block D in the 716–722 MHz band, Block E in the 722–728 MHz band, or Block C, C1 or C2 in the 746–757 MHz and 776–787 MHz bands. Each of these licensees must file a renewal application in accordance with the provisions set forth in §1.949, and must make a showing of substantial service, independent of its performance requirements, as a condition for renewal at the end of each license term.

(f) Comparative renewal proceedings do not apply to WCS licensees holding authorizations for the 600 MHz band, 698–746 MHz, 747–762 MHz, and 777–792 MHz bands or licensees holding AWS authorizations for the 1915–1920 MHz and 1995–2000 MHz bands or the 2000–2020 MHz and 2180–2200 MHz bands, or the 1695–1710 MHz, or the 1755–1780 MHz and 2155–2180 MHz bands. These licensees must file a renewal application in accordance with the provisions set forth in §1.949 of this chapter.

(g) WCS licensees holding EA authorizations for Block A in the 698–704 MHz and 728–734 MHz bands, cellular market authorizations for Block B in the 704–710 MHz and 734–740 MHz bands, or EA authorizations for Block E in the 722–728 MHz band, if the results of the first auction in which licenses for such authorizations are offered satisfy the reserve price for the applicable block, shall provide signal coverage and offer service over at least 35 percent of the geographic area of each of their license authorizations no later than June 13, 2013 (or within four years of initial license grant if the initial authorization in a market is granted after June 13, 2009), and shall provide such service over at least 70 percent of the geographic area of each of these authorizations by the end of the license term. In applying these geographic benchmarks, licensees are not required to include land owned or administered by government as a part of the relevant service area. Licensees may count covered government land for purposes of meeting their geographic construction benchmark, but are required to add the covered government land to the total geographic area used for measurement purposes. Licensees are required to include those populated lands held by tribal governments and those held by the Federal Government in trust or for the benefit of a recognized tribe.

(1) If an EA or CMA licensee holding an authorization in these particular blocks fails to provide signal coverage and offer service over at least 35 percent of the geographic area of its license authorization by no later than June 13, 2013 (or within four years of initial license grant, if the initial authorization in a market is granted after June 13, 2009), the term of that license authorization will be reduced by two years and such licensee may be subject to enforcement action, including forfeitures. In addition, an EA or CMA licensee that provides signal coverage and offers service at a level that is below this interim benchmark may lose authority to operate in part of the remaining unserved areas of the license.

(2) If any such EA or CMA licensee fails to provide signal coverage and offer service to at least 70 percent of the geographic area of its license authorization by the end of the license term, that licensee's authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission. Such licensee may also be subject to enforcement action, including forfeitures. In addition, an EA or CMA licensee that provides signal coverage and offers service at a level that is below this end-of-term benchmark may be subject to license termination. In the event that a licensee's authority to operate in a license area terminates automatically without Commission action, such areas will become available for reassignment pursuant to the procedures in paragraph (j) of this section.

(3) For licenses under paragraph (g) of this section, the geographic service area to be made available for reassignment must include a contiguous area of at least 130 square kilometers (50 square miles), and areas smaller than a contiguous area of at least 130 square kilometers (50 square miles) will not be deemed unserved.

(h) WCS licensees holding REAG authorizations for Block C in the 746–757 MHz and 776–787 MHz bands or REAG authorizations for Block C2 in the 752–757 MHz and 782–787 MHz bands shall provide signal coverage and offer service over at least 40 percent of the population in each EA comprising the REAG license area no later than June 13, 2013 (or within four years of initial license grant, if the initial authorization in a market is granted after June 13, 2009), and shall provide such service over at least 75 percent of the population of each of these EAs by the end of the license term. For purposes of compliance with this requirement, licensees should determine population based on the most recently available U.S. Census Data.

(1) If a licensee holding a Block C authorization fails to provide signal coverage and offer service over at least 40 percent of the population in each EA comprising the REAG license area by no later than June 13, 2013 (or within four years of initial license grant if the initial authorization in a market is granted after June 13, 2009), the term of the license authorization will be reduced by two years and such licensee may be subject to enforcement action, including forfeitures. In addition, a licensee that provides signal coverage and offers service at a level that is below this interim benchmark may lose authority to operate in part of the remaining unserved areas of the license.

(2) If a licensee holding a Block C authorization fails to provide signal coverage and offer service over at least 75 percent of the population in any EA comprising the REAG license area by the end of the license term, for each such EA that licensee's authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service. Such licensee may also be subject to enforcement action, including forfeitures. In the event that a licensee's authority to operate in a license area terminates automatically without Commission action, such areas will become available for reassignment pursuant to the procedures in paragraph (j) of this section. In addition, a REAG licensee that provides signal coverage and offers service at a level that is below this end-of-term benchmark within any EA may be subject to license termination within that EA.

(3) For licenses under paragraph (h), the geographic service area to be made available for reassignment must include a contiguous area of at least 130 square kilometers (50 square miles), and areas smaller than a contiguous area of at least 130 square kilometers (50 square miles) will not be deemed unserved.

(i) WCS licensees holding EA authorizations for Block A in the 698–704 MHz and 728–734 MHz bands, cellular market authorizations for Block B in the 704–710 MHz and 734–740 MHz bands, or EA authorizations for Block E in the 722–728 MHz band, if the results of the first auction in which licenses for such authorizations in Blocks A, B, and E are offered do not satisfy the reserve price for the applicable block, as well as EA

authorizations for Block C1 in the 746–752 MHz and 776–782 MHz bands, are subject to the following:

(1) If a licensee holding a cellular market area or EA authorization subject to this paragraph (i) fails to provide signal coverage and offer service over at least 40 percent of the population in its license area by no later than June 13, 2013 (or within four years of initial license grant, if the initial authorization in a market is granted after June 13, 2009), the term of that license authorization will be reduced by two years and such licensee may be subject to enforcement action, including forfeitures. In addition, such licensee that provides signal coverage and offers service at a level that is below this interim benchmark may lose authority to operate in part of the remaining unserved areas of the license. For purposes of compliance with this requirement, licensees should determine population based on the most recently available U.S. Census Data.

(2) If a licensee holding a cellular market area or EA authorization subject to this paragraph (i) fails to provide signal coverage and offer service over at least 75 percent of the population in its license area by the end of the license term, that licensee's authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission. Such licensee may also be subject to enforcement action, including forfeitures. In the event that a licensee's authority to operate in a license area terminates automatically without Commission action, such areas will become available for reassignment pursuant to the procedures in paragraph (j) of this section. In addition, such a licensee that provides signal coverage and offers service at a level that is below this end-of-term benchmark may be subject to license termination. For purposes of compliance with this requirement, licensees should determine population based on the most recently available U.S. Census Data.

(3) For licenses under paragraph (i), the geographic service area to be made available for reassignment must include a contiguous area of at least 130 square kilometers (50 square miles), and areas smaller than a contiguous area of at least 130 square kilometers (50 square miles) will not be deemed unserved.

(j) In the event that a licensee's authority to operate in a license area terminates automatically under paragraphs (g), (h), or (i) of this section, such areas will become available for reassignment pursuant to the following procedures:

(1) The Wireless Telecommunications Bureau is delegated authority to announce by public notice that these license areas will be made available and establish a 30-day window during which third parties may file license applications to serve these areas. During this 30-day period, licensees that had their authority to operate terminate automatically for unserved areas may not file applications to provide service to these areas. Applications filed by third parties that propose areas overlapping with other applications will be deemed mutually exclusive, and will be resolved through an auction. The Wireless Telecommunications Bureau, by public notice, may specify a limited period before the filing of short-form applications (FCC Form 175) during which applicants may enter into a settlement to resolve their mutual exclusivity, subject to the provisions of §1.935 of this chapter.

(2) Following this 30-day period, the original licensee and third parties can file license applications for remaining unserved areas where licenses have not been issued or for which there are no pending applications. If the original licensee or a third party files an application, that application will be placed on public notice for 30 days. If no mutually exclusive application is filed, the application will be granted, provided that a grant is found to be in the public interest. If a mutually exclusive application is filed, it will be resolved through an auction. The Wireless Telecommunications Bureau, by public notice, may specify a limited period before the filing of short-form applications (FCC Form 175) during which applicants may enter into a settlement to

resolve their mutual exclusivity, subject to the provisions of §1.935 of this chapter.

(3) The licensee will have one year from the date the new license is issued to complete its construction and provide signal coverage and offer service over 100 percent of the geographic area of the new license area. If the licensee fails to meet this construction requirement, its license will automatically terminate without Commission action and it will not be eligible to apply to provide service to this area at any future date.

(k) Licensees holding WCS or AWS authorizations in the spectrum blocks enumerated in paragraphs (g), (h), (i), (q), (r), (s), and (t) of this section, including any licensee that obtained its license pursuant to the procedures set forth in paragraph (j) of this section, shall demonstrate compliance with performance requirements by filing a construction notification with the Commission, within 15 days of the expiration of the applicable benchmark, in accordance with the provisions set forth in §1.946(d) of this chapter. The licensee must certify whether it has met the applicable performance requirements. The licensee must file a description and certification of the areas for which it is providing service. The construction notifications must include electronic coverage maps, supporting technical documentation and any other information as the Wireless Telecommunications Bureau may prescribe by public notice.

(l) WCS licensees holding authorizations in the spectrum blocks enumerated in paragraphs (g), (h), or (i) of this section, excluding any licensee that obtained its license pursuant to the procedures set forth in subsection (j) of this section, shall file reports with the Commission that provide the Commission, at a minimum, with information concerning the status of their efforts to meet the performance requirements applicable to their authorizations in such spectrum blocks and the manner in which that spectrum is being utilized. The information to be reported will include the date the license term commenced, a description of the steps the licensee has taken toward meeting its construction obligations in a timely manner, including the technology or technologies and service(s) being provided, and the areas within the license area in which those services are available. Each of these licensees shall file its first report with the Commission no later than June 13, 2011 and no sooner than 30 days prior to this date. Each licensee that meets its interim benchmarks shall file a second report with the Commission no later than June 13, 2016 and no sooner than 30 days prior to this date. Each licensee that does not meet its interim benchmark shall file this second report no later than on June 13, 2015 and no sooner than 30 days prior to this date.

(m)–(n) [Reserved]

(o) BRS and EBS licensees originally issued a BRS or EBS license prior to November 6, 2009 must make a showing of substantial service no later than May 1, 2011. With respect to initial BRS licenses issued on or after November 6, 2009, the licensee must make a showing of substantial service within four years from the date of issue of the license. Incumbent BRS licensees that are required to demonstrate substantial service by May 1, 2011 must file their substantial service showings with their renewal applications. ''Substantial service'' is defined as service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal. Substantial service for BRS and EBS licensees is satisfied if a licensee meets the requirements of paragraph (o)(1), (o)(2), or (o)(3) of this section. If a licensee has not met the requirements of paragraph (o)(1), (o)(2), or (o)(3) of this section, then demonstration of substantial service shall proceed on a case-by-case basis. Except as provided in paragraphs (o)(4) and (o)(5) of this section, all substantial service determinations will be made on a license-by-license basis. Failure by any licensee to demonstrate substantial service will result in forfeiture of the license and the licensee will be ineligible to regain it.

(1) A BRS or EBS licensee has provided ''substantial service'' by:

(i) Constructing six permanent links per one million people for licensees providing fixed point-to-point services;

(ii) Providing coverage of at least 30 percent of the population of the licensed area for licensees providing mobile services or fixed point-to-multipoint services;

(iii) Providing service to ''rural areas'' (a county (or equivalent) with a population density of 100 persons per square mile or less, based upon the most recently available Census data) and areas with limited access to telecommunications services:

(A) For mobile service, where coverage is provided to at least 75% of the geographic area of at least 30% of the rural areas within its service area; or

(B) for fixed service, where the BRS or EBS licensee has constructed at least one end of a permanent link in at least 30% of the rural areas within its licensed area.

(iv) Providing specialized or technologically sophisticated service that does not require a high level of coverage to benefit consumers; or

(v) Providing service to niche markets or areas outside the areas served by other licensees.

(2) An EBS licensee has provided ''substantial service'' when:

(i) The EBS licensee is using its spectrum (or spectrum to which the EBS licensee's educational services are shifted) to provide educational services within the EBS licensee's GSA;

(ii) the EBS licensee's license is actually being used to serve the educational mission of one or more accredited public or private schools, colleges or universities providing formal educational and cultural development to enrolled students; or

(iii) the level of service provided by the EBS licensee meets or exceeds the minimum usage requirements specified in § 27.1214.

(3) An EBS or BRS licensee may be deemed to provide substantial service through a leasing arrangement if the lessee is providing substantial service under paragraph (o)(1) of this section. The EBS licensee must also be otherwise in compliance with this Chapter (including the programming requirements in § 27.1203 of this subpart).

(4) If the GSA of a licensee is less than 1924 square miles in size, and there is an overlapping co-channel station licensed or leased by the licensee or its affiliate, substantial service may be demonstrated by meeting the requirements of paragraph (o)(1) or (o)(2) of this section with respect to the combined GSAs of both stations.

(5) If the GSA of a BTA authorization holder, is less than one-half of the area within the BTA for every BRS channel, substantial service may be demonstrated for the licenses in question by meeting the requirements of paragraph (o)(1) or (o)(2) of this section with respect to the combined GSAs of the BTA authorization holder, together with any incumbent authorizations licensed or leased by the licensee or its affiliates.

(p) This section enumerates performance requirements for licensees holding authorizations for Block A in the 2305–2310 MHz and 2350–2355 MHz bands, Block B in the 2310–2315 MHz and 2355–2360 MHz bands, Block C in the 2315–2320 MHz band, and Block D in the 2345–2350 MHz band.

(1) For mobile and point-to-multipoint systems in Blocks A and B, and point-to-multipoint systems in Blocks C and D, a licensee must provide reliable signal coverage and offer service to at least 40 percent of the license area's population by March 13, 2017, and to at least 75 percent of the license area's population by September 13, 2019. If, when filing the construction notification required under § 1.946(d) of this chapter, a WCS licensee demonstrates that 25 percent or more of the license area's population for Block A, B or D is within a coordination zone as defined by § 27.73(a) of the rules, the foregoing population benchmarks are reduced to 25 and 50 percent, respectively. The percentage of a license area's population within a coordination zone equals the sum of the Census Block Centroid Populations within the area, divided by the license area's total population.

(2) For point-to-point fixed systems, except those deployed in the Gulf of Mexico license area, a licensee must construct and operate a minimum of 15 point-to-point links per million persons (one link per 67,000 persons) in a license area by March 13, 2017, and 30 point-to-point links per million persons (one link per 33,500 persons) in a licensed area by September 13, 2019.

The exact link requirement is calculated by dividing a license area's total population by 67,000 and 33,500 for the respective milestones, and then rounding upwards to the next whole number. For a link to be counted towards these benchmarks, both of its endpoints must be located in the license area. If only one endpoint of a link is located in a license area, it can be counted as a one- half link towards the benchmarks.

(3) For point-to-point fixed systems deployed on any spectrum block in the Gulf of Mexico license area, a licensee must construct and operate a minimum of 15 point-to-point links by March 13, 2017, and a minimum of 15 point-to-point links by September 13, 2019.

(4) Under paragraph (p)(2) and (p)(3) of this section, each fixed link must provide a minimum bit rate, in bits per second, equal to or greater than the bandwidth specified by the emission designator in Hertz (*e.g.*, equipment transmitting at a 5 Mb/s rate must not require a bandwidth of greater than 5 MHz).

(5) If an initial authorization for a license area is granted after March 13, 2013, then the applicable benchmarks in paragraphs (p)(1), (2) and (3) of this section must be met within 48 and 78 months, respectively, of the initial authorization grant date.

(6) Licensees must use the most recently available U.S. Census Data at the time of measurement to meet these performance requirements.

(7) Licensees must certify compliance with the applicable performance requirements by filing a construction notification with the Commission, within 15 days of the expiration of the relevant performance milestone, pursuant to §1.946(d) of this chapter. Each construction notification must include electronic coverage maps, supporting technical documentation, and any other information as the Wireless Telecommunications Bureau may prescribe by public notice. Electronic coverage maps must accurately depict the boundaries of each license area (Regional Economic Area Grouping, REAG, or Major Economic Area, MEA) in the licensee's service territory. Further, REAG maps must depict MEA boundaries and MEA maps must depict Economic Area boundaries. If a licensee does not provide reliable signal coverage to an entire license area, its map must accurately depict the boundaries of the area or areas within each license area not being served. Each licensee also must file supporting documentation certifying the type of service it is providing for each REAG or MEA within its service territory and the type of technology used to provide such service. Supporting documentation must include the assumptions used to create the coverage maps, including the propagation model and the signal strength necessary to provide reliable service with the licensee's technology.

(8) If a licensee fails to meet any applicable performance requirement, its authorization will terminate automatically without further Commission action as of the applicable performance milestone and the licensee will be ineligible to regain it.

(q) The following provisions apply to any licensee holding an AWS authorization in the 2000–2020 MHz and 2180–2200 MHz bands (an ''AWS–4 licensee''):

(1) An AWS–4 licensee shall provide terrestrial signal coverage and offer terrestrial service within four (4) years from the date of the license to at least forty (40) percent of the total population in the aggregate service areas that it has licensed in the 2000–2020 MHz and 2180–2200 MHz bands (''AWS–4 Interim Buildout Requirement''). For purposes of this subpart, a licensee's total population shall be calculated by summing the population of each license area that a licensee holds in the 2000–2020 MHz and 2180–2200 MHz bands; and

(2) An AWS–4 licensee shall provide terrestrial signal coverage and offer terrestrial service within seven (7) years from the date of the license to at least seventy (70) percent of the population in each of its license areas in the 2000–2020 MHz and 2180–2200 MHz bands (''AWS–4 Final Buildout Requirement'').

(3) If any AWS–4 licensee fails to establish that it meets the AWS–4 Interim Buildout Requirement, the AWS–4 Final Buildout requirement shall be

accelerated by one year from (seven to six years).

(4) If any AWS–4 licensee fails to establish that it meets the AWS–4 Final Buildout Requirement in any of its license areas in the 2000–2020 MHz and 2180–2200 MHz bands, its authorization for each license area in which it fails to meet the requirement shall terminate automatically without Commission action. To the extent that the AWS–4 licensee also holds the 2 GHz MSS rights for the affected license area, failure to meet the AWS–4 Final Buildout Requirement in an EA shall also result in the MSS protection rule in §27.1136 no longer applying in that license area.

(5) To demonstrate compliance with these performance requirements, licensees shall use the most recently available U.S. Census Data at the time of measurement and shall base their measurements of population served on areas no larger than the Census Tract level. The population within a specific Census Tract (or other acceptable identifier) will only be deemed served by the licensee if it provides signal coverage to and offers service within the specific Census Tract (or other acceptable identifier). To the extent the Census Tract (or other acceptable identifier) extends beyond the boundaries of a license area, a licensee with authorizations for such areas may only include the population within the Census Tract (or other acceptable identifier) towards meeting the performance requirement of a single, individual license.

(6) Failure by any AWS–4 licensee to meet the AWS–4 Final Buildout Requirement in paragraph (q)(4) of this section will result in forfeiture of the license and the licensee will be ineligible to regain it.

(7) *Renewal showing.* An applicant for renewal of a geographic-area authorization in the 2000–2020 MHz and 2180–2200 MHz service bands must make a renewal showing, independent of its performance requirements, as a condition of renewal. The showing must include a detailed description of the applicant's provision of service during the entire license period and address:

(i) The level and quality of service provided by the applicant (including the population served, the area served, the number of subscribers, the services offered);

(ii) The date service commenced, whether service was ever interrupted, and the duration of any interruption or outage;

(iii) The extent to which service is provided to rural areas;

(iv) The extent to which service is provided to qualifying tribal land as defined in §1.2110(f)(3)(i) of this chapter; and

(v) Any other factors associated with the level of service to the public.

(r) The following provisions apply to any licensee holding an AWS authorization in the 1915–1920 MHz and 1995–2000 MHz bands:

(1) A licensee shall provide signal coverage and offer service within four (4) years from the date of the initial license to at least forty (40) percent of the population in each of its licensed areas (''Interim Buildout Requirement'').

(2) A licensee shall provide signal coverage and offer service within ten (10) years from the date of the initial license to at least seventy-five (75) percent of the population in each of its licensed areas (''Final Buildout Requirement'').

(3) If a licensee fails to establish that it meets the Interim Buildout Requirement for a particular licensed area, then the Final Buildout Requirement (in this paragraph (r)) and the license term (as set forth in §27.13(j)) for each license area in which it fails to meet the Interim Buildout Requirement shall be accelerated by two years (from ten to eight years).

(4) If a licensee fails to establish that it meets the Final Buildout Requirement for a particular licensed area, its authorization for each license area in which it fails to meet the Final Buildout Requirement shall terminate automatically without Commission action and the licensee will be ineligible to regain it if the Commission makes the license available at a later date.

(5) To demonstrate compliance with these performance requirements, licensees shall use the most recently available U.S. Census Data at the time of measurement and shall base their measurements of population served on areas no larger than the Census Tract

level. The population within a specific Census Tract (or other acceptable identifier) will only be deemed served by the licensee if it provides signal coverage to and offers service within the specific Census Tract (or other acceptable identifier). To the extent the Census Tract (or other acceptable identifier) extends beyond the boundaries of a license area, a licensee with authorizations for such areas may only include the population within the Census Tract (or other acceptable identifier) towards meeting the performance requirement of a single, individual license.

(6) An applicant for renewal of a license covered by this paragraph (r) must make a renewal showing, independent of its performance requirements, as a condition of renewal. The showing must include a detailed description of the applicant's provision of service during the entire license period and address:

(i) The level and quality of service provided by the applicant (including the population served, the area served, the number of subscribers, the services offered);

(ii) The date service commenced, whether service was ever interrupted, and the duration of any interruption or outage;

(iii) The extent to which service is provided to rural areas;

(iv) The extent to which service is provided to qualifying tribal land as defined in §1.2110(f)(3)(i) of this chapter; and

(v) Any other factors associated with the level of service to the public.

(s) The following provisions apply to any licensee holding an AWS authorization in the 1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands:

(1) A licensee shall provide reliable signal coverage and offer service within six (6) years from the date of the initial license to at least forty (40) percent of the population in each of its licensed areas (''Interim Buildout Requirement'').

(2) A licensee shall provide reliable signal coverage and offer service within twelve (12) years from the date of the initial license to at least seventy-five (75) percent of the population in each of its licensed areas (''Final Buildout Requirement'').

(3) If a licensee fails to establish that it meets the Interim Buildout Requirement for a particular licensed area, then the Final Buildout Requirement (in this paragraph (s)) and the AWS license term (as set forth in §27.13(k)) for each license area in which it fails to meet the Interim Buildout Requirement shall be accelerated by two (2) years (from twelve (12) to ten (10) years).

(4) If a licensee fails to establish that it meets the Final Buildout Requirement for a particular licensed area, its authorization for each license area in which it fails to meet the Final Buildout Requirement shall terminate automatically without Commission action and the licensee will be ineligible to regain it if the Commission makes the license available at a later date.

(5) To demonstrate compliance with these performance requirements, licensees shall use the most recently available U.S. Census Data at the time of measurement and shall base their measurements of population served on areas no larger than the Census Tract level. The population within a specific Census Tract (or other acceptable identifier) will be deemed served by the licensee only if it provides signal coverage to and offers service within the specific Census Tract (or other acceptable identifier). To the extent the Census Tract (or other acceptable identifier) extends beyond the boundaries of a license area, a licensee with authorizations for such areas may include only the population within the Census Tract (or other acceptable identifier) towards meeting the performance requirement of a single, individual license. For the Gulf of Mexico license area, the licensee shall demonstrate compliance with these performance requirements, using off-shore platforms, including production, manifold, compression, pumping and valving platforms as a proxy for population in the Gulf of Mexico.

(6) An applicant for renewal of a license covered by paragraph (s) of this section must make a renewal showing, independent of its performance requirements, as a condition of each renewal. The showing must include a detailed

description of the applicant's provision of service during the entire license period and address:

(i) The level and quality of service provided by the applicant (including the population served, the area served, the number of subscribers, the services offered);

(ii) The date service commenced, whether service was ever interrupted, and the duration of any interruption or outage;

(iii) The extent to which service is provided to rural areas;

(iv) The extent to which service is provided to qualifying tribal land as defined in §1.2110(f)(3)(i) of this chapter; and

(v) Any other factors associated with the level of service to the public.

(t) The following provisions apply to any licensee holding an authorization in the 600 MHz band:

(1) A licensee shall provide reliable signal coverage and offer service within six (6) years from the date of the initial license to at least forty (40) percent of the population in each of its license areas (''Interim Buildout Requirement'').

(2) A licensee shall provide reliable signal coverage and offer service within twelve (12) years from the date of the initial license to at least seventy-five (75) percent of the population in each of its license areas (''Final Buildout Requirement'').

(3) If a licensee fails to establish that it meets the Interim Buildout Requirement for a particular licensed area, then the Final Buildout Requirement (in this paragraph (t)) and the license term (as set forth in §27.13(l)) for each license area in which it fails to meet the Interim Buildout Requirement shall be accelerated by two (2) years (from twelve (12) to ten (10) years).

(4) If a licensee fails to establish that it meets the Final Buildout Requirement for a particular license area, its authorization for each license area in which it fails to meet the Final Buildout Requirement shall terminate automatically without Commission action, and the licensee will be ineligible to regain it if the Commission makes the license available at a later date.

(5) To demonstrate compliance with these performance requirements, licensees shall use the most recently available decennial U.S. Census Data at the time of measurement and shall base their measurements of population served on areas no larger than the Census Tract level. The population within a specific Census Tract (or other acceptable identifier) will be deemed served by the licensee only if it provides reliable signal coverage to and offers service within the specific Census Tract (or other acceptable identifier). To the extent the Census Tract (or other acceptable identifier) extends beyond the boundaries of a license area, a licensee with authorizations for such areas may include only the population within the Census Tract (or other acceptable identifier) towards meeting the performance requirement of a single, individual license. For the Gulf of Mexico license area, the licensee shall demonstrate compliance with these performance requirements, using offshore platforms, including production, manifold, compression, pumping and valving platforms as a proxy for population in the Gulf of Mexico.

(6) An applicant for renewal of a license covered by this paragraph (t) must make a renewal showing, independent of its performance requirements, as a condition of each renewal. The showing must include a detailed description of the applicant's provision of service during the entire license period and address:

(i) The level and quality of service provided by the applicant (including the population served, the area served, the number of subscribers, the services offered);

(ii) The date service commenced, whether service was ever interrupted, and the duration of any interruption or outage;

(iii) The extent to which service is provided to rural areas;

(iv) The extent to which service is provided to qualifying tribal land as defined in §1.2110(f)(3)(i) of this chapter; and

(v) Any other factors associated with the level of service to the public.

[62 FR 9658, Mar. 3, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §27.14, see the List of CFR Sections Affected, which appears in the

Finding Aids section of the printed volume and at www.fdsys.gov.

§ 27.15 Geographic partitioning and spectrum disaggregation.

(a) *Eligibility.* (1) Parties seeking approval for partitioning and disaggregation shall request from the Commission an authorization for partial assignment of a license pursuant to § 1.948.

(2) AWS and WCS licensees may apply to partition their licensed geographic service area or disaggregate their licensed spectrum at any time following the grant of their licenses.

(b) *Technical Standards*—(1) *Partitioning.* In the case of partitioning, applicants and licensees must file FCC Form 603 pursuant to section 1.948 and list the partitioned service area on a schedule to the application. The geographic coordinates must be specified in degrees, minutes, and seconds to the nearest second of latitude and longitude and must be based upon the 1983 North American Datum (NAD83).

(2) *Disaggregation.* Spectrum may be disaggregated in any amount.

(3) *Combined partitioning and disaggregation.* The Commission will consider requests for partial assignment of licenses that propose combinations of partitioning and disaggregation.

(4) *Signal levels.* For purposes of partitioning and disaggregation, part 27 systems must be designed so as not to exceed the signal level specified for the particular spectrum block in § 27.55 at the licensee's service area boundary, unless the affected adjacent service area licensees have agreed to a different signal level.

(c) *License term.* The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in § 27.13.

(d) *Compliance with construction requirements*—(1) *Partitioning.* (i) Except for WCS licensees holding authorizations for the 600 MHz band, Block A in the 698–704 MHz and 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block E in the 722–728 MHz band, or Blocks C, C1, and C2 in the 746–757 MHz and 776–787 MHz bands; and for licensees holding AWS authorizations in the 1915–1920 MHz and 1995–2000 MHz bands, the 2000–2020 MHz and 2180–2200 MHz bands; or the 1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz bands the following rules apply to WCS and AWS licensees holding authorizations for purposes of implementing the construction requirements set forth in § 27.14. Parties to partitioning agreements have two options for satisfying the construction requirements set forth in § 27.14. Under the first option, the partitioner and partitionee each certifies that it will independently satisfy the substantial service requirement for its respective partitioned area. If a licensee subsequently fails to meet its substantial service requirement, its license will be subject to automatic cancellation without further Commission action. Under the second option, the partitioner certifies that it has met or will meet the substantial service requirement for the entire, pre-partitioned geographic service area. If the partitioner subsequently fails to meet its substantial service requirement, only its license will be subject to automatic cancellation without further Commission action.

(ii) For WCS licensees holding authorizations for Block A in the 698–704 MHz and 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block E in the 722–728 MHz band, or Blocks C, C1, and C2 in the 746–757 MHz and 776–787 MHz bands, the following rules apply for purposes of implementing the construction requirements set forth in § 27.14. Parties to partitioning agreements have two options for satisfying the construction requirements set forth in § 27.14. Under the first option, the partitioner and partitionee each certifies that they will collectively share responsibility for meeting the construction requirement for the entire pre-partition geographic license area. If the partitioner and partitionee collectively fail to meet the construction requirement, then both the partitioner and partitionee will be subject to the consequences enumerated in § 27.14(g) and (h) for this failure. Under the second option, the partitioner and partitionee

each certifies that it will independently meet the construction requirement for its respective partitioned license area. If the partitioner or partitionee fails to meet the construction requirement for its respective partitioned license area, then the consequences for this failure shall be those enumerated in § 27.14(g) and (h).

(iii) For licensees holding authorizations for the 600 MHz band, AWS authorizations in the 1915–1920 MHz and 1995–2000 MHz bands, or the 2000–2020 MHz and 2180–2200 MHz bands, or the 1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz bands, the following rules apply for purposes of implementing the construction requirements set forth in § 27.14. Each party to a geographic partitioning must individually meet any service-specific performance requirements (i.e., construction and operation requirements). If a partitioner or partitionee fails to meet any service-specific performance requirements on or before the required date, then the consequences for this failure shall be those enumerated in § 27.14(q) for 2000–2020 MHz and 2180–2200 MHz licenses, those enumerated in § 27.14(r) for 1915–1920 MHz and 1995–2000 MHz licenses, and those enumerated in § 27.14(s) for 1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz licenses, and those enumerated in § 27.14(t) for 600 MHz band licenses.

(2) *Disaggregation.* (i) Except for WCS licensees holding authorizations for the 600 MHz band, Block A in the 698–704 MHz and 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block E in the 722–728 MHz band, or Blocks C, C1, or C2 in the 746–757 MHz and 776–787 MHz bands; and for licensees holding AWS authorizations in the 1915–1920 MHz and 1995–2000 MHz bands, the 2000–2020 MHz and 2180–2200 MHz bands or the 1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz bands; the following rules apply to WCS and AWS licensees holding authorizations for purposes of implementing the construction requirements set forth in § 27.14. Parties to disaggregation agreements have two options for satisfying the construction requirements set forth in § 27.14. Under the first option, the disaggregator and disaggregatee each certifies that it will share responsibility for meeting the substantial service requirement for the geographic service area. If the parties choose this option and either party subsequently fails to satisfy its substantial service responsibility, both parties' licenses will be subject to forfeiture without further Commission action. Under the second option, both parties certify either that the disaggregator or the disaggregatee will meet the substantial service requirement for the geographic service area. If the parties choose this option, and the party responsible subsequently fails to meet the substantial service requirement, only that party's license will be subject to forfeiture without further Commission action.

(ii) For WCS licensees holding authorizations for Block A in the 698–704 MHz and 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block E in the 722–728 MHz band, and Blocks C, C1, or C2 in the 746–757 MHz and 776–787 MHz bands, the following rules apply for purposes of implementing the construction requirements set forth in § 27.14. If either the disaggregator or the disaggregatee meets the construction requirements set forth in § 27.14, then these requirements will be considered to be satisfied for both parties. If neither the disaggregator nor the disaggregatee meets the construction requirements, then both parties will be subject to the consequences enumerated in § 27.14(g) and (h) for this failure.

(iii) For licensees holding authorizations for the 600 MHz band, AWS authorizations in the 1915–1920 MHz and 1995–2000 MHz bands, or the 2000–2020 MHz and 2180–2200 MHz bands, or the 1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz bands, the following rules apply for purposes of implementing the construction requirements set forth in § 27.14. Each party to a spectrum disaggregation must individually meet any service-specific performance requirements (i.e., construction and operation requirements). If a disaggregator or a disaggregatee fails to meet any service-specific performance requirements on or before the required date, then the consequences for this failure shall be those enumerated in § 27.14(q) for 2000–2020 MHz and 2180–2200 MHz licenses, those enumerated in § 27.14(r)

for 1915–1920 MHz and 1995–2000 MHz licenses, those enumerated in §27.14(s) for 1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz licenses, and those enumerated in §27.14(t) for 600 MHz band licenses.

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 68954, Dec. 14, 1998; 65 FR 3146, Jan. 20, 2000; 65 FR 57268, Sept. 21, 2000; 67 FR 45373, July 9, 2002; 69 FR 5715, Feb. 6, 2004; 72 FR 48848, Aug. 24, 2007; 78 FR 8268, Feb. 5, 2013; 78 FR 50255, Aug. 16, 2013; 79 FR 596, Jan. 6, 2014; 79 FR 32412, June 4, 2014; 79 FR 48537, Aug. 15, 2014]

§27.16 Network access requirements for Block C in the 746–757 and 776–787 MHz bands.

(a) *Applicability.* This section shall apply only to the authorizations for Block C in the 746–757 and 776–787 MHz bands assigned and only if the results of the first auction in which licenses for such authorizations are offered satisfied the applicable reserve price.

(b) *Use of devices and applications.* Licensees offering service on spectrum subject to this section shall not deny, limit, or restrict the ability of their customers to use the devices and applications of their choice on the licensee's C Block network, except:

(1) Insofar as such use would not be compliant with published technical standards reasonably necessary for the management or protection of the licensee's network, or

(2) As required to comply with statute or applicable government regulation.

(c) *Technical standards.* For purposes of paragraph (b)(1) of this section:

(1) Standards shall include technical requirements reasonably necessary for third parties to access a licensee's network via devices or applications without causing objectionable interference to other spectrum users or jeopardizing network security. The potential for excessive bandwidth demand alone shall not constitute grounds for denying, limiting or restricting access to the network.

(2) To the extent a licensee relies on standards established by an independent standards-setting body which is open to participation by representatives of service providers, equipment manufacturers, application developers, consumer organizations, and other interested parties, the standards will carry a presumption of reasonableness.

(3) A licensee shall publish its technical standards, which shall be non-proprietary, no later than the time at which it makes such standards available to any preferred vendors, so that the standards are readily available to customers, equipment manufacturers, application developers, and other parties interested in using or developing products for use on a licensee's networks.

(d) *Access requests.* (1) Licensees shall establish and publish clear and reasonable procedures for parties to seek approval to use devices or applications on the licensees' networks. A licensee must also provide to potential customers notice of the customers' rights to request the attachment of a device or application to the licensee's network, and notice of the licensee's process for customers to make such requests, including the relevant network criteria.

(2) If a licensee determines that a request for access would violate its technical standards or regulatory requirements, the licensee shall expeditiously provide a written response to the requester specifying the basis for denying access and providing an opportunity for the requester to modify its request to satisfy the licensee's concerns.

(e) *Handset locking prohibited.* No licensee may disable features on handsets it provides to customers, to the extent such features are compliant with the licensee's standards pursuant to paragraph (b)of this section, nor configure handsets it provides to prohibit use of such handsets on other providers' networks.

(f) *Burden of proof.* Once a complainant sets forth a prima facie case that the C Block licensee has refused to attach a device or application in violation of the requirements adopted in this section, the licensee shall have the burden of proof to demonstrate that it has adopted reasonable network standards and reasonably applied those standards in the complainant's case. Where the licensee bases its network restrictions on industry-wide consensus standards, such restrictions would be presumed reasonable.

[72 FR 48849, Aug. 24, 2007]

§ 27.17 Discontinuance of service in the 600 MHz band and the 1695–1710 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2155–2180 MHz, and 2180–2200 MHz bands.

(a) *Termination of authorization.* A 600 MHz band authorization and an AWS authorization in the 1695–1710 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2155–2180 MHz, and 2180–2200 MHz bands will automatically terminate, without specific Commission action, if the licensee permanently discontinues service either during the initial license term or during any subsequent license term, as follows:

(1) After the interim buildout deadline as specified in § 27.14(r), (s), or (t) as applicable (where the licensee meets the Interim Buildout Requirement), or after the accelerated Final Buildout Requirement (where the licensee failed to meet the Interim Buildout Requirement).

(2) After the AWS–4 final buildout deadline as specified in § 27.14(q)(1) (where the licensee meets the AWS–4 interim buildout requirement), or after the accelerated final buildout deadline specified in § 27.14(q)(3) (where the licensee failed to meet its AWS–4 interim buildout requirement).

(b) For licensees with common carrier or non-common carrier regulatory status that hold 600 MHz band authorizations or AWS authorizations in the 1695–1710 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2155–2180 MHz, and 2180–2200 MHz bands, permanent discontinuance of service is defined as 180 consecutive days during which a licensee does not provide service to at least one subscriber that is not affiliated with, controlled by, or related to the licensee in the individual license area. For licensees with private, internal communications regulatory status that hold 600 MHz band authorizations or AWS authorizations in the 1695–1710 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2155–2180 MHz, and 2180–2200 MHz bands, permanent discontinuance of service is defined as 180 consecutive days during which a licensee does not operate.

(c) *Filing requirements.* A licensee that holds a 600 MHz band authorization or an AWS authorization in the 1695–1710 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2155–2180 MHz, and 2180–2200 MHz bands, that permanently discontinues service as defined in this section must notify the Commission of the discontinuance within 10 days by filing FCC Form 601 or 605 requesting license cancellation. An authorization will automatically terminate, without specific Commission action, if service is permanently discontinued as defined in this section, even if a licensee fails to file the required form requesting license cancellation.

[79 FR 32412, June 4, 2014, as amended at 79 FR 48538, Aug. 15, 2014]

§ 27.19 Requirements for operation of base and fixed stations in the 600 MHz downlink band in close proximity to Radio Astronomy Observatories.

(a) Licensees must make reasonable efforts to protect the radio astronomy observatory at Green Bank, WV, Arecibo, PR, and those identified in § 15.712(h)(3) of this chapter as part of the Very Long Baseline Array (VLBA) from interference.

(b) 600 MHz band base and fixed stations in the 600 MHz downlink band within 25 kilometers of VLBA observatories are subject to coordination with the National Science Foundation (NSF) prior to commencing operations. The appropriate NSF contact point to initiate coordination is Electromagnetic Spectrum Manager, NSF, 4201 Wilson Blvd., Suite 1045, Arlington, VA 22203, fax 703–292–9034, email *esm@nsf.gov*.

(c) Any licensee that intends to operate base and fixed stations in the 600 MHz downlink band in locations near the Radio Astronomy Observatory site located in Green Bank, Pocahontas County, West Virginia, or near the Arecibo Observatory in Puerto Rico, must comply with the provisions in § 1.924 of this chapter.

[79 FR 48538, Aug. 15, 2014]

§ 27.20 Digital television transition education reports.

(a) The requirements of this section shall apply only with regard to WCS license authorizations in Block A in the 698–704 MHz and 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block E in the 722–728 MHz band, and Block C, C1 or C2 in the 746–757 MHz and 776–787 MHz bands.

(b) By the tenth day of the first calendar quarter after the initial grant of a WCS license authorization subject to the requirements of this section—and on a quarterly basis thereafter as specified in paragraph (c) of this section—the licensee holding such authorization must file a report with the Commission indicating whether, in the previous quarter, it has taken any outreach efforts to educate consumers about the transition from analog broadcast television service to digital broadcast television service (DTV) and, if so, what specific efforts were undertaken. Thus, for example, if the license authorization is granted during the April-June quarter of 2008, the licensee must file its first report by July 10, 2008. Each quarterly report, either paper or electronic, must be filed with the Commission in Docket Number 07–148. If the quarterly report is a paper filing, the cover sheet must clearly state ''Report,'' whereas if the report is filed electronically using the Commission's Electronic Comment File System (ECFS), the ''Document Type'' on the cover sheet should indicate ''REPORT.''

(c) The reporting requirements under this section cover the remaining period of the DTV transition. Accordingly, once the licensee files its quarterly report covering the second quarter of 2009, the requirements of this section terminate.

[73 FR 15448, Mar. 24, 2008, as amended at 74 FR 8878, Feb. 27, 2009; 79 FR 597, Jan. 6, 2014]

Subpart C—Technical Standards

§ 27.50 Power limits and duty cycle.

(a) The following power limits and related requirements apply to stations transmitting in the 2305–2320 MHz band or the 2345–2360 MHz band.

(1) *Base and fixed stations.* (i) For base and fixed stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz band:

(A) The average equivalent isotropically radiated power (EIRP) must not exceed 2,000 watts within any 5 megahertz of authorized bandwidth and must not exceed 400 watts within any 1 megahertz of authorized bandwidth.

(B) The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

(ii) For base and fixed stations transmitting in the 2315–2320 MHz band or the 2345–2350 MHz band, the peak EIRP must not exceed 2,000 watts.

(2) *Fixed customer premises equipment stations.* For fixed customer premises equipment (CPE) stations transmitting in the 2305–2320 MHz band or in the 2345–2360 MHz band, the peak EIRP must not exceed 20 watts within any 5 megahertz of authorized bandwidth. Fixed CPE stations transmitting in the 2305–2320 MHz band or in the 2345–2360 MHz band must employ automatic transmit power control when operating so the stations operate with the minimum power necessary for successful communications. The use of outdoor antennas for CPE stations or outdoor CPE station installations operating with 2 watts per 5 megahertz or less average EIRP using the stepped emissions mask prescribed in § 27.53(a)(3) is prohibited except if professionally installed in locations removed by 20 meters from roadways or in locations where it can be shown that the ground power level of -44 dBm in the A or B blocks or -55 dBm in the C or D blocks will not be exceeded at the nearest road location. The use of outdoor antennas for fixed CPE stations operating with 2 watts per 5 megahertz or less average EIRP and the emissions mask

prescribed in § 27.53(a)(1)(i) through (iii) is permitted in all locations. For fixed WCS CPE using TDD technology, the duty cycle must not exceed 38 percent;

(3) *Mobile and portable stations.* (i) For mobile and portable stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, *except that* for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305–2315 MHz and 2350–2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305–2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

(ii) Mobile and portable stations are not permitted to transmit in the 2315–2320 MHz and 2345–2350 MHz bands.

(iii) *Automatic transmit power control.* Mobile and portable stations transmitting in the 2305–2315 MHz band or in the 2350–2360 MHz band must employ automatic transmit power control when operating so the stations operate with the minimum power necessary for successful communications.

(iv) *Prohibition on external vehicle-mounted antennas.* The use of external vehicle-mounted antennas for mobile and portable stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz band is prohibited.

(b) The following power and antenna height limits apply to transmitters operating in the 746–758 MHz, 775–788 MHz and 805–806 MHz bands:

(1) Fixed and base stations transmitting a signal in the 757–758 and 775–776 MHz bands must not exceed an effective radiated power (ERP) of 1000 watts and an antenna height of 305 m height above average terrain (HAAT), except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts ERP in accordance with Table 1 of this section.

(2) Fixed and base stations transmitting a signal in the 746–757 MHz and 776–787 MHz bands with an emission bandwidth of 1 MHz or less must not exceed an ERP of 1000 watts and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts ERP in accordance with Table 1 of this section.

(3) Fixed and base stations located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, and transmitting a signal in the 746–757 MHz and 776–787 MHz bands with an emission bandwidth of 1 MHz or less must not exceed an ERP of 2000 watts and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 2000 watts ERP in accordance with Table 2 of this section.

(4) Fixed and base stations transmitting a signal in the 746–757 MHz and 776–787 MHz bands with an emission bandwidth greater than 1 MHz must not exceed an ERP of 1000 watts/MHz and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts/MHz ERP in accordance with Table 3 of this section.

(5) Fixed and base stations located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, and transmitting a signal in the 746–757 MHz and 776–787 MHz bands with an emission bandwidth greater than 1 MHz must not exceed an ERP of 2000 watts/MHz and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 2000 watts/MHz ERP in accordance with Table 4 of this section.

(6) Licensees of fixed or base stations transmitting a signal in the 746–757 MHz and 776–787 MHz bands at an ERP greater than 1000 watts must comply

with the provisions set forth in paragraph (b)(8) of this section and § 27.55(c).

(7) Licensees seeking to operate a fixed or base station located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, and transmitting a signal in the 746–757 MHz and 776–787 MHz bands at an ERP greater than 1000 watts must:

(i) Coordinate in advance with all licensees authorized to operate in the 698–758 MHz, 775–788, and 805–806 MHz bands within 120 kilometers (75 miles) of the base or fixed station;

(ii) coordinate in advance with all regional planning committees, as identified in § 90.527 of this chapter, with jurisdiction within 120 kilometers (75 miles) of the base or fixed station.

(8) Licensees authorized to transmit in the 746–757 MHz and 776–787 MHz bands and intending to operate a base or fixed station at a power level permitted under the provisions of paragraph (b)(6) of this section must provide advanced notice of such operation to the Commission and to licensees authorized in their area of operation. Licensees who must be notified are all licensees authorized to operate in the 758–775 MHz and 788–805 MHz bands under part 90 of this chapter within 75 km of the base or fixed station and all regional planning committees, as identified in § 90.527 of this chapter, with jurisdiction within 75 km of the base or fixed station. Notifications must provide the location and operating parameters of the base or fixed station, including the station's ERP, antenna coordinates, antenna height above ground, and vertical antenna pattern, and such notifications must be provided at least 90 days prior to the commencement of station operation.

(9) Control stations and mobile stations transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands and fixed stations transmitting in the 787–788 MHz and 805–806 MHz bands are limited to 30 watts ERP.

(10) Portable stations (hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

(11) For transmissions in the 757–758, 775–776, 787–788, and 805–806 MHz bands, maximum composite transmit power shall be measured over any interval of continuous transmission using instrumentation calibrated in terms of RMS-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, etc., so as to obtain a true maximum composite measurement for the emission in question over the full bandwidth of the channel.

(12) For transmissions in the 746–757 and 776–787 MHz bands, licensees may employ equipment operating in compliance with either the measurement techniques described in paragraph (b)(11) of this section or a Commission-approved average power technique. In both instances, equipment employed must be authorized in accordance with the provisions of § 27.51.

(c) The following power and antenna height requirements apply to stations transmitting in the 600 MHz band and the 698–746 MHz band:

(1) Fixed and base stations transmitting a signal with an emission bandwidth of 1 MHz or less must not exceed an effective radiated power (ERP) of 1000 watts and an antenna height of 305 m height above average terrain (HAAT), except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts ERP in accordance with Table 1 of this section;

(2) Fixed and base stations located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, and transmitting a signal with an emission bandwidth of 1 MHz or less must not exceed an ERP of 2000 watts and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 2000 watts ERP in accordance with Table 2 of this section;

(3) Fixed and base stations transmitting a signal with an emission bandwidth greater than 1 MHz must not exceed an ERP of 1000 watts/MHz and an

antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts/MHz ERP in accordance with Table 3 of this section;

(4) Fixed and base stations located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, and transmitting a signal with an emission bandwidth greater than 1 MHz must not exceed an ERP of 2000 watts/MHz and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 2000 watts/MHz ERP in accordance with Table 4 of this section;

(5) Licensees, except for licensees operating in the 600 MHz downlink band, seeking to operate a fixed or base station located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, and transmitting a signal at an ERP greater than 1000 watts must:

(i) Coordinate in advance with all licensees authorized to operate in the 698–758 MHz, 775–788, and 805–806 MHz bands within 120 kilometers (75 miles) of the base or fixed station;

(ii) coordinate in advance with all regional planning committees, as identified in § 90.527 of this chapter, with jurisdiction within 120 kilometers (75 miles) of the base or fixed station.

(6) Licensees of fixed or base stations transmitting a signal at an ERP greater than 1000 watts and greater than 1000 watts/MHz must comply with the provisions of paragraph (c)(8) of this section and § 27.55(b), except that licensees of fixed or base stations located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, must comply with the provisions of paragraph (c)(8) of this section and § 27.55(b) only if transmitting a signal at an ERP greater than 2000 watts and greater than 2000 watts/MHz;

(7) A licensee authorized to operate in the 710–716 or 740–746 MHz bands may operate a fixed or base station at an ERP up to a total of 50 kW within its authorized, 6 megahertz spectrum block if the licensee complies with the provisions of § 27.55(b). The antenna height for such stations is limited only to the extent required to satisfy the requirements of § 27.55(b).

(8) Licensees intending to operate a base or fixed station at a power level permitted under the provisions of paragraph (c)(6) of this section must provide advanced notice of such operation to the Commission and to licensees authorized in their area of operation. Licensees who must be notified are all licensees authorized under this part to operate on an adjacent spectrum block within 75 km of the base or fixed station. Notifications must provide the location and operating parameters of the base or fixed station, including the station's ERP, antenna coordinates, antenna height above ground, and vertical antenna pattern, and such notifications must be provided at least 90 days prior to the commencement of station operation.

(9) Control and mobile stations in the 698–746 MHz band are limited to 30 watts ERP.

(10) Portable stations (hand-held devices) in the 600 MHz uplink band and the 698–746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

(11) Licensees may employ equipment operating in compliance with either the measurement techniques described in paragraph (b)(11) of this section or a Commission-approved average power technique. In both instances, equipment employed must be authorized in accordance with the provisions of § 27.51.

(12) A licensee authorized to operate in the 716–722 or 722–728 MHz bands may operate a fixed or base station at an ERP up to a total of 50 kW within its authorized, 6 megahertz spectrum block if the licensee complies with the provisions of § 27.55(b), obtains written concurrences from all affected licensees in the 698–746 MHz bands within 120 km of the proposed high power site, and files a copy of each written concurrences with the Wireless Telecommunications Bureau on FCC Form 601. The

antenna height for such stations is limited only to the extent required to satisfy the requirements of § 27.55(b).

(13) Licensees authorized to operate in the 716–722 or 722–728 MHz bands must coordinate with licensees with uplink operations in the 698–716 MHz band to mitigate the potential for harmful interference. Licensees authorized to operate in the 716–722 or 722–728 MHz bands must mitigate harmful interference to licensees' uplink operations in the 698–716 MHz band within 30 days after receiving written notice from the affected licensees. A licensee authorized to operate in the 716–722 or 722–728 MHz bands must ensure that 716–728 MHz band transmissions are filtered at least to the extent that the 716–728 MHz band transmissions are filtered in markets where the 716–728 MHz band licensee holds any license in the 698–716 band, as applicable. For purposes of coordination and mitigations measures in paragraphs (i) and (iii) below, network will be deemed ''deployed'' as of the date upon which the network is able to support a commercial mobile or data service. The coordination and mitigation measures should include, but are not limited to, the following:

(i) If a licensee operating in the 698–716 and 728–746 MHz band deploys a network after the 716–722 or 722–728 MHz bands licensee deploys a network on its 716–722 or 722–728 MHz spectrum in the same geographic market, the 716–722 or 722–728 MHz bands licensee will work with the licensee with uplink operations in the 698–716 MHz band to identify sites that will require additional filtering, and will help the licensee operating in the 698–716 and 728–746 MHz bands to identify proper filters;

(ii) The 716–722 or 722–728 MHz bands licensee must permit licensees operating in the 698–716 and 728–746 MHz bands to collocate on the towers it owns at prevailing market rates; and

(iii) If a 698–716 and 728–746 MHz bands licensee deploys a network before a licensee in the 716–722 or 722–728 MHz bands deploys a network in the same geographic market, the 716–722 or 722–728 MHz bands licensee will work with licensees in the 698–716 and 728–746 MHz bands to identify sites that will need additional filtering and will purchase and pay for installation of required filters on such sites.

(d) The following power and antenna height requirements apply to stations transmitting in the 1695–1710 MHz, 1710–1755 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2110–2155 MHz, 2155–2180 MHz and 2180–2200 MHz bands:

(1) The power of each fixed or base station transmitting in the 1995–2000 MHz, 2110–2155 MHz, 2155–2180 MHz or 2180–2200 MHz band and located in any county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, is limited to:

(i) An equivalent isotropically radiated power (EIRP) of 3280 watts when transmitting with an emission bandwidth of 1 MHz or less;

(ii) An EIRP of 3280 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

(2) The power of each fixed or base station transmitting in the 1995–2000 MHz, the 2110–2155 MHz 2155–2180 MHz band, or 2180–2200 MHz band and situated in any geographic location other than that described in paragraph (d)(1) of this section is limited to:

(i) An equivalent isotropically radiated power (EIRP) of 1640 watts when transmitting with an emission bandwidth of 1 MHz or less;

(ii) An EIRP of 1640 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

(3) A licensee operating a base or fixed station in the 2110–2155 MHz band utilizing a power greater than 1640 watts EIRP and greater than 1640 watts/MHz EIRP must coordinate such operations in advance with all Government and non-Government satellite entities in the 2025–2110 MHz band. A licensee operating a base or fixed station in the 2110–2180 MHz band utilizing power greater than 1640 watts EIRP and greater than 1640 watts/MHz EIRP must be coordinated in advance with the following licensees authorized to operate within 120 kilometers (75 miles) of the base or fixed station operating in this band: All Broadband Radio Service (BRS) licensees authorized under this part in the 2155–2160 MHz band and all advanced wireless

services (AWS) licensees authorized to operate on adjacent frequency blocks in the 2110–2180 MHz band.

(4) Fixed, mobile, and portable (handheld) stations operating in the 1710–1755 MHz band and mobile and portable stations operating in the 1695–1710 MHz and 1755–1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710–1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

(5) Equipment employed must be authorized in accordance with the provisions of §24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

(6) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

(7) Fixed, mobile, and portable (handheld) stations operating in the 2000–2020 MHz band are limited to 2 watts EIRP, except that the total power of any portion of an emission that falls within the 2000–2005 MHz band may not exceed 5 milliwatts. A licensee of AWS–4 authority may enter into private operator-to-operator agreements with all 1995–2000 MHz licensees to operate in 2000–2005 MHz at power levels above 5 milliwatts EIRP; except the total power of the AWS–4 mobile emissions may not exceed 2 watts EIRP.

(8) A licensee operating a base or fixed station in the 2180–2200 MHz band utilizing a power greater than 1640 watts EIRP and greater than 1640 watts/MHz EIRP must be coordinated in advance with all AWS licensees authorized to operate on adjacent frequency blocks in the 2180–2200 MHz band.

(9) Fixed, mobile and portable (handheld) stations operating in the 1915–1920 MHz band are limited to 300 milliwatts EIRP.

(10) A licensee operating a base or fixed station in the 1995–2000 MHz band utilizing a power greater than 1640 watts EIRP and greater than 1640 watts/MHz EIRP must be coordinated in advance with all PCS G Block licensees authorized to operate on adjacent frequency blocks in the 1990–1995 MHz band within 120 kilometers of the base or fixed station operating in this band.

(e) The following power limits apply to the paired 1392–1395 MHz and 1432–1435 MHz bands as well as the unpaired 1390–1392 MHz band (1.4 GHz band):

(1) Fixed stations transmitting in the 1390–1392 MHz and 1432–1435 MHz bands are limited to 2000 watts EIRP peak power. Fixed stations transmitting in the 1392–1395 MHz band are limited to 100 watts EIRP peak power.

(2) Mobile stations transmitting in the 1390–1392 MHz and 1432–1435 MHz bands are limited to 4 watts EIRP peak power. Mobile stations transmitting in the1392–1395 MHz band are limited to 1 watt EIRP peak power.

(f) The following power limits apply to the 1670–1675 MHz band:

(1) Fixed and base stations are limited to 2000 watts EIRP peak power.

(2) Mobile stations are limited to 4 watts EIRP peak power.

(g) [Reserved]

(h) The following power limits shall apply in the BRS and EBS:

(1) *Main, booster and base stations.* (i) The maximum EIRP of a main, booster or base station shall not exceed 33 dBW + 10log(X/Y) dBW, where X is the actual channel width in MHz and Y is either 6 MHz if prior to transition or the station is in the MBS following transition or 5.5 MHz if the station is in the LBS and UBS following transition, except as provided in paragraph (h)(1)(ii) of this section.

(ii) If a main or booster station sectorizes or otherwise uses one or more transmitting antennas with a non-omnidirectional horizontal plane radiation pattern, the maximum EIRP in dBW in a given direction shall be determined by the following formula: EIRP = 33 dBW + 10 log(X/Y) dBW + 10 log(360/beamwidth) dBW, where X is the actual channel width in MHz, Y is either (i) 6 MHz if prior to transition or the station is in the MBS following transition or (ii) 5.5 MHz if the station is in the LBS and UBS following transition, and beamwidth is the total horizontal plane beamwidth of the individual transmitting antenna for the station or any sector measured at the half-power points.

(2) *Mobile and other user stations.* Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

(3) For television transmission, the peak power of the accompanying aural signal must not exceed 10 percent of the peak visual power of the transmitter. The Commission may order a reduction in aural signal power to diminish the potential for harmful interference.

(4) For main, booster and response stations utilizing digital emissions with non-uniform power spectral density (*e.g.* unfiltered QPSK), the power measured within any 100 kHz resolution bandwidth within the 6 MHz channel occupied by the non-uniform emission cannot exceed the power permitted within any 100 kHz resolution bandwidth within the 6 MHz channel if it were occupied by an emission with uniform power spectral density, *i.e.*, if the maximum permissible power of a station utilizing a perfectly uniform power spectral density across a 6 MHz channel were 2000 watts EIRP, this would result in a maximum permissible power flux density for the station of 2000/60 = 33.3 watts EIRP per 100 kHz bandwidth. If a non-uniform emission were substituted at the station, station power would still be limited to a maximum of 33.3 watts EIRP within any 100 kHz segment of the 6 MHz channel, irrespective of the fact that this would result in a total 6 MHz channel power of less than 2000 watts EIRP.

(i) Peak transmit power shall be measured over any interval of continuous transmission using instrumentation calibrated in terms of rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

TABLE 1 TO § 27.50—PERMISSIBLE POWER AND ANTENNA HEIGHTS FOR BASE AND FIXED STATIONS IN THE 757–758 AND 775–776 MHZ BANDS AND FOR BASE AND FIXED STATIONS IN THE 600 MHZ, 698–757 MHZ, 758–763 MHZ, 776–787 MHZ AND 788–793 MHZ BANDS TRANSMITTING A SIGNAL WITH AN EMISSION BANDWIDTH OF 1 MHZ OR LESS

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) (watts)
Above 1372 (4500)	65
Above 1220 (4000) To 1372 (4500)	70
Above 1067 (3500) To 1220 (4000)	75
Above 915 (3000) To 1067 (3500)	100
Above 763 (2500) To 915 (3000)	140
Above 610 (2000) To 763 (2500)	200
Above 458 (1500) To 610 (2000)	350
Above 305 (1000) To 458 (1500)	600
Up to 305 (1000)	1000

TABLE 2 TO § 27.50—PERMISSIBLE POWER AND ANTENNA HEIGHTS FOR BASE AND FIXED STATIONS IN THE 600 MHZ, 698–757 MHZ, 758–763 MHZ, 776–787 MHZ AND 788–793 MHZ BANDS TRANSMITTING A SIGNAL WITH AN EMISSION BANDWIDTH OF 1 MHZ OR LESS

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) (watts)
Above 1372 (4500)	130
Above 1220 (4000) To 1372 (4500)	140
Above 1067 (3500) To 1220 (4000)	150
Above 915 (3000) To 1067 (3500)	200
Above 763 (2500) To 915 (3000)	280
Above 610 (2000) To 763 (2500)	400
Above 458 (1500) To 610 (2000)	700
Above 305 (1000) To 458 (1500)	1200
Up to 305 (1000)	2000

TABLE 3 TO § 27.50—PERMISSIBLE POWER AND ANTENNA HEIGHTS FOR BASE AND FIXED STATIONS IN THE 600 MHZ, 698–757 MHZ, 758–763 MHZ, 776–787 MHZ AND 788–793 MHZ BANDS TRANSMITTING A SIGNAL WITH AN EMISSION BANDWIDTH GREATER THAN 1 MHZ

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) per MHz (watts/MHz)
Above 1372 (4500)	65
Above 1220 (4000) To 1372 (4500)	70
Above 1067 (3500) To 1220 (4000)	75
Above 915 (3000) To 1067 (3500)	100
Above 763 (2500) To 915 (3000)	140
Above 610 (2000) To 763 (2500)	200
Above 458 (1500) To 610 (2000)	350
Above 305 (1000) To 458 (1500)	600
Up to 305 (1000)	1000

TABLE 4 TO § 27.50—PERMISSIBLE POWER AND ANTENNA HEIGHTS FOR BASE AND FIXED STATIONS IN THE 600 MHZ, 698–757 MHZ, 758–763 MHZ, 776–787 MHZ AND 788–793 MHZ BANDS TRANSMITTING A SIGNAL WITH AN EMISSION BANDWIDTH GREATER THAN 1 MHZ

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) per MHz (watts/MHz)
Above 1372 (4500)	130
Above 1220 (4000) To 1372 (4500)	140
Above 1067 (3500) To 1220 (4000)	150
Above 915 (3000) To 1067 (3500)	200
Above 763 (2500) To 915 (3000)	280
Above 610 (2000) To 763 (2500)	400
Above 458 (1500) To 610 (2000)	700
Above 305 (1000) To 458 (1500)	1200
Up to 305 (1000)	2000

[62 FR 16497, Apr. 7, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 27.50, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov*.

EFFECTIVE DATE NOTE: At 72 FR 27709, May 16, 2007, § 27.50 was amended, in part, by revising paragraph (c). Paragraphs (c) (5) and (8) contain information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 27.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part must be of a type that has been authorized by the Commission under its certification procedure.

(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.

[65 FR 3147, Jan. 20, 2000]

§ 27.52 RF safety.

Licensees and manufacturers are subject to the radio frequency radiation exposure requirements specified in sections 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 for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

§ 27.53 Emission limits.

(a) For operations in the 2305–2320 MHz band and the 2345–2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:

(1) For base and fixed stations' operations in the 2305–2320 MHz band and the 2345–2360 MHz band:

(i) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than 75 + 10 log (P) dB on all frequencies between 2320 and 2345 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 70 + 10 log (P) dB on all frequencies between 2287.5 and 2300 MHz, 72 + 10 log (P) dB on all frequencies between 2285 and 2287.5 MHz, and 75 + 10 log (P) dB below 2285 MHz;

(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2362.5 MHz, 55 + 10 log (P) dB on all frequencies between 2362.5 and 2365 MHz, 70 + 10 log (P) dB on all frequencies between 2365 and 2367.5 MHz, 72 + 10 log (P) dB on all frequencies between 2367.5 and 2370 MHz, and 75 + 10 log (P) dB above 2370 MHz.

(2) For fixed customer premises equipment (CPE) stations operating in the 2305–2320 MHz band and the 2345–2360 MHz band transmitting with more than 2 watts per 5 megahertz average EIRP:

(i) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than 75 + 10 log (P) dB on all frequencies between 2320 and 2345 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 70 + 10 log (P) dB on all frequencies between 2287.5 and 2300 MHz, 72 + 10 log (P) dB on all frequencies between 2285 and 2287.5 MHz, and 75 + 10 log (P) dB below 2285 MHz;

(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2362.5 MHz, 55 + 10 log (P) dB on all frequencies between 2362.5 and 2365 MHz, 70 + 10 log (P) dB on all frequencies between 2365 and 2367.5 MHz, 72 + 10 log (P) dB on all frequencies between 2367.5 and 2370 MHz, and 75 + 10 log (P) dB above 2370 MHz.

(3) For fixed CPE stations operating in the 2305–2320 MHz and 2345–2360 MHz bands transmitting with 2 watts per 5 megahertz average EIRP or less:

(i) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300

MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz;

(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

(4) For mobile and portable stations operating in the 2305–2315 MHz and 2350–2360 MHz bands:

(i) By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300 MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz;

(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

(5) *Measurement procedure.* Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.,* 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(6) [Reserved]

(7) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power;

(8) Waiver requests of any of the out-of-band emission limits in paragraphs (a)(1) through (a)(7) of this section shall be entertained only if interference protection equivalent to that afforded by the limits is shown;

(9) [Reserved]

(10) The out-of-band emissions limits in paragraphs (a)(1) through (a)(3) of this section may be modified by the private contractual agreement of all affected licensees, who must maintain a copy of the agreement in their station files and disclose it to prospective assignees, transferees, or spectrum lessees and, upon request, to the Commission.

(b) *For WCS Satellite DARS operations:* The limits set forth in § 25.202(f) of this chapter shall apply, except that Satellite DARS operations shall be limited to a maximum power flux density of −197 dBW/m^2/4 kHz in the 2370–2390 MHz band at Arecibo, Puerto Rico.

(c) For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the 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, in accordance with the following:

(1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;

(4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(d) [Reserved]

(e) For operations in the 775–776 MHz and 805–806 MHz bands, transmitters must comply with either paragraphs (d)(1) through (5) of this section or the ACP emission limitations set forth in paragraphs (d)(6) to (d)(9) of this section.

(1) On all frequencies between 758–775 MHz and 788–805 MHz, the power of any emission outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;

(2) On all frequencies between 758–775 MHz and 788–805 MHz, the power of any emission outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

(3) On any frequency outside the 775–776 MHz and 805–806 MHz bands, the power of any emission shall be attenuated outside the band below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB;

(4) Compliance with the provisions of paragraphs (e)(1) and (e)(2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment;

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed.

(6) The adjacent channel power (ACP) requirements for transmitters designed for various channel sizes are shown in the following tables. Mobile station requirements apply to handheld, car mounted and control station units. The tables specify a value for the ACP as a function of the displacement from the channel center frequency and measurement bandwidth. In the following tables, ''(s)'' indicates a swept measurement may be used.

6.25 kHz Mobile Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
6.25	6.25	−40
12.5	6.25	−60
18.75	6.25	−60
25.00	6.25	−65
37.50	25.00	−65
62.50	25.00	−65
87.50	25.00	−65
150.00	100.00	−65
250.00	100.00	−65
350.00	100.00	−65
>400 kHz to 12 MHz	30(s)	−75
12 MHz to paired receive band	30(s)	−75
In the paired receive band	30(s)	−100

12.5 kHz Mobile Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
9.375	6.25	−40
15.625	6.25	−60
21.875	6.25	−60
37.50	25.00	−60
62.50	25.00	−65
87.50	25.00	−65
150.00	100	−65
250.00	100	−65

12.5 kHz Mobile Transmitter ACP Requirements—Continued

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
350.00	100	−65
>400 to 12 MHz	30(s)	−75
12 MHz to paired receive band	30(s)	−75
In the paired receive band	30(s)	−100

25 kHz Mobile Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
15.625	6.25	−40
21.875	6.25	−60
37.50	25	−60
62.50	25	−65
87.50	25	−65
150.00	100	−65
250.00	100	−65
350.00	100	−65
>400 kHz to 12 MHz	30(s)	−75
12 MHz to paired receive band	30(s)	−75
In the paired receive band	30(s)	−100

150 kHz Mobile Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP relative (dBc)
100	50	−40
200	50	−50
300	50	−50
400	50	−50
600–1000	30(s)	−60
1000 to receive band	30(s)	−70
In the receive band	30(s)	−100

6.25 kHz Base Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
6.25	6.25	−40
12.50	6.25	−60
18.75	6.25	−60
25.00	6.25	−65
37.50	25	−65
62.50	25	−65
87.50	25	−65
150.00	100	−65
250.00	100	−65
350.00	100	−65
>400 kHz to 12 MHz	30(s)	−80
12 MHz to paired receive band	30(s)	−80

6.25 kHz Base Transmitter ACP Requirements—Continued

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
In the paired receive band	30(s)	[1] −85

[1] Although we permit individual base transmitters to radiate a maximum ACP of −85 dBc in the paired receive band, licensees deploying these transmitters may not exceed an ACP of −100 dBc in the paired receive band when measured at either the transmitting antenna input port or the output of the transmitter combining network. Consequently, licensees deploying these transmitters may need to use external filters to comply with the more restrictive ACP limit.

12.5 kHz Base Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
9.375	6.25	−40
15.625	6.25	−60
21.875	6.25	−60
37.5	25	−60
62.5	25	−65
87.5	25	−65
150	100	−65
250	100	−65
350.00	100	−65
>400 kHz to 12 MHz	30(s)	−80
12 MHz to paired receive band	30(s)	−80
In the paired receive band	30(s)	[1] −85

[1] Although we permit individual base transmitters to radiate a maximum ACP of −85 dBc in the paired receive band, licensees deploying these transmitters may not exceed an ACP of −100 dBc in the paired receive band when measured at either the transmitting antenna input port or the output of the transmitter combining network. Consequently, licensees deploying these transmitters may need to use external filters to comply with the more restrictive ACP limit.

25 kHz Base Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
15.625	6.25	−40
21.875	6.25	−60
37.5	25	−60
62.5	25	−65
87.5	25	−65
150	100	−65
250	100	−65
350	100.00	−65
>400 kHz to 12 MHz	30(s)	−80
12 MHz to paired receive band	30(s)	−80
In the paired receive band	30(s)	[1] −85

[1] Although we permit individual base transmitters to radiate a maximum ACP of −85 dBc in the paired receive band, licensees deploying these transmitters may not exceed an ACP of −100 dBc in the paired receive band when measured at either the transmitting antenna input port or the output of the transmitter combining network. Consequently, licensees deploying these transmitters may need to use external filters to comply with the more restrictive ACP limit.

150 kHz Base Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
100	50	−40
200	50	−50
300	50	−55
400	50	−60
600–1000	30(s)	−65
1000 to receive band	30(s)	−75 (continues at −6dB/oct
In the receive band	30(s)	[1] −85

[1] Although we permit individual base transmitters to radiate a maximum ACP of −85 dBc in the paired receive band, licensees deploying these transmitters may not exceed an ACP of −100 dBc in the paired receive band when measured at either the transmitting antenna input port or the output of the transmitter combining network. Consequently, licensees deploying these transmitters may need to use external filters to comply with the more restrictive ACP limit.

(7) *ACP measurement procedure.* The following procedures are to be followed for making ACP transmitter measurements. For time division multiple access (TDMA) systems, the measurements are to be made under TDMA operation only during time slots when the transmitter is on. All measurements must be made at the input to the transmitter's antenna. Measurement bandwidth used below implies an instrument that measures the power in many narrow bandwidths (*e.g.*, 300 Hz) and integrates these powers across a larger band to determine power in the measurement bandwidth.

(i) *Setting reference level.* Using a spectrum analyzer capable of ACP measurements, set the measurement bandwidth to the channel size. For example, for a 6.25 kHz transmitter, set the measurement bandwidth to 6.25 kHz; for a 150 kHz transmitter, set the measurement bandwidth to 150 kHz. Set the frequency offset of the measurement bandwidth to zero and adjust the center frequency of the spectrum analyzer to give the power level in the measurement bandwidth. Record this power level in dBm as the ''reference power level''.

(ii) *Non-swept power measurement.* Using a spectrum analyzer capable of ACP measurements, set the measurement bandwidth as shown in the tables above. Measure the ACP in dBm. These measurements should be made at maximum power. Calculate the coupled power by subtracting the measurements made in this step from the reference power measured in the previous step. The absolute ACP values must be less than the values given in the table for each condition above.

(iii) *Swept power measurement.* Set a spectrum analyzer to 30 kHz resolution bandwidth, 1 MHz video bandwidth and sample mode detection. Sweep ±MHz from the carrier frequency. Set the reference level to the RMS value of the transmitter power and note the absolute power. The response at frequencies greater than 600 kHz must be less than the values in the tables above.

(8) *Out-of-band emission limit.* On any frequency outside of the frequency ranges covered by the ACP tables in this section, the power of any emission must be reduced below the unmodulated carrier power (P) by at least 43 + 10 log (P) dB.

(9) *Authorized bandwidth.* Provided that the ACP requirements of this section are met, applicants may request any authorized bandwidth that does not exceed the channel size.

(f) For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

(g) For operations in the 600 MHz band and the 698–746 MHz band, 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 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

(h) *AWS emission limits*—(1) *General protection levels.* Except as otherwise specified below, for operations in the 1695–1710 MHz, 1710–1755 MHz, 1755–1780

MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2110–2155 MHz, 2155–2180 MHz, and 2180–2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

(2) *Additional protection levels.* Notwithstanding the foregoing paragraph (h)(1) of this section:

(i) Operations in the 2180–2200 MHz band are subject to the out-of-band emission requirements set forth in § 27.1134 for the protection of federal government operations operating in the 2200–2290 MHz band.

(ii) For operations in the 2000–2020 MHz band, the power of any emissions below 2000 MHz shall be attenuated below the transmitter power (P) in watts by at least $70 + 10 \log_{10}(P)$ dB.

(iii) For operations in the 1915–1920 MHz band, the power of any emission between 1930–1995 MHz shall be attenuated below the transmitter power (P) in watts by at least $70 + 10 \log_{10}(P)$ dB.

(iv) For operations in the 1995–2000 MHz band, the power of any emission between 2005–2020 MHz shall be attenuated below the transmitter power (P) in watts by at least $70 + 10 \log_{10}(P)$ dB.

(3) *Measurement procedure.* (i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(ii) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

(iii) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

(4) *Private agreements.* (i) For AWS operations in the 2000–2020 MHz and 2180–2200 MHz bands, to the extent a licensee establishes unified operations across the AWS blocks, that licensee may choose not to observe the emission limit specified in paragraph (h)(1), above, strictly between its adjacent block licenses in a geographic area, so long as it complies with other Commission rules and is not adversely affecting the operations of other parties by virtue of exceeding the emission limit.

(ii) For AWS operations in the 2000–2020 MHz band, a licensee may enter into private agreements with all licensees operating between 1995 and 2000 MHz to allow the $70 + 10 \log_{10}(P)$ dB limit to be exceeded within the 1995–2000 MHz band.

(iii) An AWS licensee who is a party to a private agreement described in this section (4) must maintain a copy of the agreement in its station files and disclose it, upon request, to prospective AWS assignees, transferees, or spectrum lessees and to the Commission.

(i) 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.

(j)(1) For operations in the unpaired 1390–1392 MHz band and the paired 1392–1395 MHz and 1432–1435 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) by at least $43 + 10 \log (P)$ dB. Compliance with these provisions is based on the procedures described in paragraph (a)(4) of this section.

(2) In the 1390–1395 MHz and 1432–1435 MHz bands, licensees are encouraged to take all reasonable steps to ensure that unwanted emission power does not exceed the following levels in the band 1400–1427 MHz:

(i) For stations of point-to-point systems in the fixed service: −45 dBW/27 MHz.

(ii) For stations in the mobile service: −60 dBW/27 MHz.

(k) For operations in the 1670–1675 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below

the transmitter power (P) by at least 43 + 10 log (P) dB. Compliance with these provisions is based on the procedures described in paragraph (a)(4) of this section.

(l) [Reserved]

(m) For BRS and EBS stations, the power of any emissions outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) measured in watts in accordance with the standards below. If a licensee has multiple contiguous channels, out-of-band emissions shall be measured from the upper and lower edges of the contiguous channels.

(1) Prior to the transition, and thereafter, solely within the MBS, for analog operations with an EIRP in excess of −9 dBW, the signal shall be attenuated at the channel edges by at least 38 dB relative to the peak visual carrier, then linearly sloping from that level to at least 60 dB of attenuation at 1 MHz below the lower band edge and 0.5 MHz above the upper band edge, and attenuated at least 60 dB at all other frequencies.

(2) For digital base stations, the attenuation shall be not less than 43 + 10 log (P) dB, unless a documented interference complaint is received from an adjacent channel licensee with an overlapping Geographic Service Area. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS No. 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. Provided that a documented interference complaint cannot be mutually resolved between the parties prior to the applicable deadline, then the following additional attenuation requirements shall apply:

(i) If a pre-existing base station suffers harmful interference from emissions caused by a new or modified base station located 1.5 km or more away, within 24 hours of the receipt of a documented interference complaint the licensee of the new or modified base station must attenuate its emissions by at least 67 + 10 log (P) dB measured at 3 megahertz, above or below, from the channel edge of its frequency block and shall immediately notify the complaining licensee upon implementation of the additional attenuation. No later than 60 days after the implementation of such additional attenuation, the licensee of the complaining base station must attenuate its base station emissions by at least 67 + 10 log (P) dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(ii) If a pre-existing base station suffers harmful interference from emissions caused by a new or modified base station located less than 1.5 km away, within 24 hours of receipt of a documented interference complaint the licensee of the new or modified base station must attenuate its emissions by at least 67 + 10 log (P)−20 log (Dkm/1.5) dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the complaining licensee, or if both base stations are colocated, limit its undesired signal level at the pre-existing base station receiver(s) to no more than −107 dBm measured in a 5.5 megahertz bandwidth and shall immediately notify the complaining licensee upon such reduction in the undesired signal level. No later than 60 days after such reduction in the undesired signal level, the complaining licensee must attenuate its base station emissions by at least 67 + 10 log (P) dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(iii) If a new or modified base station suffers harmful interference from emissions caused by a pre-existing base station located 1.5 km or more away, within 60 days of receipt of a documented interference complaint the licensee of each base station must attenuate its base station emissions by at least 67 + 10 log (P) dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the other licensee.

(iv) If a new or modified base station suffers harmful interference from emissions caused by a pre-existing base station located less than 1.5 km away, within 60 days of receipt of a documented interference complaint: (a) The licensee of the new or modified base station must attenuate its OOBE by at

least 67 + 10 log (P) − 20 log (Dkm/1.5) measured 3 megahertz above or below, from the channel edge of its frequency block of the other licensee, or if the base stations are co-located, limit its undesired signal level at the other base station receiver(s) to no more than −107 dBm measured in a 5.5-megahertz bandwidth; and (b) the licensee causing the interference must attenuate its emissions by at least 67 + 10 log (P) dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(v) For all fixed digital user stations, the attenuation factor shall be not less than 43 + 10 log (P) dB at the channel edge.

(3) Prior to transition and thereafter solely within the MBS, and notwithstanding paragraph (l)(2) of this section, the maximum out-of-band power of a digital transmitter operating on a single 6 MHz channel with an EIRP in excess of −9 dBW employing digital modulation for the primary purpose of transmitting video programming shall be attenuated at the 6 MHz channel edges at least 25 dB relative to the licensed average 6 MHz channel power level, then attenuated along a linear slope to at least 40 dB at 250 kHz beyond the nearest channel edge, then attenuated along a linear slope from that level to at least 60 dB at 3 MHz above the upper and below the lower licensed channel edges, and attenuated at least 60 dB at all other frequencies.

(4) For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

(5) Notwithstanding the provisions of paragraphs (l)(2) and (l)(4) of this section, prior to transition, a licensee may continue to operate facilities deployed as of January 10, 2005 provided that such facilities operate in compliance with the emission mask applicable to those services prior to January 10, 2005.

(6) *Measurement procedure.* Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495–2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495–2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

(7) *Alternative out of band emission limit.* Licensees in this service may establish an alternative out of band emission limit to be used at specified band edge(s) in specified geographical

areas, in lieu of that set forth in this section, pursuant to a private contractual arrangement of all affected licensees and applicants. In this event, each party to such contract shall maintain a copy of the contract in their station files and disclose it to prospective assignees or transferees and, upon request, to the FCC.

(n) 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.

[62 FR 16497, Apr. 7, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §27.53, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov*.

§27.54 Frequency stability.

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

§27.55 Power strength limits.

(a) *Field strength limits.* For the following bands, the predicted or measured median field strength at any location on the geographical border of a licensee's service area shall not exceed the value specified unless the adjacent affected service area licensee(s) agree(s) to a different field strength. This value applies to both the initially offered service areas and to partitioned service areas.

(1) 1995–2000 MHz, 2110–2155, 2155–2180, 2180–2200, 2305–2320, and 2345–2360 MHz bands: 47 dBμV/m.

(2) 600 MHz, 698–758, and 775–787 MHz bands: 40 dBμV/m.

(3) The paired 1392–1395 MHz and 1432–1435 MHz bands and the unpaired 1390–1392 MHz band (1.4 GHz band): 47 dBμV/m.

(4) BRS and EBS: The predicted or measured median field strength at any location on the geographical border of a licensee's service area shall not exceed the value specified unless the adjacent affected service area licensee(s) agree(s) to a different field strength. This value applies to both the initially offered services areas and to partitioned services areas. Licensees may exceed this signal level where there is no affected licensee that is constructed and providing service. Once the affected licensee is providing service, the original licensee will be required to take whatever steps necessary to comply with the applicable power level at its GSA boundary, absent consent from the affected licensee.

(i) Prior to transition, the signal strength at any point along the licensee's GSA boundary does not exceed the greater of that permitted under the licensee's Commission authorizations as of January 10, 2005 or 47 dBμV/m.

(ii) Following transition, for stations in the LBS and UBS, the signal strength at any point along the licensee's GSA boundary must not exceed 47 dBμV/m. This field strength is to be measured at 1.5 meters above the ground over the channel bandwidth (*i.e.*, each 5.5 MHz channel for licensees that hold a full channel block, and for the 5.5 MHz channel for licensees that hold individual channels).

(iii) Following transition, for stations in the MBS, the signal strength at any point along the licensee's GSA boundary must not exceed the greater of $-73.0 + 10 \log(X/6)$ dBW/m^2, where X is the bandwidth in megahertz of the channel, or for facilities that are substantially similar to the licensee's pretransition facilities (including modifications that do not alter the fundamental nature or use of the transmissions), the signal strength at such point that resulted from the station's operations immediately prior to the transition, provided that such operations complied with paragraph (a)(4)(i) of this section.

(b) *Power flux density limit for stations operating in the 698–746 MHz bands.* For base and fixed stations operating in the 698–746 MHz band in accordance with the provisions of §27.50(c)(6), the power flux density that would be produced by such stations through a combination of antenna height and vertical gain pattern must not exceed 3000 microwatts per square meter on the ground over the area extending to 1 km from the base of the antenna mounting structure.

(c) *Power flux density limit for stations operating in the 746–757 MHz and 776–787 MHz bands.* For base and fixed stations operating in the 746–757 MHz and 776–

787 MHz bands in accordance with the provisions of § 27.50(b)(6), the power flux density that would be produced by such stations through a combination of antenna height and vertical gain pattern must not exceed 3000 microwatts per square meter on the ground over the area extending to 1 km from the base of the antenna mounting structure.

[69 FR 5715, Feb. 6, 2004, as amended at 69 FR 72034, Dec. 10, 2004; 72 FR 27712, May 16, 2007; 72 FR 48852, Aug. 24, 2007; 73 FR 26040, May 8, 2008; 78 FR 8270, Feb. 5, 2013; 78 FR 50256, Aug. 16, 2013; 79 FR 599, Jan. 6, 2014; 79 FR 32413, June 4, 2014; 79 FR 48539, Aug. 15, 2014]

§ 27.56 Antenna structures; air navigation safety.

A licensee that owns its antenna structure(s) must not allow such antenna structure(s) 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, the 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 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. For any construction or alteration that would exceed the requirements of section 17.7 of this chapter, licensees must notify the appropriate Regional Office of the Federal Aviation Administration (FAA Form 7460–1) and file a request for antenna height clearance and obstruction marking and lighting specifications (FCC Form 854) with the FCC, WTB, 1270 Fairfield Road, Gettysburg, PA 17325.

(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 make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

§ 27.57 International coordination.

(a) WCS operations in the border areas shall be subject to coordination with those countries and provide protection to non-U.S. operations in the 2305–2320 and 2345–2360 MHz bands as appropriate. In addition, satellite DARS operations in WCS spectrum shall be subject to international satellite coordination procedures.

(b) Wireless operations in the 512–608 MHz, 614–763 MHz, 775–793 MHz, and 805–806 MHz bands are subject to current and future international agreements between the United States and Canada and the United States and Mexico. Unless otherwise modified by international treaty, licenses must not cause interference to, and must accept harmful interference from, television broadcast operations in Mexico and Canada, where these services are coprimary in the band.

(c) Operation in the 1695–1710 MHz, 1710–1755 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2110–2155 MHz, 2155–2180 MHz, and 2180–2200 MHz bands is subject to international agreements with Mexico and Canada.

[62 FR 9658, Mar. 3, 1997, as amended at 67 FR 5511, Feb. 6, 2002; 69 FR 5715, Feb. 6, 2004; 72 FR 48852, Aug. 24, 2007; 79 FR 599, Jan. 6, 2014; 79 FR 32413, June 4, 2014; 79 FR 48539, Aug. 15, 2014]

§ 27.58 Interference to BRS/EBS receivers.

(a) WCS licensees shall bear full financial obligation to remedy interference to BRS/EBS block downconverters if all of the following conditions are met:

(1) The complaint is received by the WCS licensee prior to February 20, 2002;

(2) The BRS/EBS downconverter was installed prior to August 20, 1998;

(3) The WCS fixed or land station transmits at 50 or more watts peak EIRP;

(4) The BRS/EBS downconverter is located within a WCS transmitter's free space power flux density contour of −34 dBW/m^2; and

(5) The BRS/EBS customer or licensee has informed the WCS licensee of the interference within one year from the initial operation of the WCS transmitter or within one year from any subsequent power increases at the WCS station.

(b) Resolution of the complaint shall be at no cost to the complainant.

(c) Two or more WCS licensees collocating their antennas on the same tower shall assume shared responsibility for remedying interference complaints within the area determined by paragraph (a)(4) of this section unless an offending station can be readily determined and then that station shall assume full financial responsibility.

(d) If the WCS licensee cannot otherwise eliminate interference caused to BRS/EBS reception, then that licensee must cease operations from the offending WCS facility.

(e) At least 30 days prior to commencing operations from any new WCS transmission site or with increased power from any existing WCS transmission site, a WCS licensee shall notify all BRS/EBS licensees in or through whose licensed service areas they intend to operate of the technical parameters of the WCS transmission facility. WCS and BRS/EBS licensees are expected to coordinate voluntarily and in good faith to avoid interference problems and to allow the greatest operational flexibility in each other's operations.

[62 FR 16498, Apr. 7, 1997, as amended at 69 FR 72034, Dec. 10, 2004]

§ 27.59 [Reserved]

§ 27.60 TV/DTV interference protection criteria.

Base, fixed, control, and mobile transmitters in the 698–758 MHz, 775–788 MHz, and 805–806 MHz frequency bands must be operated only in accordance with the rules in this section to reduce the potential for interference to public reception of the signals of existing TV and DTV broadcast stations transmitting on TV Channels 51 through 68.

(a) *D/U ratios.* Licensees must choose site locations that are a sufficient distance from co-channel and adjacent channel TV and DTV stations, and/or must use reduced transmitting power or transmitting antenna height such that the following minimum desired signal-to-undesired signal ratios (D/U ratios) are met.

(1) The minimum D/U ratio for co-channel stations is:

(i) 40 dB at the hypothetical Grade B contour (64 dBμV/m) (88.5 kilometers (55 miles)) of the TV station;

(ii) For transmitters operating in the 698–746 MHz frequency band, 23 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers (55 miles)) of the DTV station; or

(iii) For transmitters operating in the 746–758 MHz, 775–788 MHz, and 805–806 MHz frequency bands, 17 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers (55 miles)) of the DTV station.

(2) The minimum D/U ratio for adjacent channel stations is 0 dB at the hypothetical Grade B contour (64 dBμV/m) (88.5 kilometers (55 miles)) of the TV station or −23 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers (55 miles)) of the DTV station.

(b) *TV stations and calculation of contours.* The methods used to calculate TV contours and antenna heights above average terrain are given in §§ 73.683 and 73.684 of this chapter. Tables to determine the necessary minimum distance from the 698–758 MHz, 775–788 MHz, and 805–806 MHz station to the TV/DTV station, assuming that the TV/DTV station has a hypothetical or equivalent Grade B contour of 88.5 kilometers (55 miles), are located in § 90.309 of this chapter and labeled as Tables B, D, and E. The locations of existing and proposed TV/DTV stations during the period of transition from analog to digital TV service are given in part 73 of this chapter and in the final proceedings of MM Docket No. 87–268.

(1) Licensees of stations operating within the ERP and HAAT limits of § 27.50 must select one of four methods to meet the TV/DTV protection requirements, subject to Commission approval:

(i) Utilize the geographic separation specified in Tables B, D, and E of § 90.309 of this chapter, as appropriate;

(ii) When station parameters are greater than those indicated in the tables, calculate geographic separation in accordance with the required D/U ratios, as provided in paragraph (a) of this section;

(iii) Submit an engineering study justifying the proposed separations based on the parameters of the land mobile station and the parameters, including authorized and/or applied for facilities, of the TV/DTV station(s) it is trying to protect; or,

(iv) Obtain written concurrence from the applicable TV/DTV station(s). If this method is chosen, a copy of the agreement must be submitted with the application.

(2) The following is the method for geographic separations. (i) Base and fixed stations that operate in the 746–758 MHz and 775–787 MHz bands having an antenna height (HAAT) less than 152 m. (500 ft.) shall afford protection to co-channel and adjacent channel TV/DTV stations in accordance with the values specified in Table B (co-channel frequencies based on 40 dB protection) and Table E (adjacent channel frequencies based on 0 dB protection) in § 90.309 of this chapter. Base and fixed stations that operate in the 698–746 MHz band having an antenna height (HAAT) less than 152 m. (500 ft.) shall afford protection to adjacent channel DTV stations in accordance with the values specified in Table E in § 90.309 of this chapter, shall afford protection to co-channel DTV stations by providing 23 dB protection to such stations' equivalent Grade B contour (41 dBμV/m), and shall afford protection to co-channel and adjacent channel TV stations in accordance with the values specified in Table B (co-channel frequencies based on 40 dB protection) and Table E (adjacent channel frequencies based on 0 dB protection) in § 90.309 of this chapter. For base and fixed stations having an antenna height (HAAT) between 152–914 meters (500–3,000 ft.) the effective radiated power must be reduced below 1 kilowatt in accordance with the values shown in the power reduction graph in Figure B in § 90.309 of this chapter. For heights of more than 152 m. (500 ft.) above average terrain, the distance to the radio path horizon will be calculated assuming smooth earth. If the distance so determined equals or exceeds the distance to the hypothetical or equivalent Grade B contour of a co-channel TV/DTV station (*i.e.*, it exceeds the distance from the appropriate Table in § 90.309 of this chapter to the relevant TV/DTV station), an authorization will not be granted unless it can be shown in an engineering study (*see* paragraph (b)(1)(iii) of this section) that actual terrain considerations are such as to provide the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m for DTV stations) or unless the effective radiated power will be further reduced so that, assuming free space attenuation, the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m coverage contour for DTV stations) will be achieved. Directions for calculating powers, heights, and reduction curves are listed in § 90.309 of this chapter for land mobile stations. Directions for calculating coverage contours are listed in § 73.683 through 73.685 of this chapter for TV stations and in § 73.625 of this chapter for DTV stations.

(ii) Control, fixed, and mobile stations (including portables) that operate in the 787–788 MHz and 805–806 MHz bands and control and mobile stations (including portables) that operate in the 698–757 MHz and 776–787 MHz bands are limited in height and power and therefore shall afford protection to co-channel and adjacent channel TV/DTV stations in the following manner:

(A) For control, fixed, and mobile stations (including portables) that operate in the 787–788 MHz and 805–806 MHz bands and control and mobile stations (including portables) that operate in the 746–757 MHz and 776–787 MHz bands, co-channel protection shall be afforded in accordance with the values specified in Table D (co-channel frequencies based on 40 dB protection for TV stations and 17 dB for DTV stations) in § 90.309 of this chapter.

(B) For control and mobile stations (including portables) that operate in the 698–746 MHz band, co-channel protection shall be afforded to TV stations in accordance with the values specified

in Table D (co-channel frequencies based on 40 dB protection) and to DTV stations by providing 23 dB protection to such stations' equivalent Grade B contour (41 dBμV/m).

(C) For control, fixed, and mobile stations (including portables) that operate in the 787–788 MHz and 805–806 MHz bands and control and mobile stations (including portables) that operate in the 698–757 MHz and 776–787 MHz bands, adjacent channel protection shall be afforded by providing a minimum distance of 8 kilometers (5 miles) from all adjacent channel TV/DTV station hypothetical or equivalent Grade B contours (adjacent channel frequencies based on 0 dB protection for TV stations and −23 dB for DTV stations).

(D) Since control, fixed, and mobile stations may affect different TV/DTV stations than the associated base or fixed station, particular care must be taken by applicants/licensees to ensure that all appropriate TV/DTV stations are considered (*e.g.*, a base station may be operating within TV Channel 62 and the mobiles within TV Channel 67, in which case TV Channels 61, 62, 63, 66, 67 and 68 must be protected). Control, fixed, and mobile stations shall keep a minimum distance of 96.5 kilometers (60 miles) from all adjacent channel TV/DTV stations. Since mobiles and portables are able to move and communicate with each other, licensees must determine the areas where the mobiles can and cannot roam in order to protect the TV/DTV stations.

NOTE TO §27.60: The 88.5 km (55mi) Grade B service contour (64 dBμV/m) is based on a hypothetical TV station operating at an effective radiated power of one megawatt, a transmitting antenna height above average terrain of 610 meters (2000 feet) and the Commission's R–6602 F(50,50) curves. *See* §73.699 of this chapter. Maximum facilities for TV stations operating in the UHF band are 5 megawatts effective radiated power at an antenna HAAT of 610 meters (2,000 feet). *See* §73.614 of this chapter. The equivalent contour for DTV stations is based on a 41 dBμV/m signal strength and the distance to the F(50,90) curve. *See* §73.625 of this chapter.

[72 FR 48852, Aug. 24, 2007, as amended at 79 FR 599, Jan. 6, 2014]

§§ 27.61–27.62 [Reserved]

§ 27.64 Protection from interference.

Wireless Communications Service (WCS) stations operating in full accordance with applicable FCC rules and the terms and conditions of their authorizations are normally considered to be non-interfering. If the FCC determines, however, that interference which significantly interrupts or degrades a radio service is being caused, it may, after notice and an opportunity for a hearing, require modifications to any WCS station as necessary to eliminate such interference.

(a) *Failure to operate as authorized.* Any licensee causing interference to the service of other stations by failing to operate its station in full accordance with its authorization and applicable FCC rules shall discontinue all transmissions, except those necessary for the immediate safety of life or property, until it can bring its station into full compliance with the authorization and rules.

(b) *Intermodulation interference.* Licensees should attempt to resolve such interference by technical means.

(c) *Situations in which no protection is afforded.* Except as provided elsewhere in this part, no protection from interference is afforded in the following situations:

(1) *Interference to base receivers from base or fixed transmitters.* Licensees should attempt to resolve such interference by technical means or operating arrangements.

(2) *Interference to mobile receivers from mobile transmitters.* No protection is provided against mobile-to-mobile interference.

(3) *Interference to base receivers from mobile transmitters.* No protection is provided against mobile-to-base interference.

(4) *Interference to fixed stations.* Licensees should attempt to resolve such interference by technical means or operating arrangements.

(5) *Anomalous or infrequent propagation modes.* No protection is provided against interference caused by tropospheric and ionospheric propagation of signals.

(d) *Harmful interference to SDARS operations requiring resolution.* The following conditions will be presumed to constitute harmful interference to SDARS operations from WCS operations in the 2305–2320 MHz and 2345–2360 MHz bands and require WCS operators to work cooperatively with SDARS operators to address areas where such power levels are exceeded and harmful interference occurs:

(1) A WCS ground signal level greater than -44 dBm in the upper or lower A or B block, or -55 dBm in the C or D block, present at a location on a roadway, where a test demonstrates that SDARS service would be muted over a road distance of greater than 50 meters; or

(2) A WCS ground signal level exceeding -44 dBm in the upper or lower A or B block, or -55 dBm in the C or D block on a test drive route, which is mutually agreed upon by the WCS licensee and the SDARS licensee, for more than 1 percent of the cumulative surface road distance on that drive route, where a test demonstrates that SDARS service would be muted over a cumulative road distance of greater than 0.5 percent (incremental to any muting present prior to use of WCS frequencies in the area of that drive test).

[62 FR 9658, Mar. 3, 1997, as amended at 78 FR 9621, Feb. 11, 2013]

§ 27.65 Acceptance of interference in 2000–2020 MHz.

(a) Receivers operating in the 2000–2020 MHz band must accept interference from lawful operations in the 1995–2000 MHz band, where such interference is due to:

(1) The in-band power of any operations in 1995–2000 MHz (i.e., the portion transmit power contained in the 1995–2000 MHz band); or

(2) The portion of out-of-band emissions contained in 2000–2005 MHz.

(b) [Reserved]

[78 FR 8270, Feb. 5, 2013]

§ 27.66 Discontinuance, reduction, or impairment of service.

(a) *Involuntary act.* If the service provided by a fixed common carrier licensee, or a fixed common carrier operating on spectrum licensed to a Guard Band Manager, is involuntarily discontinued, reduced, or impaired for a period exceeding 48 hours, the licensee must promptly notify the Commission, in writing, as to the reasons for discontinuance, reduction, or impairment of service, including a statement when normal service is to be resumed. When normal service is resumed, the licensee must promptly notify the Commission.

(b) *Voluntary act by common carrier.* If a fixed common carrier licensee, or a fixed common carrier operating on spectrum licensed to a Guard Band Manager, voluntarily discontinues, reduces, or impairs service to a community or part of a community, it must obtain prior authorization as provided under § 63.71 of this chapter. An application will be granted within 31 days after filing if no objections have been received.

(c) *Voluntary act by non-common carrier.* If a fixed non-common carrier licensee, or a fixed non-common carrier operating on spectrum licensed to a Guard Band Manager, voluntarily discontinues, reduces, or impairs service to a community or part of a community, it must given written notice to the Commission within seven days.

(d) *Notifications and requests.* Notifications and requests identified in paragraphs(a) through (c) of this section should be sent to: Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, Pennsylvania, 17325.

[65 FR 3149, Jan. 20, 2000; 65 FR 12483, Mar. 9, 2000, as amended at 65 FR 17605, Apr. 4, 2000; 65 FR 57267, Sept. 21, 2000]

§ 27.70 Information exchange.

(a) *Prior notification.* Public safety licensees authorized to operate in the 758–775 MHz and 788–805 MHz bands may notify any licensee authorized to operate in the 746–757 or 776–787 MHz bands that they wish to receive prior notification of the activation or modification of the licensee's base or fixed stations in their area. Thereafter, the 746–757 or 776–787 MHz band licensee must provide the following information to the public safety licensee at least 10 business days before a new base or fixed station is activated or an existing base or fixed station is modified:

(1) Location;

(2) Effective radiated power;

(3) Antenna height; and
(4) Channels available for use.

(b) *Purpose of prior notification.* The prior coordination of base or fixed stations is for informational purposes only. Public safety licensees are not afforded the right to accept or reject the activation of a proposed base or fixed station or to unilaterally require changes in its operating parameters. The principal purposes of notification are to:

(1) Allow a public safety licensee to advise the 746–757 or 776–787 MHz band licensee whether it believes a proposed base or fixed station will generate unacceptable interference;

(2) Permit 746–757 and 776–787 MHz band licensees to make voluntary changes in base or fixed station parameters when a public safety licensee alerts them to possible interference; and,

(3) Rapidly identify the source if interference is encountered when the base or fixed station is activated.

[72 FR 27712, May 16, 2007, as amended at 72 FR 48853, Aug. 24, 2007; 79 FR 599, Jan. 6, 2014]

§ 27.72 Information sharing requirements.

This section requires WCS licensees in the 2305–2320 MHz and 2345–2360 MHz bands to share information regarding the location and operation of base and fixed stations (except fixed customer premises equipment) with Satellite Digital Audio Radio Service (SDARS) licensees in the 2320–2345 MHz band. Section 25.263 of this chapter requires SDARS licensees in the 2320–2345 MHz band to share information regarding the location and operation of terrestrial repeaters with WCS licensees in the 2305–2320 MHz and 2345–2360 MHz bands. WCS licensees are encouraged to develop separate coordination agreements with SDARS licensees to facilitate efficient deployment of and coexistence between each service. To the extent the provisions of any such coordination agreement conflict with the requirements set forth herein, the procedures established under a coordination agreement will control. WCS licensees must maintain a copy of any coordination agreement with an SDARS licensee in their station files and disclose it to prospective assignees, transferees, or spectrum lessees and, upon request, to the Commission.

(a) *Sites and frequency selections.* WCS licensees must select base and fixed station sites and frequencies, to the extent practicable, to minimize the possibility of harmful interference to operations in the SDARS 2320–2345 MHz band.

(b) *Prior notice periods.* WCS licensees that intend to operate a base or fixed station must, before commencing such operation, provide 10 business days prior notice to all SDARS licensees. WCS licensees that intend to modify an existing station must, before commencing such modified operation, provide 5 business days prior notice to all SDARS licensees. For the purposes of this section, a business day is defined by §1.4(e)(2) of this chapter.

(1) For modifications other than changes in location, a licensee may provide notice within 24 hours after the modified operation if the modification does not result in a predicted increase of the power flux density (PFD) at ground level by more than 1 dB since the last advance notice was given. If a demonstration is made by the SDARS licensee that such modifications may cause harmful interference to SDARS receivers, WCS licensees will be required to provide notice 5 business days in advance of additional station modifications.

(2) WCS base and fixed stations operating below 2 watts equivalent isotropically radiated power (EIRP) are exempt from the notice requirements set forth in this paragraph.

(3) WCS and SDARS licensees may enter into agreements regarding alternative notification procedures.

(c) *Contents of notice.* (1) Notification must be written (*e.g.*, certified letter, fax, or e-mail) and include the licensee's name, and the name, address, and telephone number of its coordination representative, unless the SDARS licensee and all potentially affected WCS licensees reach a mutual agreement to provide notification by some other means. WCS licensees and SDARS licensees may establish such a mutually agreeable alternative notification mechanism without prior Commission approval, provided that they comply

with all other requirements of this section.

(2) Regardless of the notification method, it must specify relevant technical details, including, at a minimum:

(i) The coordinates of the proposed base or fixed stations to an accuracy of no less than ±1 second latitude and longitude;

(ii) The proposed operating power(s), frequency band(s), and emission(s);

(iii) The antenna center height above ground and ground elevation above mean sea level, both to an accuracy of no less than ±1 meter;

(iv) The antenna gain pattern(s) in the azimuth and elevation planes that include the peak of the main beam; and

(v) The antenna downtilt angle(s).

(3) A WCS licensee operating base or fixed stations must maintain an accurate and up-to-date inventory of its stations, including the information set forth in §27.72(c)(2), which shall be available upon request by the Commission.

(d) *Calculation of notice period.* Notice periods are calculated from the date of receipt by the licensee being notified. If notification is by mail, the date of receipt is evidenced by the return receipt on certified mail. If notification is by fax, the date of receipt is evidenced by the notifying party's fax transmission confirmation log. If notification is by e-mail, the date of receipt is evidenced by a return e-mail receipt. If the SDARS licensee and all potentially affected WCS licensees reach a mutual agreement to provide notification by some other means, that agreement must specify the method for determining the beginning of the notice period.

(e) *Duty to cooperate.* WCS licensees must cooperate in good faith in the selection and use of new station sites and new frequencies to reduce interference and make the most effective use of the authorized facilities. WCS licensees should provide SDARS licensees as much lead time as practicable to provide ample time to conduct analyses and opportunity for prudent base station site selection prior to WCS licensees entering into real estate and tower leasing or purchasing agreements. WCS licensees must have sufficient operational flexibility in their network design to implement one or more technical solutions to remedy harmful interference. Licensees of stations suffering or causing harmful interference, as defined in §27.64(d), must cooperate in good faith and resolve such problems by mutually satisfactory arrangements. If the licensees are unable to do so, the Wireless Telecommunications Bureau, in consultation with the Office of Engineering and Technology and the International Bureau, will consider the actions taken by the parties to mitigate the risk of and remedy any alleged interference. In determining the appropriate action, the Bureau will take into account the nature and extent of the interference and act promptly to remedy the interference. The Bureau may impose restrictions on WCS licensees, including specifying the transmitter power, antenna height, or other technical or operational measures to remedy the interference, and will take into account previous measures by the licensees to mitigate the risk of interference.

[75 FR 45071, Aug. 2, 2010, as amended at 78 FR 9622, Feb. 11, 2013]

§ 27.73 WCS, AMT, and Goldstone coordination requirements.

This section requires Wireless Communications Services (WCS) licensees in the 2305–2320 MHz and 2345–2360 MHz bands, respectively, to coordinate the deployment of base and fixed stations (except fixed customer premises equipment) with the Goldstone, CA Deep Space Network (DSN) facility in the 2290–2300 MHz band and with Aeronautical Mobile Telemetry (AMT) facilities in the 2360–2395 MHz band; and to take all practicable steps necessary to minimize the risk of harmful interference to AMT and DSN facilities.

(a) WCS licensees operating base and fixed stations in the 2345–2360 MHz band must, prior to operation of such stations, achieve a mutually satisfactory coordination agreement with the AMT entity(ies) (*i.e.,* FCC licensee(s) and/or Federal operator(s)) for any AMT receiver facility within 45 kilometers or radio line of sight, whichever distance is larger, of the intended WCS base or fixed station location. The coordinator for the assignment of flight test frequencies in the 2360–2390 MHz band,

Aerospace and Flight Test Radio Coordination Council (AFTRCC) or successors of AFTRCC, will facilitate a mutually satisfactory coordination agreement between the WCS licensee(s) and AMT entity(ies) for existing AMT receiver sites. The locations of current Federal and non-Federal AMT receiver sites may be obtained from AFTRCC at Post Office Box 12822 Wichita, KS 67277–2822, (316) 946–8826, or successor frequency coordinators of AFTRCC. Such coordination agreement shall provide protection to existing AMT receiver stations consistent with International Telecommunication Union (ITU) Recommendation ITU–R M.1459, ''Protection criteria for telemetry systems in the aeronautical mobile service and mitigation techniques to facilitate sharing with geostationary broadcasting-satellite and mobile-satellite services in the frequency bands 1 452–1 525 MHz and 2 310–2 360 MHz May 2000 edition,'' adopted May 2000, as adjusted using generally accepted engineering practices and standards to take into account the local conditions and operating characteristics of the applicable AMT and WCS facilities. This ITU document is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 and approved by the Director of Federal Register. Copies of the recommendation may be obtained from ITU, Place des Nations, 1211 Geneva 20, Switzerland, or online at *http://www.itu.int/en/publications/Pages/default.aspx*. You may inspect a copy at the Federal Communications Commission, 445 12th Street SW., Washington, DC 20554, or at the 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*.

(b) WCS licensees operating base and fixed stations in the 2305–2320 MHz band must, prior to operation of such stations, achieve a mutually satisfactory coordination agreement with the National Aeronautics and Space Administration (NASA) within 145 kilometers of the Goldstone, CA earth station site (35°25′33″ N, 116°53′23″ W).

(c) After base or fixed station operations commence, upon receipt of a complaint of harmful interference, the WCS licensee(s) receiving the complaint, no matter the distance from the NASA Goldstone, CA earth station or from an AMT site, operating in the 2305–2320 or 2345–2360 MHz bands, respectively, shall take all practicable steps to immediately eliminate the interference.

(d) *Duty to cooperate.* WCS licensees, AFTRCC, and NASA must cooperate in good faith in the coordination and deployment of new facilities. WCS licensees must also cooperate in good faith in the selection and use of new station sites and new frequencies when within radio line of site of AMT receiver facilities to reduce the risk of harmful interference and make the most effective use of the authorized facilities. Licensees of stations suffering or causing harmful interference must cooperate in good faith and resolve such problems by mutually satisfactory arrangements. If the licensees are unable to do so, the Wireless Telecommunications Bureau, in consultation with the Office of Engineering and Technology and the National Telecommunications and Information Administration may impose restrictions including specifying the transmitter power, antenna height, or area or hours of operation of the stations.

[75 FR 45072, Aug. 2, 2010, as amended at 78 FR 9622, Feb. 11, 2013]

§ 27.75 Basic interoperability requirement.

(a)(1) Mobile and portable stations that operate on any portion of frequencies in the paired 1755–1780 MHz and 2155–2180 MHz band must be capable of operating on all frequencies in the paired 1710–1780 MHz and 2110–2180 MHz band, using the same air interfaces that the equipment utilizes on any frequencies in the paired 1710–1780 MHz and 2110–2180 MHz band.

(2) Mobile and portable stations that operate on any portion of frequencies in the 600 MHz band must be capable of operating on all frequencies in the 600 MHz band using the same air interfaces that the equipment utilizes on any frequencies in the 600 MHz band.

(b) The basic interoperability requirement in paragraph (a) of this section does not require a licensee to use any particular industry standard. Devices may also contain functions that are not operational in U.S. Territories.

[79 FR 32413, June 4, 2014, as amended at 79 FR 48539, Aug. 15, 2014]

§ 27.77 Restriction on mobile and portable equipment in the 1695–1710 MHz and 1755–1780 MHz bands.

Mobile and portable stations in the 1695–1710 MHz and 1755–1780 MHz bands may operate only when under the control of a base station. Base stations that enable mobile or portable equipment to operate in the 1695–1710 MHz and 1755–1780 MHz band are subject to prior coordination requirements. See § 27.1134 (Protection of Federal Government operations).

[79 FR 32413, June 4, 2014]

Subpart D—Competitive Bidding Procedures for the 2305–2320 MHz and 2345–2360 MHz Bands

§ 27.201 WCS in the 2305–2320 MHz and 2345–2360 MHz bands subject to competitive bidding.

Mutually exclusive initial applications for WCS licenses in the 2305–2320 MHz and 2345–2360 MHz bands are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

[67 FR 45373, July 9, 2002]

§§ 27.202–27.208 [Reserved]

§ 27.209 Designated entities; bidding credits; unjust enrichment.

(a) Designated entities entitled to preferences in the WCS in the 2305–2320 and 2345–2360 bands auction are small businesses and very small businesses as defined in § 27.110(b). Designated entities will be eligible for bidding credits, as defined in paragraphs (b) and (c) of this section.

(b) A winning bidder that qualifies as a *small business* may use a bidding credit of 25 percent to lower the cost of its winning bid.

(c) A winning bidder that qualifies as a *very small business* may use a bidding credit of 35 percent to lower the cost of its winning bid.

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 2349, Jan. 15, 1998; 65 FR 57268, Sept. 21, 2000; 67 FR 45373, July 9, 2002]

§ 27.210 Definitions.

(a) *Scope.* The definitions in this section apply to § 27.209, unless otherwise specified in those sections.

(b) *Small and very small business.* (1) A *small business* is an entity that, together with its affiliates and controlling interests, has average annual gross revenues that are not more than $40 million for the preceding three years.

(2) *A very small business* is an entity that, together with its affiliates and controlling interests, has average annual gross revenues that are not more than $15 million for the preceding three years.

[67 FR 45373, July 9, 2002, as amended at 68 FR 43000, July 21, 2003]

Subpart E—Application, Licensing, and Processing Rules for WCS

§ 27.301 [Reserved]

§ 27.302 Eligibility.

(a) General. Authorizations will be granted upon proper application if:

(1) The applicant is qualified under the applicable laws and the regulations, policies and decisions issued under those laws, including § 27.12;

(2) There are frequencies available to provide satisfactory service; and

(3) The public interest, convenience or necessity would be served by a grant.

(b) Alien Ownership. A WCS authorization may not be granted to or held by an entity not meeting the requirements of section 310 of the Communications Act of 1934, as amended, 47 U.S.C. section 310 insofar as applicable to the particular service in question.

§ 27.303 Upper 700 MHz commercial and public safety coordination zone.

(a) *General.* CMRS operators are required, prior to commencing operations on fixed or base station transmitters

on the 776–787 MHz band that are located within 500 meters of existing or planned public safety base station receivers, to submit a description of their proposed facility to a Commission-approved public safety coordinator.

(i) The frequency or frequencies on which the facility will operate;

(ii) Antenna location and height;

(iii) Type of emission;

(iv) Effective radiated power;

(v) A description of the area served and the operator's name.

(2) It is the CMRS operator's responsibility to determine whether referral is required for stations constructed in its area of license. Public safety base stations are considered ''planned'' when public safety operators have notified, or initiated coordination with, a Commission-approved public safety coordinator.

(b) CMRS operators must wait at least 10 business days after submission of the required description before commencing operations on the referenced facility, or implementing modifications to an existing facility.

(c) The potential for harmful interference between the CMRS and public safety facilities will be evaluated by the public safety coordinator.

(1) With regard to existing public safety facilities, the coordinator's determination to disapprove a proposed CMRS facility (or modification) to be located within 500 meters of the public safety facilities will be presumed correct, but the CMRS operator may seek Commission review of such determinations. Pending Commission review, the CMRS operator will not activate the facility or implement proposed modifications.

(2) With regard to proposed public safety facilities, the coordinator's determination to disapprove a proposed CMRS facility (or modification) to be located within 500 meters of the public safety facilities will be presumed correct, but the CMRS operator may seek Commission review and, pending completion of review, operate the facility during construction of the public safety facilities. If coordination or Commission review has not been completed when the public safety facilities are ready to operate, the CMRS operator must cease operations pending completion of coordination or Commission review. Such interim operation of the CMRS facility within the coordination zone (or implementation of modifications) will not be relied on by the Commission in its subsequent review and determination of measures necessary to control interference, including relocation or modification of the CMRS facility.

(d) If, in the event of harmful interference between facilities located within 500 meters proximity, the parties are unable, with the involvement of the coordinator, to resolve the problem by mutually satisfactory arrangements, the Commission may impose restrictions on the operations of any of the parties involved.

[67 FR 49245, July 30, 2002, as amended at 72 FR 48853, Aug. 24, 2007; 79 FR 599, Jan. 6, 2014]

§§ 27.304–27.307 [Reserved]

§ 27.308 Technical content of applications.

All applications required by this part shall contain all technical information required by the application forms or associated public notice(s). Applications other than initial applications for a WCS license must also comply with all technical requirements of the rules governing the applicable frequency band (see subparts C, D, F, and G of this part, as appropriate).

[65 FR 57268, Sept. 21, 2000]

§§ 27.310–27.320 [Reserved]

§ 27.321 Mutually exclusive applications.

(a) Two or more pending applications are mutually exclusive if the grant of one application would effectively preclude the grant of one or more of the others under the Commission's rules governing the Wireless Communications Services involved. The Commission uses the general procedures in this section for processing mutually exclusive applications in the Wireless Communications Services.

(b) An application will be entitled to comparative consideration with one or more conflicting applications only if the Commission determines that such comparative consideration will serve the public interest.

§§ 27.322–27.325 [Reserved]

Subpart F—Competitive Bidding Procedures for the 698–806 MHz Band

SOURCE: 65 FR 3149, Jan. 20, 2000, unless otherwise noted.

§ 27.501 746–758 MHz, 775–788 MHz, and 805–806 MHz bands subject to competitive bidding.

Mutually exclusive initial applications for licenses in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

[79 FR 600, Jan. 6, 2014]

§ 27.502 Designated entities.

Eligibility for small business provisions:

(a)(1) A small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $40 million for the preceding three years.

(2) A very small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $15 million for the preceding three years.

(b) *Bidding credits.* A winning bidder that qualifies as a small business or a consortium of small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter. A winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter.

[72 FR 63499, Nov. 9, 2007]

Subpart G— Guard Band A and B Blocks (757–758/787–788 MHz and 775–776/805–806 MHz Bands)

SOURCE: 65 FR 17605, Apr. 4, 2000, unless otherwise noted.

§ 27.601 Authority and coordination requirements.

(a) Subject to the provisions of § 27.2(b), a Guard Band licensee may allow a spectrum lessee, pursuant to a spectrum lease arrangement under part 1, subpart X of this chapter, to construct and operate stations at any available site within the licensed area and on any channel for which the Guard Band licensee is licensed, provided such stations comply with Commission Rules and coordination requirements.

(b) Subject to the provisions of § 27.2(b), a Guard Band licensee may allow a spectrum lessee, pursuant to a spectrum lease arrangement under part 1, subpart X of this chapter, to delete, move or change the operating parameters of any of the user's stations that are covered under the Guard Band licensee's authorization without prior Commission approval, provided such stations comply with Commission Rules and coordination requirements.

(c) *Frequency coordination.* (1) A Guard Band licensee, or a spectrum lessee operating at 775–776 MHz and 805–806 MHz pursuant to a spectrum lease arrangement under §§ 1.9030 and 1.9035 of this chapter, must notify Commission-recognized public safety frequency coordinators for the 700 MHz Public Safety band and adjacent-area Guard Band licensees within one business day after the licensee or the spectrum lessee has:

(i) Coordinated a new station or modification of an existing station; or

(ii) Filed an application for an individual station license with the Commission.

(2) The notification required in paragraph (c)(1) of this section must include, at a minimum—

(i) The frequency or frequencies coordinated;

(ii) Antenna location and height;

(iii) Type of emission;

(iv) Effective radiated power;

(v) A description of the service area, date of coordination, and user name or, in the alternative, a description of the type of operation.

(3) In the event a licensee partitions its service area or disaggregates its spectrum, it is required to submit the notification required in paragraph

(c)(1) of this section to other Guard Band licensees in the same geographic area.

(4) Entities coordinated by a Guard Band licensee, or a spectrum lessee operating pursuant to a spectrum lease arrangement under §§1.9030 and 1.9035 of this chapter, must wait at least 10 business days after the notification required in paragraph (c)(1) of this section before operating under the license.

(d) Where a deletion, move or change authorized under paragraph (b) of this section constitutes a discontinuance, reduction, or impairment of service under §27.66 or where discontinuance, reduction or impairment of service results from an involuntary act subject to §27.66(a), the licensee must comply with the notification and authorization requirements set forth in that section.

[72 FR 27712, May 16, 2007, as amended at 72 FR 48853, Aug. 24, 2007]

§27.602 Lease agreements.

Guard Band licensees may enter into spectrum leasing arrangements under part 1, subpart X of this chapter regarding the use of their licensed spectrum by spectrum lessees, subject to the following conditions:

(a) The spectrum lease agreement between the licensee and the spectrum lessee must specify in detail the operating parameters of the spectrum lessee's system, including power, maximum antenna heights, frequencies of operation, base station location(s), area(s) of operation, and other parameters specified in Commission rules for the use of spectrum identified in §27.5(b)(1) and (b)(2).

(b) The spectrum lease agreement must require the spectrum lessee to use Commission-approved equipment where appropriate and to complete post-construction proofs of system performance prior to system activation.

[72 FR 27713, May 16, 2007]

§27.604 Limitation on licenses won at auction.

(a) For the first auction of licenses in Blocks A and B, as defined in §27.5, no applicant may be deemed the winning bidder of both a Block A and a Block B license in a single geographic service area.

(b) For purposes of paragraph (a) of this section, licenses will be deemed to be won by the same bidder if an entity that wins one license at the auction is an affiliate of any other entity that wins a license at the auction.

§27.607 Performance requirements and annual reporting requirement.

(a) Guard Band licensees are subject to the performance requirements specified in §27.14(a).

(b) Guard Band licensees are required to file an annual report providing the Commission with information about the manner in which their spectrum is being utilized. Such reports shall be filed with the Commission on a calendar year basis, no later than the March 1 following the close of each calendar year, unless another filing date is specified by Public Notice.

(c) Guard Band licensees must, at a minimum, include the following information in their annual reports:

(1) The total number of spectrum lessees;

(2) The amount of the licensee's spectrum being used pursuant to spectrum lease agreements;

(3) The nature of the spectrum use of the licensee's customers; and,

(4) The length of term of each spectrum lease agreement, and whether the agreement is a spectrum manager lease agreement, or a *de facto* transfer lease agreement.

(d) The specific information that licensees will provide and the procedures that they will follow in submitting their annual reports will be announced in a Public Notice issued by the Wireless Telecommunications Bureau.

[72 FR 27713, May 16, 2007]

Subpart H—Competitive Bidding Procedures for the 698–746 MHz Band

SOURCE: 67 FR 5512, Feb. 6, 2002, unless otherwise noted.

§27.701 698–746 MHz bands subject to competitive bidding.

Mutually exclusive initial applications for licenses in the 698–746 MHz band are subject to competitive bidding. The general competitive bidding

procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

[67 FR 45374, July 9, 2002]

§ 27.702 Designated entities.

(a) *Eligibility for small business provisions.* (1) An entrepreneur is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $3 million for the preceding three years. This definition applies only with respect to licenses in Block C (710–716 MHz and 740–746 MHz) as specified in § 27.5(c)(1).

(2) A very small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $15 million for the preceding three years.

(3) A small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $40 million for the preceding three years.

(b) *Bidding credits.* A winning bidder that qualifies as an entrepreneur, as defined in this section, or a consortium of entrepreneurs may use the bidding credit specified in § 1.2110(f)(2)(i) of this chapter. A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter. A winning bidder that qualifies as a small business, as defined in this section, or a consortium of small businesses may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter.

[67 FR 5512, Feb. 6, 2002, as amended at 68 FR 43000, July 21, 2003]

Subpart I—1.4 GHz Band

SOURCE: 67 FR 41855, June 20, 2002, unless otherwise noted.

§ 27.801 Scope.

This subpart sets out the regulations governing service in the paired 1392–1395 MHz and 1432–1435 MHz bands as well as the unpaired 1390–1392 MHz band (1.4 GHz band).

§ 27.802 Permissible communications.

Licensees in the paired 1392–1395 MHz and 1432–1435 MHz bands and unpaired 1390–1392 MHz band are authorized to provide fixed or mobile service, except aeronautical mobile service, subject to the technical requirements of this subpart.

§ 27.803 Coordination requirements.

(a) Licensees in the 1.4 GHz band will be issued geographic area licenses in accordance with the service areas listed in § 27.6(d) and (e).

(b) Licensees in the 1.4 GHz Service must file a separate station application with the Commission and obtain an individual station license, prior to construction or operation, of any station:

(1) That requires submission of an Environmental Assessment under part 1, § 1.1307 of this chapter;

(2) That requires international coordination;

(3) That operates in areas listed in part 1, § 1.924 of this chapter; or

(4) That requires approval of the Frequency Advisory Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC). Licensees in the 1432–1435 MHz band must receive FAS approval, prior to operation of fixed sites or mobile units within the NTIA recommended protection radii of the Government sites listed in footnote US83 of § 2.106 of this chapter.

(c) Prior to construction of a station, a licensee in the 1.4 GHz Band must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by part 17 of this chapter.

(d) It is the licensee's responsibility to determine whether an individual station needs referral to the Commission.

(e) The application required in paragraph (b) of this chapter must be filed on the Universal Licensing System.

[67 FR 41855, June 20, 2002, as amended at 69 FR 17958, Apr. 6, 2004; 80 FR 38908, July 7, 2015]

§ 27.804 Field strength limits at WMTS facility.

For any operation in the 1392–1395 MHz band, the predicted or measured field strength—into the WMTS band at

1395–1400 MHz—shall not exceed 150 uV/m at the location of any registered WMTS healthcare facility. When performing measurements to determine compliance with this provision, measurement instrumentation employing an average detector and a resolution bandwidth of 1 MHz may be used, provided it accurately represents the true interference potential of the equipment.

§ 27.805 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a 1.4 GHz band licensee's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a 1.4 GHz band licensee and is subject to the obligations and restrictions on the 1.4 GHz band license as set forth in this subpart.

§ 27.806 1.4 GHz service licenses subject to competitive bidding.

Mutually exclusive initial applications for 1.4 GHz Band licenses in the paired 1392–1395 MHz and 1432–1435 MHz bands as well as the unpaired 1390–1392 MHz band are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

§ 27.807 Designated entities.

(a) Eligibility for small business provisions for 1.4 GHz band licenses in the paired 1392–1395 MHz and 1432–1435 MHz bands and the unpaired 1390–1392 MHz band.

(1) A very small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $15 million for the preceding three years.

(2) A small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $40 million for the preceding three years.

(b) *Bidding credits.* A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter. A winning bidder that qualifies as a small business, as defined in this section, or a consortium of small businesses may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter.

[67 FR 41855, June 20, 2002, as amended at 68 FR 43000, July 21, 2003]

Subpart J—1670–1675 MHz Band

SOURCE: 67 FR 41856, June 20, 2002, unless otherwise noted.

§ 27.901 Scope.

This subpart sets out the regulations governing service in the 1670–1675 MHz band (1670–1675 MHz band).

§ 27.902 Permissible communications.

Licensees in the 1670–1675 MHz band are authorized to provide fixed or mobile service, except aeronautical mobile service, subject to the technical requirements of this subpart.

§ 27.903 Coordination requirements.

(a) The licensee in the 1670–1675 MHz band will be issued a geographic area license on a nationwide basis in accordance with § 27.6(f).

(b) Licensees in the 1670–1675 MHz band must file a separate station application with the Commission and obtain an individual station license, prior to construction or operation, of any station:

(1) That requires submission of an Environmental Assessment under part 1, § 1.1307 of this chapter;

(2) That requires international coordination;

(3) That operates in areas listed under part 1, § 1.924 of this chapter.

(c) The application required in paragraph (b) of this section must be filed on the Universal Licensing System.

(d) Prior to construction of a station, a licensee must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by part 17 of this chapter.

(e) It is the licensee's responsibility to determine whether an individual station requires referral to the Commission.

[67 FR 41856, June 20, 2002, as amended at 69 FR 17958, Apr. 6, 2004]

§ 27.904 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a 1670–1675 MHz band licensee's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a 1670–1675 MHz licensee and is subject to the obligations and restrictions on the 1670–1675 MHz license as set forth in this subpart.

§ 27.905 1670–1675 MHz service licenses subject to competitive bidding.

Mutually exclusive initial applications for the 1670–1675 MHz Band license are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

§ 27.906 Designated entities.

(a) *Eligibility for small business provisions.* (1) A very small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $15 million for the preceding three years.

(2) A small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $40 million for the preceding three years.

(b) *Bidding credits.* A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter. A winning bidder that qualifies as a small business, as defined in this section, or a consortium of small businesses may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter.

[67 FR 41856, June 20, 2002, as amended at 68 FR 43000, July 21, 2003]

Subpart K—1915–1920 MHz and 1995–2000 MHz

SOURCE: 78 FR 50257, Aug. 16, 2013, unless otherwise noted.

LICENSING AND COMPETITIVE BIDDING PROVISIONS

§ 27.1001 1915–1920 MHz and 1995–2000 MHz bands subject to competitive bidding.

Mutually exclusive initial applications for 1915–1920 MHz and 1995–2000 MHz band licenses are subject to competitive bidding. The general competitive bidding procedures set forth in 47 CFR part 1, subpart Q will apply unless otherwise provided in this subpart.

§ 27.1002 Designated entities in the 1915–1920 MHz and 1995–2000 MHz bands.

Eligibility for small business provisions:

(a)(1) A small business is an entity that, together with its affiliates, its controlling interests, the affiliates of its controlling interests, and the entities with which it has an attributable material relationship, has average gross revenues not exceeding $40 million for the preceding three years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests, the affiliates of its controlling interests, and the entities with which it has an attributable material relationship, has average gross revenues not exceeding $15 million for the preceding three years.

(b) *Bidding credits.* A winning bidder that qualifies as a small business as defined in this section or a consortium of small businesses may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter. A winning bidder that qualifies as a very small business as defined in this section or a consortium of very small businesses may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter.

EFFECTIVE DATE NOTE: At 80 FR 56816, Sept. 18, 2015, § 27.1002 was amended by revising paragraph (a), effective Nov. 17, 2015. For the convenience of the user, the revised text is set forth as follows:

§ 27.1002 Designated entities in the 1915–1920 MHz and 1995–2000 MHz bands.

* * * * *

(a)(1) A small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling

interests, has average gross revenues not exceeding $40 million for the preceding three years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding $15 million for the preceding three years.

* * * * *

REIMBURSEMENT OBLIGATION OF LICENSEES AT 1915–1920 MHZ AND 1995–2000 MHZ

§ 27.1021 Reimbursement obligation of licensees at 1915–1920 MHz.

A licensee in the 1915–1920 MHz band (Lower H Block) shall, within 30 days of grant of its long-form application, reimburse 25 percent of the total relocation costs incurred by UTAM, Inc. for relocating and clearing incumbent Fixed Microwave Service (FS) licensees from the 1910–1930 MHz band on a *pro rata* shared basis with other Lower H Block licensees as set forth in paragraphs (a) through (e) of this section.

(a)(1) If Lower H Block licenses granted as a result of the first auction for this spectrum cover, collectively, at least forty (40) percent of the nation's population, the amount owed to UTAM, Inc. by each individual Lower H Block licensee (reimbursement amount owed or RN) will be determined by dividing the gross winning bid (GWB) for each individual Lower H Block license (*i.e.*, an Economic Area (EA)) by the sum of the gross winning bids for all Lower H Block licenses for which there is a winning bid in the first auction, and then multiplying by $12,629,857.

RN = (EA GWB ÷ Sum of GWBs) × $12,629,857.00

(2) Except as provided in paragraphs (b) and (c) of this section, a licensee that obtains a license for a market in which no license is granted as a result of the first Lower H Block auction will not have a reimbursement obligation to UTAM, Inc.

(b) If Lower H Block licenses granted as a result of the first auction for this spectrum cover, collectively, less than forty (40) percent of the nation's population, then the pro rata amount that the licensee of an individual Lower H Block license must reimburse UTAM, Inc. shall be calculated by dividing the population of the individual EA by the total U.S. population, and then multiplying by $12,629,857. In this event, the same population data, e.g., 2010, used to calculate the RNs for Lower H Block licenses granted as a result of the first auction will apply to subsequent auctions of Lower H Block licenses that were not granted as a result of an earlier auction of Lower H Block licenses.

RN = (EA POP ÷ U.S. POP) × $12,629,857.00

(c) A winning bidder of a Lower H Block license that is not granted a license for any reason will be deemed to have triggered a reimbursement obligation to UTAM, Inc. This obligation will be owed to UTAM, Inc. by the licensee acquiring the Lower H Block license through a subsequent auction. The amount owed by the licensee acquiring the Lower H Block license at such auction will be the RN calculated for the EA license based on the first auction (calculated under paragraphs (a) or (b), as applicable, of this section).

(d) For purposes of compliance with this section, licensees should determine population based on 2010 U.S. Census Data or such other data or measurements that the Wireless Telecommunications Bureau proposes and adopts under the notice and comment process for the auction procedures.

(e) A payment obligation owed by a Lower H Block licensees under this section shall be made within thirty (30) days of the grant of the license (*i.e.*, grant of the long form application).

§ 27.1031 Reimbursement obligation of licensees at 1995–2000 MHz.

A licensee in the 1995–2000 MHz band (Upper H Block) shall, within 30 days of grant of its long-form application, reimburse one-seventh of the eligible expenses incurred by Sprint Nextel, Inc. (Sprint) for relocating and clearing Broadcast Auxiliary Service (BAS), Cable Television Relay Service (CARS), and Local Television Transmission Service (LTTS) incumbents from the 1990–2025 MHz band, on a *pro rata* shared basis with other Upper H Block licensees as set forth in paragraphs (a) through (e) of this section.

(a)(1) If Upper H Block licenses granted as a result of the first auction for

this spectrum cover, collectively, at least forty (40) percent of the nation's population, the amount owed to Sprint by the winning bidder of each individual Upper H Block license granted as a result of the first auction will be determined by dividing the gross winning bid (GWB) for each individual Upper H Block license (*i.e.*, an Economic Area (EA)) by the sum of the gross winning bids for all Upper H Block licenses for which there is a winning bid in the first auction, and then multiplying by $94,875,516.

RN = (EA GWB ÷ Sum of GWBs) × $94,875,516

(2) Except as provided in paragraphs (b) and (c) of this section, a licensee that obtains a license for a market in which no license was granted as a result of the first Upper H Block auction will not have a reimbursement obligation to Sprint.

(b) If Upper H Block licenses granted as a result of the first auction for this spectrum cover, collectively, less than forty (40) percent of the nation's population, then the amount that the licensee of an individual Upper H Block license must reimburse Sprint shall be calculated by dividing the population of the individual EA by the total U.S. population, and then multiplying by $94,875,516. In this event, the same population data, e.g., 2010, used to calculate the RNs for Upper H Block licenses granted as a result of the first auction will apply to subsequent auctions of Upper H Block licenses that were not granted as a result of an earlier auction of Upper H Block licenses.

RN = (EA POP ÷ U.S. POP) × $94,875,516

(c) A winning bidder of an Upper H Block license that is not granted a license for any reason will be deemed to have triggered a reimbursement obligation to Sprint. This obligation will be owed to Sprint by the licensee acquiring the Upper H Block license through a subsequent auction. The amount owed by the licensee acquiring the EA license at such auction will be based on the RN calculated for the EA license based on the first auction (calculated under paragraphs (a) or (b), as applicable, of this section).

(d) For purposes of compliance with this section, licensees should determine population based on 2010 U.S. Census Data or such other data or measurements that the Wireless Telecommunications Bureau proposes and adopts under the notice and comment process for the auction procedures.

(e) A payment obligation owed by a Upper H Block licensees under this section shall be made within thirty (30) days of the grant of the license (i.e., grant of the long form application).

§ 27.1041 Termination of cost-sharing obligations.

(a) The cost-sharing obligation adopted in this subpart for the Lower H Block and for the Upper H Block will sunset ten years after the first license is issued in the respective band.

(b) A Lower H Block licensee and an Upper H Block licensee must satisfy in full its payment obligations under this subpart K within thirty days of the grant of its long-form application. The failure to timely satisfy a payment obligation in full prior to the applicable sunset date will not terminate the debt owed or a party's right to collect the debt.

Subpart L—1695–1710 MHz, 1710–1755 MHz, 1755–1780 MHz, 2110–2155 MHz, 2155–2180 MHz, 2180–2200 MHz Bands

SOURCE: 69 FR 5716, Feb. 6, 2004, unless otherwise noted.

LICENSING AND COMPETITIVE BIDDING PROVISIONS

§ 27.1101 1710–1755 MHz and 2110–2155 MHz bands subject to competitive bidding.

Mutually exclusive initial applications for 1710–1755 MHz and 2110–2155 MHz band licenses are subject to competitive bidding. The general competitive bidding procedures set forth in 47 CFR part 1, subpart Q will apply unless otherwise provided in this subpart.

§ 27.1102 Designated Entities in the 1710–1755 MHz and 2110–2155 MHz bands.

(a) *Eligibility for small business provisions.* (1) A small business is an entity that, together with its affiliates, its controlling interests and the affiliates

of its controlling interests, has average gross revenues that are not more than $40 million for the preceding three years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than $15 million for the preceding three years.

(b) *Bidding credits.* (1) A winning bidder that qualifies as a small business, as defined in this section, or a consortium of small businesses may use a bidding credit of 15 percent, as specified in §1.2110(f)(2)(iii) of this chapter, to lower the cost of its winning bid on any of the licenses in this part.

(2) A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use a bidding credit of 25 percent, as specified in §1.2110(f)(2)(ii) of this chapter, to lower the cost of its winning bid on any of the licenses in this part.

§ 27.1103 2000–2020 MHz and 2180–2200 MHz bands subject to competitive bidding.

Mutually exclusive initial applications for 2000–2020 MHz and 2180–2200 MHz band licenses are subject to competitive bidding. The general competitive bidding procedures set forth in 47 CFR part 1, subpart Q will apply unless otherwise provided in this subpart.

[78 FR 8270, Feb. 5, 2013]

§ 27.1104 Designated Entities in the 2000–2020 MHz and 2180–2200 MHz bands.

Eligibility for small business provisions:

(a) *Small business.* (1) A small business is an entity that, together with its affiliates, its controlling interests, the affiliates of its controlling interests, and the entities with which it has an attributable material relationship, has average gross revenues not exceeding $40 million for the preceding three years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests, the affiliates of its controlling interests, and the entities with which it has an attributable material relationship, has average gross revenues not exceeding $15 million for the preceding three years.

(b) *Bidding credits.* A winning bidder that qualifies as a small business as defined in this section or a consortium of small businesses may use the bidding credit specified in §1.2110(f)(2)(iii) of this chapter. A winning bidder that qualifies as a very small business as defined in this section or a consortium of very small businesses may use the bidding credit specified in §1.2110(f)(2)(ii) of this chapter.

[78 FR 8270, Feb. 5, 2013]

EFFECTIVE DATE NOTE: At 80 FR 56816, Sept. 18, 2015, §27.1104 was amended by revising paragraph (a), effective Nov. 17, 2015. For the convenience of the user, the revised text is set forth as follows:

§ 27.1104 Designated Entities in the 2000–2020 MHz and 2180–2200 MHz bands.

* * * * *

(a) *Small business.* (1) A small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding $40 million for the preceding three years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding $15 million for the preceding three years.

* * * * *

§ 27.1105 1695–1710 MHz, 1755–1780 MHz and 2155–2180 MHz bands subject to competitive bidding.

Mutually exclusive initial applications for 1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz band licenses are subject to competitive bidding. The general competitive bidding procedures set forth in 47 CFR part 1, subpart Q will apply unless otherwise provided in this subpart.

[79 FR 32413, June 4, 2014]

§ 27.1106 Designated Entities in the 1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands.

Eligibility for small business provisions:

(a) *Small business.* (1) A small business is an entity that, together with its affiliates, its controlling interests, the affiliates of its controlling interests, and the entities with which it has an attributable material relationship, has average gross revenues not exceeding $40 million for the preceding three (3) years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests, the affiliates of its controlling interests, and the entities with which it has an attributable material relationship, has average gross revenues not exceeding $15 million for the preceding three (3) years.

(b) *Bidding credits.* A winning bidder that qualifies as a small business as defined in this section or a consortium of small businesses may use the bidding credit specified in §1.2110(f)(2)(iii) of this chapter. A winning bidder that qualifies as a very small business as defined in this section or a consortium of very small businesses may use the bidding credit specified in §1.2110(f)(2)(ii) of this chapter.

[79 FR 32413, June 4, 2014]

EFFECTIVE DATE NOTE: At 80 FR 56816, Sept. 18, 2015, §27.1106 was amended by revising paragraph (a), effective Nov. 17, 2015. For the convenience of the user, the revised text is set forth as follows:

§ 27.1106 Designated Entities in the 1695–1710 MHz, 1755–1780 MHz, and 2155–2180 MHz bands.

* * * * *

(a) *Small business.* (1) A small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding $40 million for the preceding three (3) years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding $15 million for the preceding three (3) years.

* * * * *

RELOCATION OF INCUMBENTS

§ 27.1111 Relocation of fixed microwave service licensees in the 2110–2150 and 2160–2200 MHz bands.

Part 22, subpart E and part 101, subpart B of this chapter contain provisions governing the relocation of incumbent fixed microwave service licensees in the 2110–2150 MHz and 2160–2200 MHz bands.

[79 FR 32414, June 4, 2014]

PROTECTION OF INCUMBENT OPERATIONS

§ 27.1131 Protection of part 101 operations.

All AWS licensees, prior to initiating operations from any base or fixed station, must coordinate their frequency usage with co-channel and adjacent-channel incumbent, 47 CFR part 101 fixed-point-to-point microwave licensees operating in the 2110–2150 MHz and 2160–2200 MHz bands. Coordination shall be conducted in accordance with the provisions of §24.237 of this chapter.

[79 FR 32414, June 4, 2014]

§ 27.1132 Protection of incumbent operations in the 2150–2160/62 MHz band.

All AWS licensees, prior to initiating operations from any base or fixed station in the 2110–2180 MHz band, shall follow the provisions of §27.1255.

[79 FR 32414, June 4, 2014]

§ 27.1133 Protection of part 74 and part 78 operations.

AWS operators must protect previously licensed Broadcast Auxiliary Service (BAS) or Cable Television Radio Service (CARS) operations in the adjacent 2025–2110 MHz band. In satisfying this requirement AWS licensees must, before constructing and operating any base or fixed station, determine the location and licensee of all BAS or CARS stations authorized in their area of operation, and coordinate their planned stations with those licensees. In the event that mutually satisfactory coordination agreements cannot be reached, licensees may seek the assistance of the Commission, and the Commission may, at its discretion,

impose requirements on one or both parties.

§ 27.1134 Protection of Federal Government operations.

(a) *Protection of Department of Defense operations in the 1710–1755 MHz band.* The Department of Defense (DoD) operates communications systems in the 1710–1755 MHz band at 16 protected facilities, nationwide. AWS licensees must accept any interference received from these facilities and must protect the facilities from interference. AWS licensees shall protect the facilities from interference by restricting the operation of their base and fixed stations from any locations that could potentially permit AWS mobile, fixed, and portable stations transmitting in the 1710–1755 MHz band to cause interference to government operations within the radii of operation of the 16 facilities (the radii of operation of each facility is indicated in the third column of Table 1 immediately following paragraph (a)(3) of this section). In addition, AWS licensees shall be required to coordinate any operations that could permit mobile, fixed, and portable stations to operate in the specified areas of the 16 facilities, as defined in paragraph (a)(3) of this section. Protection of these facilities in this manner shall take place under the following conditions:

(1) At the Yuma, Arizona and Cherry Point, North Carolina facilities, all operations shall be protected indefinitely.

(2) At the remaining 14 facilities, airborne and military test range operations shall be protected until such time as these systems are relocated to other spectrum, and precision guided munitions (PGM) operations shall be protected until such time as these systems are relocated to other spectrum or until PGM inventory at each facility is exhausted, whichever occurs first.

(3) AWS licensees whose transmit operations in the 1710–1755 MHz band consist of fixed or mobile operations with nominal transmit EIRP values of 100 mW or less and antenna heights of 1.6 meters above ground or less shall coordinate their services around the 16 sites at the distance specified in row a. of Table 2. AWS licensees whose transmit operations in the 1710–1755 MHz band consist of fixed or mobile operations with nominal transmit EIRP values of 1 W or less and antenna heights of 10 meters above ground or less shall coordinate their services around the 16 sites at the distance specified in row b. of Table 2. These coordination distances shall be measured from the edge of the operational distances indicated in the third column of Table 1, and coordination with each affected DoD facility shall be accomplished through the Commander of the facility.

TABLE 1—PROTECTED DEPARTMENT OF DEFENSE FACILITIES

Location	Coordinates	Radius of operation (km)
Cherry Point, NC	34°58′ N, 076°56′ W	100
Yuma, AZ	32°32′ N, 113°58′ W	120
China Lake, CA	35°41′ N, 117°41′ W	120
Eglin AFB, FL	30°29′ N, 086°31′ W	120
Pacific Missile Test Range/Point Mugu, CA	34°07′ N, 119°30′ W	80
Nellis AFB, NV	36°14′ N, 115°02′ W	160
Hill AFB, UT	41°07′ N, 111°58′ W	160
Patuxent River, MD	38°17′ N, 076°25′ W	80
White Sands Missile Range, NM	33°00′ N, 106°30′ W	80
Fort Irwin, CA	35°16′ N, 116°41′ W	50
Fort Rucker, AL	31°13′ N, 085°49′ W	50
Fort Bragg, NC	35°09′ N, 079°01′ W	50
Fort Campbell, KY	36°41′ N, 087°28′ W	50
Fort Lewis, WA	47°05′ N, 122°36′ W	50
Fort Benning, GA	32°22′ N, 084°56′ W	50
Fort Stewart, GA	31°52′ N, 081°37′ W	50

TABLE 2—COORDINATION DISTANCES FOR THE PROTECTED DEPARTMENT OF DEFENSE FACILITIES

1710–1755 MHz transmit operations	Coordination distance (km)
a. EIRP < = 100 mW, antenna height < = 1.6 m AG	35
b. EIRP < = 1 W, antenna height < = 10 m AG	55

(b) *Protection of non-DoD operations in the 1710–1755 MHz and 1755–1761 MHz bands.* Until such time as non-DoD systems operating in the 1710–1755 MHz and 1755–1761 MHz bands are relocated to other spectrum, AWS licensees shall protect such systems by satisfying the appropriate provisions of TIA Telecommunications Systems Bulletin 10–F, ''Interference Criteria for Microwave Systems,'' May, 1994 (TSB 10–F).

(c) *Protection of Federal operations in the 1675–1710 MHz band*—(1) *27 Protection Zones.* Within 27 Protection Zones, prior to operating a base station that enables mobile or portable stations to transmit in the 1695–1710 MHz band, licensees must successfully coordinate such base station operations with Federal Government entities operating meteorological satellite Earth-station receivers in the 1675–1710 MHz band. See 47 CFR 2.106, footnote US 88, for the 27 Protection Zones and other details.

(2) *Operation outside of 27 Protection Zones.* Non-Federal operations, for mobile and portable stations operating at a maximum EIRP of 20 dBm, are permitted outside of the protection zones without coordination. All non-Federal operations for mobile and portables operating at a maximum EIRP of greater than 20 dBm and up to 30 dBm must be coordinated nationwide. All such operations may not cause harmful interference to the Federal operations protected in 47 CFR 2.106, footnote US 88.

(3) *Interference.* If protected Federal operations receive harmful interference from AWS operations in the 1695–1710 MHz band, an AWS licensee must, upon notification, modify its operations and/or technical parameters as necessary to eliminate the interference.

(4) *Point of contact.* AWS licensees in the 1695–1710 MHz band must provide and maintain a point of contact at all times so that immediate contact can be made should interference against protected Federal sites occur.

(5) *Coordination procedures.* Federal use of the radio spectrum is generally governed by the National Telecommunications and Information Administration (NTIA) while non-Federal use is governed by the Commission. As such, any guidance or details concerning Federal/non-Federal coordination must be issued jointly by NTIA and the Commission. The Commission may jointly issue with NTIA one or more public notices with guidance or details concerning the coordination procedures for the 1695–1710 MHz band.

(6) *Requirements for licensees operating in the 1710–1755 MHz band.* AWS licensees operating fixed stations in the 1710–1755 MHz band, if notified that such stations are causing interference to radiosonde receivers operating in the Meteorological Aids Service in the 1675–1700 MHz band or a meteorological-satellite earth receiver operating in the Meteorological-Satellite Service in the 1675–1710 MHz band, shall be required to modify the stations' location and/or technical parameters as necessary to eliminate the interference.

(d) *Recognition of NASA Goldstone facility operations in the 2110–2120 MHz band.* The National Aeronautics and Space Administration (NASA) operates the Deep Space Network (DSN) in the 2110–2120 MHz band at Goldstone, California (*see* Table 3). NASA will continue its operations of high power transmitters (nominal EIRP of 105.5 dBW with EIRP up to 119.5 dBW used under emergency conditions) in this band at this location. AWS licensees must accept any interference received from the Goldstone DSN facility in this band.

TABLE 3—LOCATION OF THE NASA GOLDSTONE DEEP SPACE FACILITY

Location	Coordinates	Maximum transmitter output power
Goldstone, California	35°18′ N 116°54′ W	500 kW

(e) *Protection of Federal operations in the 2200–2290 MHz band*—(1) *Default emission limits.* Except as provided in paragraph (e)(2) of this section, the following default out-of-band emissions limits shall apply for AWS–4 operations in the 2180–2200 MHz band.

(i) For these AWS–4 operations, the power of any emissions on all frequencies between 2200 and 2290 MHz shall not exceed an EIRP of −100.6 dBW/4 kHz.

(ii) No AWS–4 base station operating in the 2180–2200 MHz band shall be located less than 820 meters from a U.S. Earth Station facility operating in the 2200–2290 MHz band.

(2) *Agreements between AWS–4 operators and Federal government entities.* The out-of-band emissions limits in paragraph (e)(1) of this section may be modified by the private contractual agreement of licensees of AWS–4 operating authority and Federal government entities operating in the 2200–2290 MHz band. Such agreement shall be transmitted to the Commission by the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce. A licensee of AWS–4 operating authority who is a party to such an agreement must maintain a copy of the agreement in its station files and disclose it, upon request, to prospective AWS–4 assignees, transferees, or spectrum lessees, to Federal operators, and to the Commission.

(f) *Protection of Federal operations in the 1755–1780 MHz band.* The Federal Government operates communications systems in the 1755–1780 MHz band. Certain systems are expected to continue to operate in the band indefinitely. All other operations will be relocating to other frequencies or otherwise cease operations in the 1755–1780 MHz band in accordance with 47 CFR part 301. Until such a time as Federal operations in the 1755–1780 MHz bands vacate this spectrum, AWS licensees shall protect such systems and must accept any interference received from these Federal operations. See 47 CFR 2.106, footnote US 91, for details. AWS licensees must successfully coordinate proposed operations with all Federal incumbents prior to operation as follows:

(1) *Protection Zone(s).* A protection zone is established for each Federal operation pursuant to 47 CFR 2.106, footnote US 91. Unless otherwise specified in later Commission actions, the default protection zone is nationwide. A base station which enables mobile or portable stations to transmit in the 1755–1780 MHz band may not operate within the Protection Zone(s) of a Federal operation until the licensee successfully coordinates such base station operations with Federal Government entities as follows depending on the type of Federal incumbent authorization:

(i) *Federal US&P Assignments.* Each AWS licensee must coordinate with each Federal agency that has U.S. and Possessions (US&P) authority prior to its first operations in its licensed area to reach a coordination arrangement with each US&P agency on an operator-to-operator basis. (Agencies with U.S. and Possessions (US&P) authority do not operate nationwide and may be able to share, prior to relocation, in some areas.)

(ii) *Other Federal Assignments.* Each AWS licensee must successfully coordinate all base station operations within a Protection Zone with the Federal incumbents. The default requirement is a nationwide coordination zone with possible revisions to the Protection Zone and other details to be announced in a Joint FCC/NTIA public notice.

(2) *Interference.* If protected Federal operations receive harmful interference from AWS operations in the 1755–1780 MHz band, an AWS licensee must, upon notification, modify its operations and/or technical parameters as

necessary to eliminate the interference.

(3) *Point of contact.* AWS licensees in the 1755–1780 MHz band must provide and maintain a point of contact at all times so that immediate contact can be made should interference against protected Federal operations occur.

(4) *Coordination procedures.* Federal use of the radio spectrum is generally governed by the National Telecommunications and Information Administration (NTIA) while non-Federal use is governed by the Commission. As such, any guidance or details concerning Federal/non-Federal coordination must be issued jointly by NTIA and the Commission. The Commission may jointly issue with NTIA one or more public notices with guidance or details concerning the coordination procedures for the 1755–1780 MHz band.

[69 FR 5716, Feb. 6, 2004, as amended at 73 FR 50571, Aug. 27, 2008; 78 FR 8270, Jan. 5, 2013; 79 FR 32414, June 4, 2014]

§ 27.1135 Protection of non-Federal Government Meteorological-Satellite operations.

AWS licensees operating fixed stations in the 1710–1755 MHz band, if notified that such stations are causing interference to meteorological-satellite earth receivers operating in the Meteorological-Satellite Service in the 1675–1710 MHz band, shall be required to modify the stations' location and/or technical parameters as necessary to eliminate the interference.

§ 27.1136 Protection of mobile satellite services in the 2000–2020 MHz and 2180–2200 MHz bands.

An AWS licensee of the 2000–2020 MHz and 2180–2200 MHz bands must accept any interference received from duly authorized mobile satellite service operations in these bands. Any such AWS licensees must protect mobile satellite service operations in these bands from harmful interference.

[78 FR 8270, Jan. 5, 2013]

COST-SHARING POLICIES GOVERNING MICROWAVE RELOCATION FROM THE 2110–2150 MHZ AND 2160–2200 MHZ BANDS

SOURCE: Sections 27.1160 through 27.1174 appear at 71 FR 29835, May 24, 2006, unless otherwise noted.

§ 27.1160 Cost-sharing requirements for AWS.

Frequencies in the 2110–2150 MHz and 2160–2200 MHz bands listed in § 101.147 of this chapter have been reallocated from Fixed Microwave Services (FMS) to use by AWS (as reflected in § 2.106 of this chapter). In accordance with procedures specified in § 22.602 and §§ 101.69 through 101.82 of this chapter, AWS entities are required to relocate the existing microwave licensees in these bands if interference to the existing microwave licensee would occur. All AWS entities that benefit from the clearance of this spectrum by other AWS entities or by a voluntarily relocating microwave incumbent must contribute to such relocation costs. AWS entities may satisfy their reimbursement requirement by entering into private cost-sharing agreements or agreeing to terms other than those specified in § 27.1164. However, AWS entities are required to reimburse other AWS entities or voluntarily relocating microwave incumbents that incur relocation costs and are not parties to the alternative agreement. In addition, parties to a private cost-sharing agreement may seek reimbursement through the clearinghouse (as discussed in § 27.1162) from AWS entities or other Emerging Technologies (ET) entities, including Mobile Satellite Service (MSS) operators (for Ancillary Terrestrial Component (ATC) base stations), that are not parties to the agreement. The cost-sharing plan is in effect during all phases of microwave relocation specified in §§ 22.602 and 101.69 of this chapter. If an AWS licensee enters into a spectrum leasing arrangement (as set forth in part 1, subpart X of this chapter) and the spectrum lessee triggers a cost-sharing obligation, the licensee is

the AWS entity responsible for satisfying the cost-sharing obligations under §§ 27.1160–27.1174.

[71 FR 29835, May 24, 2006, as amended at 78 FR 8270, Feb. 5, 2013]

§ 27.1162 Administration of the Cost-Sharing Plan.

The Wireless Telecommunications Bureau, under delegated authority, will select one or more entities to operate as a neutral, not-for-profit clearinghouse(s). This clearinghouse(s) will administer the cost-sharing plan by, *inter alia*, determining the cost-sharing obligation of AWS and other ET entities for the relocation of FMS incumbents from the 2110–2150 MHz and 2160–2200 MHz bands. The clearinghouse filing requirements (see §§ 27.1166(a), 27.1170) will not take effect until an administrator is selected.

§ 27.1164 The cost-sharing formula.

An AWS relocator who relocates an interfering microwave link, *i.e.*, one that is in all or part of its market area and in all or part of its frequency band or a voluntarily relocating microwave incumbent, is entitled to *pro rata* reimbursement based on the following formula:

$$R_N = \frac{C}{N} \times \frac{\left[120 - (T_m)\right]}{120}$$

(a) R_N equals the amount of reimbursement.

(b) C equals the actual cost of relocating the link(s). Actual relocation costs include, but are not limited to, such items as: Radio terminal equipment (TX and/or RX—antenna, necessary feed lines, MUX/Modems); towers and/or modifications; back-up power equipment; monitoring or control equipment; engineering costs (design/path survey); installation; systems testing; FCC filing costs; site acquisition and civil works; zoning costs; training; disposal of old equipment; test equipment (vendor required); spare equipment; project management; prior coordination notification under § 101.103(d) of this chapter; site lease renegotiation; required antenna upgrades for interference control; power plant upgrade (if required); electrical grounding systems; Heating Ventilation and Air Conditioning (HVAC) (if required); alternate transport equipment; and leased facilities. Increased recurring costs represent part of the actual cost of relocation and, even if the compensation to the incumbent is in the form of a commitment to pay five years of charges, the AWS or MSS/ATC relocator is entitled to seek immediate reimbursement of the lump sum amount based on present value using current interest rates, provided it has entered into a legally binding agreement to pay the charges. C also includes voluntarily relocating microwave incumbent's independent third party appraisal of its compensable relocation costs and incumbent transaction expenses that are directly attributable to the relocation, subject to a cap of two percent of the ''hard'' costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. C may not exceed $250,000 per paired link, with an additional $150,000 permitted if a new or modified tower is required.

(c) N equals the number of AWS and MSS/ATC entities that have triggered a cost-sharing obligation. For the AWS relocator, $N = 1$. For the next AWS entity triggering a cost-sharing obligation, $N = 2$, and so on. In the case of a voluntarily relocating microwave incumbent, $N = 1$ for the first AWS entity triggering a cost-sharing obligation. For the next AWS or MSS/ATC entity triggering a cost-sharing obligation, $N = 2$, and so on.

(d) T_m equals the number of months that have elapsed between the month

the AWS or MSS/ATC relocator or voluntarily relocating microwave incumbent obtains reimbursement rights for the link and the month in which an AWS entity triggers a cost-sharing obligation. An AWS or MSS/ATC relocator obtains reimbursement rights for the link on the date that it signs a relocation agreement with a microwave incumbent. A voluntarily relocating microwave incumbent obtains reimbursement rights for the link on the date that the incumbent notifies the Commission that it intends to discontinue, or has discontinued, the use of the link, pursuant to §101.305 of the Commission's rules.

§27.1166 Reimbursement under the Cost-Sharing Plan.

(a) *Registration of reimbursement rights.* Claims for reimbursement under the cost-sharing plan are limited to relocation expenses incurred on or after the date when the first AWS license is issued in the relevant AWS band (start date). If a clearinghouse is not selected by that date (see §27.1162) claims for reimbursement (see §27.1166) and notices of operation (see §27.1170) for activities that occurred after the start date but prior to the clearinghouse selection must be submitted to the clearinghouse within 30 calendar days of the selection date.

(1) To obtain reimbursement, an AWS relocator must submit documentation of the relocation agreement to the clearinghouse within 30 calendar days of the date a relocation agreement is signed with an incumbent. In the case of involuntary relocation, an AWS relocator must submit documentation of the relocated system within 30 calendar days after the end of the relocation.

(2) To obtain reimbursement, a voluntarily relocating microwave incumbent must submit documentation of the relocation of the link to the clearinghouse within 30 calendar days of the date that the incumbent notifies the Commission that it intends to discontinue, or has discontinued, the use of the link, pursuant to §101.305 of the Commission's rules.

(b) *Documentation of expenses.* Once relocation occurs, the AWS relocator, or the voluntarily relocating microwave incumbent, must submit documentation itemizing the amount spent for items specifically listed in §27.1164(b), as well as any reimbursable items not specifically listed in §27.1164(b) that are directly attributable to actual relocation costs. Specifically, the AWS relocator, or the voluntarily relocating microwave incumbent must submit, in the first instance, only the uniform cost data requested by the clearinghouse along with a copy, without redaction, of either the relocation agreement, if any, or the third party appraisal described in (b)(1) of this section, if relocation was undertaken by the microwave incumbent. AWS relocators and voluntarily relocating microwave incumbents must maintain documentation of cost-related issues until the applicable sunset date and provide such documentation upon request, to the clearinghouse, the Commission, or entrants that trigger a cost-sharing obligation. If an AWS relocator pays a microwave incumbent a monetary sum to relocate its own facilities, the AWS relocator must estimate the costs associated with relocating the incumbent by itemizing the anticipated cost for items listed in §27.1164(b). If the sum paid to the incumbent cannot be accounted for, the remaining amount is not eligible for reimbursement.

(1) *Third party appraisal.* The voluntarily relocating microwave incumbent, must also submit an independent third party appraisal of its compensable relocation costs. The appraisal should be based on the actual cost of replacing the incumbent's system with comparable facilities and should exclude the cost of any equipment upgrades or items outside the scope of §27.1164(b).

(2) *Identification of links.* The AWS relocator or the voluntarily relocating microwave incumbent must identify the particular link associated with appropriate expenses (*i.e.*, costs may not be averaged over numerous links). Where the AWS relocator or voluntarily relocating microwave incumbent relocates both paths of a paired channel microwave link (*e.g.*, 2110–2130 MHz with 2160–2180 MHz and 2130–2150 MHz with 2180–2200 MHz), the AWS relocator or voluntarily relocating microwave

incumbent must identify the expenses associated with each paired microwave link.

(c) *Full Reimbursement.* An AWS relocator who relocates a microwave link that is either fully outside its market area or its licensed frequency band may seek full reimbursement through the clearinghouse of compensable costs, up to the reimbursement cap as defined in §27.1164(b). Such reimbursement will not be subject to depreciation under the cost-sharing formula.

(d) *Good Faith Requirement.* New entrants and incumbent licensees are expected to act in good faith in satisfying the cost-sharing obligations under §§27.1160 through 27.1174. The requirement to act in good faith extends to, but is not limited to, the preparation and submission of the documentation required in paragraph (b) of this section.

(e) *MSS Participation in the Clearinghouse.* MSS operators are not required to submit reimbursements to the clearinghouse for links relocated due to interference from MSS space-to-Earth downlink operations, but may elect to do so, in which case the MSS operator must identify the reimbursement claim as such and follow the applicable procedures governing reimbursement in part 27. MSS reimbursement rights and cost-sharing obligations for space-to-Earth downlink operations are governed by §101.82 of this chapter.

(f) *Reimbursement for Self-relocating FMS links in the 2130–2150 MHz and 2180–2200 MHz bands.* Where a voluntarily relocating microwave incumbent relocates a paired microwave link with paths in the 2130–2150 MHz and 2180–2200 MHz bands, it may not seek reimbursement from MSS operators, but is entitled to reimbursement from the first AWS beneficiary for its actual costs for relocating the paired link, subject to the reimbursement cap in §27.1164(b). This amount is subject to depreciation as specified in §27.1164(b). An AWS licensee who is obligated to reimburse relocation costs under this rule is entitled to obtain reimbursement from other AWS beneficiaries in accordance with §§27.1164 and 27.1168. For purposes of applying the cost-sharing formula relative to other AWS licensees that benefit from the self-relocation, depreciation shall run from the date on which the clearinghouse issues the notice of an obligation to reimburse the voluntarily relocating microwave incumbent.

[71 FR 29835, May 24, 2006, as amended at 78 FR 8270, Jan. 5, 2013]

§27.1168 Triggering a Reimbursement Obligation.

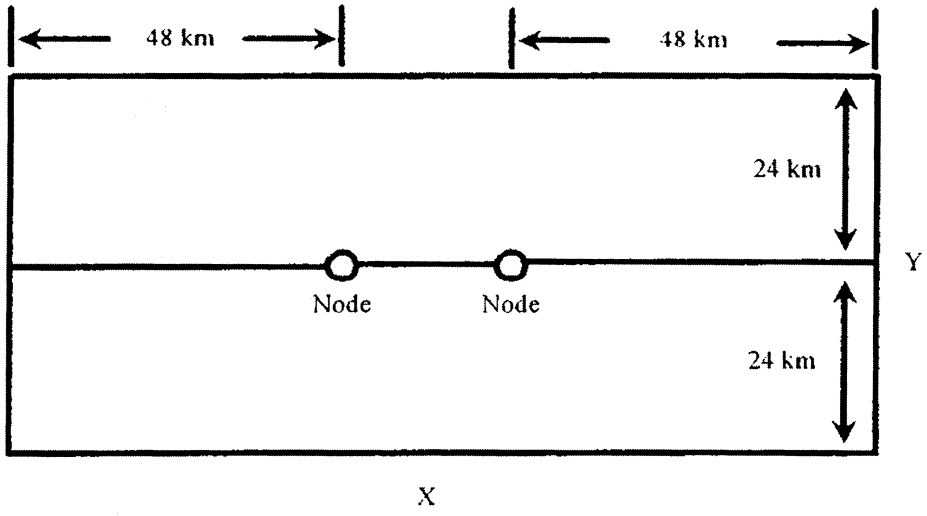
(a) The clearinghouse will apply the following test to determine when an AWS entity has triggered a cost-sharing obligation and therefore must pay an AWS relocator, MSS relocator, or a voluntarily relocating microwave incumbent in accordance with the formula detailed in §27.1164:

(1) All or part of the relocated microwave link was initially co-channel with the licensed AWS band(s) of the AWS entity or the selected assignment of the MSS operator that seeks and obtains ATC authority (see §25.149(a)(2)(i) of this chapter);

(2) An AWS relocator, MSS relocator or a voluntarily relocating microwave incumbent has paid the relocation costs of the microwave incumbent; and

(3) The AWS or MSS entity is operating or preparing to turn on a fixed base station at commercial power and the fixed base station is located within a rectangle (Proximity Threshold) described as follows:

(i) The length of the rectangle shall be x where x is a line extending through both nodes of the microwave link to a distance of 48 kilometers (30 miles) beyond each node. The width of the rectangle shall be y where y is a line perpendicular to x and extending for a distance of 24 kilometers (15 miles) on both sides of x. Thus, the rectangle is represented as follows:



(ii) If the application of the Proximity Threshold Test indicates that a reimbursement obligation exists, the clearinghouse will calculate the reimbursement amount in accordance with the cost-sharing formula and notify the AWS entity of the total amount of its reimbursement obligation.

(b) Once a reimbursement obligation is triggered, the AWS entity may not avoid paying its cost-sharing obligation by deconstructing or modifying its facilities.

[71 FR 29835, May 24, 2006, as amended at 78 FR 8271, Jan. 5, 2013]

§27.1170 Payment issues.

Prior to initiating operations for a newly constructed site or modified existing site, an AWS entity is required to file a notice containing site-specific data with the clearinghouse. The notice regarding the new or modified site must provide a detailed description of the proposed site's spectral frequency use and geographic location, including but not limited to the applicant's name and address, the name of the transmitting base station, the geographic coordinates corresponding to that base station, the frequencies and polarizations to be added, changed or deleted, and the emission designator. If a prior coordination notice (PCN) under §101.103(d) of this chapter is prepared, AWS entities can satisfy the site-data filing requirement by submitting a copy of their PCN to the clearinghouse. AWS entities that file either a notice or a PCN have a continuing duty to maintain the accuracy of the site-specific data on file with the clearinghouse. Utilizing the site-specific data, the clearinghouse will determine if any reimbursement obligation exists and notify the AWS entity in writing of its repayment obligation, if any. When the AWS entity receives a written copy of such obligation, it must pay directly to the relocator the amount owed within 30 calendar days.

[78 FR 8271, Jan. 5, 2013]

§27.1172 Dispute Resolution Under the Cost-Sharing Plan.

(a) Disputes arising out of the cost-sharing plan, such as disputes over the amount of reimbursement required, must be brought, in the first instance, to the clearinghouse for resolution. To the extent that disputes cannot be resolved by the clearinghouse, parties are encouraged to use expedited Alternative Dispute Resolution (ADR) procedures, such as binding arbitration, mediation, or other ADR techniques.

(b) *Evidentiary requirement.* Parties of interest contesting the clearinghouse's

determination of specific cost-sharing obligations must provide evidentiary support to demonstrate that their calculation is reasonable and made in good faith. Specifically, these parties are expected to exercise due diligence to obtain the information necessary to prepare an independent estimate of the relocation costs in question and to file the independent estimate and supporting documentation with the clearinghouse.

§ 27.1174 Termination of cost-sharing obligations.

The cost-sharing plan will sunset for all AWS and MSS entities on the same date on which the relocation obligation for the subject AWS band (*i.e.*, 2110–2150 MHz, 2160–2175 MHz, 2175–2180 MHz, 2180–2200 MHz) in which the relocated FMS link was located terminates. AWS or MSS entrants that trigger a cost-sharing obligation prior to the sunset date must satisfy their payment obligation in full.

[78 FR 8271, Feb. 5, 2013]

COST-SHARING POLICIES GOVERNING BROADBAND RADIO SERVICE RELOCATION FROM THE 2150–2160/62 MHZ BAND

SOURCE: Sections 27.1176 through 27.1190 appear at 71 FR 29835, May 24, 2006, unless otherwise noted.

§ 27.1176 Cost-sharing requirements for AWS in the 2150–2160/62 MHz band.

(a) Frequencies in the 2150–2160/62 MHz band have been reallocated from the Broadband Radio Service (BRS) to AWS. All AWS entities who benefit from another AWS entity's clearance of BRS incumbents from this spectrum, including BRS incumbents occupying the 2150–2162 MHz band on a primary basis, must contribute to such relocation costs. Only AWS entrants that relocate BRS incumbents are entitled to such reimbursement.

(b) AWS entities may satisfy their reimbursement requirement by entering into private cost-sharing agreements or agreeing to terms other than those specified in § 27.1180. However, AWS entities are required to reimburse other AWS entities that incur relocation costs and are not parties to the alternative agreement. In addition, parties to a private cost-sharing agreement may seek reimbursement through the clearinghouse (as discussed in § 27.1178) from AWS entities that are not parties to the agreement. The cost-sharing plan is in effect during all phases of BRS relocation until the end of the period specified in § 27.1190. If an AWS licensee enters into a spectrum leasing arrangement and the spectrum lessee triggers a cost-sharing obligation, the licensee is the AWS entity responsible for satisfying cost-sharing obligations under these rules.

§ 27.1178 Administration of the Cost-Sharing Plan.

The Wireless Telecommunications Bureau, under delegated authority, will select one or more entities to operate as a neutral, not-for-profit clearinghouse(s). This clearinghouse(s) will administer the cost-sharing plan by, *inter alia*, determining the cost-sharing obligations of AWS entities for the relocation of BRS incumbents from the 2150–2162 MHz band. The clearinghouse filing requirements (*see* §§ 27.1182(a), 27.1186) will not take effect until an administrator is selected.

§ 27.1180 The cost-sharing formula.

(a) An AWS licensee that relocates a BRS system with which it interferes is entitled to *pro rata* reimbursement based on the cost-sharing formula specified in § 27.1164, except that the depreciation factor shall be $[180 - T_m]/180$, and the variable *C* shall be applied as set forth in paragraph (b) of this section.

(b) *C* is the actual cost of relocating the system, and includes, but is not limited to, such items as: Radio terminal equipment (TX and/or RX—antenna, necessary feed lines, MUX/Modems); towers and/or modifications; back-up power equipment; monitoring or control equipment; engineering costs (design/path survey); installation; systems testing; FCC filing costs; site acquisition and civil works; zoning

costs; training; disposal of old equipment; test equipment (vendor required); spare equipment; project management; site lease renegotiation; required antenna upgrades for interference control; power plant upgrade (if required); electrical grounding systems; Heating Ventilation and Air Conditioning (HVAC) (if required); alternate transport equipment; leased facilities; and end user units served by the base station that is being relocated. In addition to actual costs, *C* may include the cost of an independent third party appraisal conducted pursuant to §27.1182(a)(3) and incumbent transaction expenses that are directly attributable to the relocation, subject to a cap of two percent of the ''hard'' costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. There is no cap on the actual costs of relocation.

(c) An AWS system shall be considered an interfering system for purposes of this rule if the AWS system is in all or part of the BRS frequency band and operates within line of sight to BRS operations under the applicable test specified in §27.1184. An AWS relocator that relocates a BRS system with which it does not interfere is entitled to full reimbursement, as specified in §27.1182(c).

§27.1182 Reimbursement under the Cost-Sharing Plan.

(a) *Registration of reimbursement rights.* (1) To obtain reimbursement, an AWS relocator must submit documentation of the relocation agreement to the clearinghouse within 30 calendar days of the date a relocation agreement is signed with an incumbent. In the case of involuntary relocation, an AWS relocator must submit documentation of the relocated system within 30 calendar days after the end of the one-year trial period.

(2) Registration of any BRS system shall include:

(i) A description of the system's frequency use;

(ii) If the system exclusively provides one-way transmissions to subscribers, the Geographic Service Area of the system; and

(iii) If the system does not exclusively provide one-way transmission to subscribers, the system hub antenna's geographic location and the above ground level height of the system's receiving antenna centerline.

(3) The AWS relocator must also include with its system registration an independent third party appraisal of the compensable relocation costs. The appraisal should be based on the actual cost of replacing the incumbent's system with comparable facilities and should exclude the cost of any equipment upgrades that are not necessary to the provision of comparable facilities. An AWS relocator may submit registration without a third party appraisal if it consents to binding resolution by the clearinghouse of any good faith cost disputes regarding the reimbursement claim, under the following standard: The relocator shall bear the burden of proof, and be required to demonstrate by clear and convincing evidence that its request does not exceed the actual cost of relocating the relevant BRS system or systems to comparable facilities. Failure to satisfy this burden of proof will result in loss of rights to subsequent reimbursement of the disputed costs from any AWS licensee.

(b) *Documentation of expenses.* Once relocation occurs, the AWS relocator must submit documentation itemizing the amount spent for items specifically listed in §27.1180(b), as well as any reimbursable items not specifically listed in §27.1180(b) that are directly attributable to actual relocation costs. Specifically, the AWS relocator must submit, in the first instance, only the uniform cost data requested by the clearinghouse along with copies, without redaction, of the relocation agreement, if any, and the third party appraisal described in (a)(3), of this section, if prepared. The AWS relocator must identify the particular system associated with appropriate expenses (*i.e.*, costs may not be averaged over numerous systems). If an AWS relocator pays a BRS incumbent a monetary sum to relocate its own facilities in whole or in part, the AWS relocator must itemize the actual costs to the extent determinable, and otherwise must estimate

the actual costs associated with relocating the incumbent and itemize these costs. If the sum paid to the incumbent cannot be accounted for, the remaining amount is not eligible for reimbursement. All AWS relocators seeking reimbursement through the clearinghouse have an ongoing duty to maintain all relevant records of BRS relocation-related expenses until the sunset of cost-sharing obligations, and to provide, upon request, such documentation, including a copy of the independent appraisal if one was conducted, to the clearinghouse, the Commission, or AWS entrants that trigger a cost-sharing obligation.

(c) *Full reimbursement.* An AWS relocator who relocates a BRS system that is either:

(1) Wholly outside its frequency band; or

(2) Not within line of sight of the relocator's transmitting base station may seek full reimbursement through the clearinghouse of compensable costs. Such reimbursement will not be subject to depreciation under the cost-sharing formula.

(d) *Good Faith Requirement.* New entrants and incumbent licensees are expected to act in good faith in satisfying the cost-sharing obligations under §§ 27.1176 through 27.1190. The requirement to act in good faith extends to, but is not limited to, the preparation and submission of the documentation required in paragraph (b) of this section.

§ 27.1184 Triggering a reimbursement obligation.

(a) The clearinghouse will apply the following test to determine when an AWS entity has triggered a cost-sharing obligation and therefore must pay an AWS relocator of a BRS system in accordance with the formula detailed in § 27.1180:

(1) All or part of the relocated BRS system was initially co-channel with the licensed AWS band(s) of the AWS entity;

(2) An AWS relocator has paid the relocation costs of the BRS incumbent; and

(3) The other AWS entity has turned on or is preparing to turn on a fixed base station at commercial power and the incumbent BRS system would have been within the line of sight of the AWS entity's fixed base station, defined as follows.

(i) For a BRS system using the 2150–2160/62 MHz band exclusively to provide one-way transmissions to subscribers, the clearinghouse will determine whether there is an unobstructed signal path (line of sight) to the incumbent licensee's geographic service area (GSA), based on the following criteria: use of 9.1 meters (30 feet) for the receiving antenna height, use of the actual transmitting antenna height and terrain elevation, and assumption of 4/3 Earth radius propagation conditions. Terrain elevation data must be obtained from the U.S. Geological Survey (USGS) 3-second database. All coordinates used in carrying out the required analysis shall be based upon use of NAD–83.

(ii) For all other BRS systems using the 2150–2160/62 MHz band, the clearinghouse will determine whether there is an unobstructed signal path (line of sight) to the incumbent licensee's receive station hub using the method prescribed in ''Methods for Predicting Interference from Response Station Transmitters and to Response Station Hubs and for Supplying Data on Response Station Systems. MM Docket 97–217,'' in Amendment of 47 CFR parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket No. 97–217, *Report and Order on Further Reconsideration and Further Notice of Proposed Rulemaking,* 15 FCC Rcd 14566 at 14610, Appendix D.

(b) If the application of the trigger test described in paragraphs (a)(3)(i) and (ii) of this section, indicates that a reimbursement obligation exists, the clearinghouse will calculate the reimbursement amount in accordance with the cost-sharing formula and notify the subsequent AWS entity of the total amount of its reimbursement obligation.

(c) Once a reimbursement obligation is triggered, the AWS entity may not avoid paying its cost-sharing obligation by deconstructing or modifying its facilities.

§ 27.1186 Payment issues.

Payment of cost-sharing obligations for the relocation of BRS systems in the 2150–60/62 MHz band is subject to the rules set forth in § 27.1170. If an AWS licensee is initiating operations for a newly constructed site or modified existing site in licensed bands overlapping the 2150–2160/62 MHz band, the AWS licensee must file with the clearinghouse, in addition to the site-specific data required by § 27.1170, the above ground level height of the transmitting antenna centerline. AWS entities have a continuing duty to maintain the accuracy of the site-specific data on file with the clearinghouse.

[71 FR 29835, May 24, 2006, as amended at 72 FR 41939, Aug. 1, 2007]

§ 27.1188 Dispute resolution under the Cost-Sharing Plan.

(a) Disputes arising out of the cost-sharing plan, such as disputes over the amount of reimbursement required, must be brought, in the first instance, to the clearinghouse for resolution. To the extent that disputes cannot be resolved by the clearinghouse, parties are encouraged to use expedited Alternative Dispute Resolution (ADR) procedures, such as binding arbitration, mediation, or other ADR techniques.

(b) *Evidentiary requirement.* Parties of interest contesting the clearinghouse's determination of specific cost-sharing obligations must provide evidentiary support to demonstrate that their calculation is reasonable and made in good faith. Specifically, these parties are expected to exercise due diligence to obtain the information necessary to prepare an independent estimate of the relocation costs in question and to file the independent estimate and supporting documentation with the clearinghouse.

§ 27.1190 Termination of cost-sharing obligations.

The plan for cost-sharing in connection with BRS relocation will sunset for all AWS entities fifteen years after the relocation sunset period for BRS relocation commences, *i.e.*, fifteen years after the first AWS licenses are issued in any part of the 2150–2162 MHz band. AWS entrants that trigger a cost-sharing obligation prior to the sunset date must satisfy their payment obligation in full.

Subpart M—Broadband Radio Service and Educational Broadband Service

SOURCE: 69 FR 72034, Dec. 10, 2004, unless otherwise noted.

§ 27.1200 Change to BRS and EBS.

(a) As of January 10, 2005, licensees assigned to the Multipoint Distribution Service (MDS) and the Multichannel Multipoint Distribution Service (MMDS) shall be reassigned to the Broadband Radio Service (BRS) and licensees in the Instructional Television Fixed Service (ITFS) shall be reassigned to the Educational Broadband Service (EBS).

§ 27.1201 EBS eligibility.

(a) A license for an Educational Broadband Service station will be issued only to an accredited institution or to a governmental organization engaged in the formal education of enrolled students or to a nonprofit organization whose purposes are educational and include providing educational and instructional television material to such accredited institutions and governmental organizations, and which is otherwise qualified under the statutory provisions of the Communications Act of 1934, as amended.

(1) A publicly supported educational institution must be accredited by the appropriate State department of education.

(2) A privately controlled educational institution must be accredited by the appropriate State department of education or the recognized regional and national accrediting organizations.

(3) Those applicant organizations whose eligibility is established by service to accredited institutional or governmental organizations must submit documentation from proposed receive

sites demonstrating that they will receive and use the applicant's educational usage. In place of this documentation, a State educational television (ETV) commission may demonstrate that the public schools it proposes to serve are required to use its proposed educational usage. Documentation from proposed receive sites which are to establish the eligibility of an entity not serving its own enrolled students for credit should be in letter form, written and signed by an administrator or authority who is responsible for the receive site's curriculum planning. No receive site more than 35 miles from the proposed station's central reference point, or outside the applicants' proposed GSA, shall be used to establish basic eligibility. Where broadband or data services are proposed, the letter should indicate that the data services will be used in furtherance of the institution's educational mission and will be provided to enrolled students, faculty and staff in a manner and in a setting conducive to educational usage. Where traditional educational or instructional video services are proposed, the letter should indicate that the applicant's program offerings have been viewed and that such programming will be incorporated in the site's curriculum. Where educational or instructional video services are proposed, the letter should discuss the types of programming and hours per week of formal and informal programming expected to be used and the site's involvement in the planning, scheduling and production of programming. If other levels of authority must be obtained before a firm commitment to utilize the service can be made, the nature and extent of such additional authorization(s) must be provided.

(4) Nonlocal applicants, in addition to submitting letters from proposed receive sites, must demonstrate the establishment of a local program committee in each community where they apply. Letters submitted on behalf of a nonlocal entity must confirm that a member of the receive site's staff will serve on the local program committee and demonstrate a recognition of the composition and power of the committee. The letter should show that the staff member will aid in the selection, scheduling and production of the programming received over the system.

(b) No numerical limit is placed on the number of stations which may be licensed to a single licensee. A single license may be issued for more than one transmitter if they are to be located at a common site and operated by the same licensee. Applicants are expected to accomplish the proposed operation by the use of the smallest number of channels required to provide the needed service.

(c) [Reserved]

(d) This paragraph applies to EBS licensees and applications licensed or filed pursuant to the provisions of §27.1201(c) contained in the edition of 47 CFR parts 20 through 39, revised as of October 1, 2005, or §§74.990 through 74.992 contained in the edition of 47 CFR parts 70 through 79, revised as of October 1, 2004, and that do not meet the eligibility requirements of paragraph (a) of this section. Such licensees may continue to operate pursuant to the terms of their existing licenses, and their licenses may be renewed, assigned, or transferred, so long as the licensee is otherwise in compliance with this chapter. Applications filed pursuant to the provisions of §27.1201(c) contained in the edition of 47 CFR parts 20 through 39, revised as of October 1, 2005 or §§74.990 through 74.992 contained in the edition of 47 CFR parts 70 through 79, revised as of October 1, 2004 may be processed and granted, so long as such applications were filed prior to July 19, 2006. The provisions of §§27.1203(b) through (d) and 27.1214 of this subpart do not apply to licenses governed by this paragraph.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35190, June 19, 2006; 73 FR 26040, May 8, 2008]

§27.1202 Cable/BRS cross-ownership.

(a) Initial or modified authorizations for BRS stations may not be granted to a cable operator if a portion of the BRS station's protected services area is within the portion of the franchise area actually served by the cable operator's cable system and the cable operator will be using the BRS station as a multichannel video programming distributor (as defined in §76.64(d) of this

chapter). No cable operator may acquire such authorization either directly, or indirectly through an affiliate owned, operated, or controlled by or under common control with a cable operator if the cable operator will use the BRS station as a multichannel video programming distributor.

(b) No licensee of a station in this service may lease transmission time or capacity to a cable operator either directly, or indirectly through an affiliate owned, operated, controlled by, or under common control with a cable operator, if a portion of the BRS station's protected services area is within the portion of the franchise area actually served by the cable operator's cable system the cable operator will use the BRS station as a multichannel video programming distributor.

(c) Applications for new stations, station modifications, assignments or transfers of control by cable operators of BRS stations shall include a showing that no portion of the GSA of the BRS station is within the portion of the franchise area actually served by the cable operator's cable system, or of any entity indirectly affiliated, owned, operated, controlled by, or under common control with the cable operator. Alternatively, the cable operator may certify that it will not use the BRS station to distribute multichannel video programming.

(d) In applying the provisions of this section, ownership and other interests in BRS licensees or cable television systems will be attributed to their holders and deemed cognizable pursuant to the following criteria:

(1) Except as otherwise provided herein, partnership and direct ownership interests and any voting stock interest amounting to 5% or more of the outstanding voting stock of a corporate BRS licensee or cable television system will be cognizable;

(2) Investment companies, as defined in 15 U.S.C. 80a–3, insurance companies and banks holding stock through their trust departments in trust accounts will be considered to have a cognizable interest only if they hold 20% or more of the outstanding voting stock of a corporate BRS licensee or cable television system, or if any of the officers or directors of the BRS licensee or cable television system are representatives of the investment company, insurance company or bank concerned. Holdings by a bank or insurance company will be aggregated if the bank or insurance company has any right to determine how the stock will be voted. Holdings by investment companies will be aggregated if under common management.

(3) Attribution of ownership interests in a BRS licensee or cable television system that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that wherever the ownership percentage for any link in the chain exceeds 50%, it shall not be included for purposes of this multiplication. For purposes of paragraph (d)(9) of this section, attribution of ownership interests in a BRS licensee or cable television system that are held indirectly by any party through one or more intervening organizations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, and the ownership percentage for any link in the chain that exceeds 50% shall be included for purposes of this multiplication. For example, except for purposes of paragraph (d)(9) of this section, if A owns 10% of company X, which owns 60% of company Y, which owns 25% of ''Licensee,'' then X's interest in ''Licensee'' would be 25% (the same as Y's interest because X's interest in Y exceeds 50%), and A's interest in ''Licensee'' would be 2.5% (0.1 × 0.25). Under the 5% attribution benchmark, X's interest in ''Licensee'' would be cognizable, while A's interest would not be cognizable. For purposes of paragraph (d)(9) of this section, X's interest in ''Licensee'' would be 15% (0.6 × 0.25) and A's interest in ''Licensee'' would be 1.5% (0.1 × 0.6 × 0.25). Neither interest would be attributed under paragraph (d)(9) of this section.

(4) Voting stock interests held in trust shall be attributed to any person

who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and to any person who has the right to revoke the trust at will or to replace the trustee at will. If the trustee has a familial, personal or extra-trust business relationship to the grantor or the beneficiary, the grantor or beneficiary, as appropriate, will be attributed with the stock interests held in trust. An otherwise qualified trust will be ineffective to insulate the grantor or beneficiary from attribution with the trust's assets unless all voting stock interests held by the grantor or beneficiary in the relevant BRS licensee or cable television system are subject to said trust.

(5) Subject to paragraph (d)(9) of this section, holders of non-voting stock shall not be attributed an interest in the issuing entity. Subject to paragraph (d)(9) of this section, holders of debt and instruments such as warrants, convertible debentures, options or other non-voting interests with rights of conversion to voting interests shall not be attributed unless and until conversion is effected.

(6)(i) A limited partnership interest shall be attributed to a limited partner unless that partner is not materially involved, directly or indirectly, in the management or operation of the BRS or cable television activities of the partnership and the licensee or system so certifies. An interest in a Limited Liability Company (''LLC'') or Registered Limited Liability Partnership (''RLLP'') shall be attributed to the interest holder unless that interest holder is not materially involved, directly or indirectly, in the management or operation of the BRS or cable television activities of the partnership and the licensee or system so certifies.

(ii) For a licensee or system that is a limited partnership to make the certification set forth in paragraph (d)(6)(i) of this section, it must verify that the partnership agreement or certificate of limited partnership, with respect to the particular limited partner exempt from attribution, establishes that the exempt limited partner has no material involvement, directly or indirectly, in the management or operation of the BRS or cable television activities of the partnership. For a licensee or system that is an LLC or RLLP to make the certification set forth in paragraph (d)(6)(i) of this section, it must verify that the organizational document, with respect to the particular interest holder exempt from attribution, establishes that the exempt interest holder has no material involvement, directly or indirectly, in the management or operation of the BRS or cable television activities of the LLC or RLLP. Irrespective of the terms of the certificate of limited partnership or partnership agreement, or other organizational document in the case of an LLC or RLLP, however, no such certification shall be made if the individual or entity making the certification has actual knowledge of any material involvement of the limited partners, or other interest holders in the case of an LLC or RLLP, in the management or operation of the BRS or cable television businesses of the partnership or LLC or RLLP.

(iii) In the case of an LLC or RLLP, the licensee or system seeking installation shall certify, in addition, that the relevant state statute authorizing LLCs permits an LLC member to insulate itself as required by our criteria.

(7) Officers and directors of a BRS licensee or cable television system are considered to have a cognizable interest in the entity with which they are so associated. If any such entity engages in businesses in addition to its primary business of BRS or cable television service, it may request the Commission to waive attribution for any officer or director whose duties and responsibilities are wholly unrelated to its primary business. The officers and directors of a parent company of a BRS licensee or cable television system, with an attributable interest in any such subsidiary entity, shall be deemed to have a cognizable interest in the subsidiary unless the duties and responsibilities of the officer or director involved are wholly unrelated to the BRS licensee or cable television system subsidiary, and a statement properly documenting this fact is submitted to the Commission. The officers and directors of a sister corporation of a BRS licensee or cable television system shall not be attributed with ownership of these entities by virtue of such status.

(8) Discrete ownership interests will be aggregated in determining whether or not an interest is cognizable under this section. An individual or entity will be deemed to have a cognizable investment if:

(i) The sum of the interests held by or through ''passive investors'' is equal to or exceeds 20 percent; or

(ii) The sum of the interests other than those held by or through ''passive investors'' is equal to or exceeds 5 percent; or

(iii) The sum of the interests computed under paragraph (d)(8)(i) of this section plus the sum of the interests computed under paragraph (d)(8)(ii) of this section equal to or exceeds 20 percent.

(9) Notwithstanding paragraphs (d)(5) and (d)(6) of this section, the holder of an equity or debt interest or interests in a BRS licensee or cable television system subject to the BRS/cable cross-ownership rule (''interest holder'') shall have that interest attributed if:

(i) The equity (including all stockholdings, whether voting or nonvoting, common or preferred) and debt interest or interests, in the aggregate, exceed 33 percent of the total asset value (all equity plus all debt) of that BRS licensee or cable television system; and

(ii) The interest holder also holds an interest in a BRS licensee or cable television system that is attributable under this section (other than this paragraph) and which operates in any portion of the franchise area served by that cable operator's cable system.

(10) The term ''area served by a cable system'' means any area actually passed by the cable operator's cable system and which can be connected for a standard connection fee.

(11) As used in this section ''cable operator'' shall have the same definition as in § 76.5 of this chapter.

(e) The Commission will entertain requests to waive the restrictions in paragraph (a) of this section where necessary to ensure that all significant portions of the franchise area are able to obtain multichannel video service.

(f) The provisions of paragraphs (a) through (e) of this section will not apply to one BRS channel used to provide locally-produced programming to cable headends. Locally-produced programming is programming produced in or near the cable operator's franchise area and not broadcast on a television station available within that franchise area. A cable operator will be permitted one BRS channel for this purpose, and no more than one BRS channel may be used by a cable television company or its affiliate or lessor pursuant to this paragraph. The licensee for a cable operator providing local programming pursuant to a lease must include in a notice filed with the Wireless Telecommunications Bureau a cover letter explicitly identifying itself or its lessees as a local cable operator and stating that the lease was executed to facilitate the provision of local programming. The first application or the first lease notification in an area filed with the Commission will be entitled to the exemption. The limitations on one BRS channel per party and per area include any cable/BRS operations or cable/EBS operations. The cable operator must demonstrate in its BRS application that the proposed local programming will be provided within one year from the date its application is granted. Local programming service pursuant to a lease must be provided within one year of the date of the lease or one year of grant of the licensee's application for the leased channel, whichever is later. If a BRS license for these purposes is granted and the programming is subsequently discontinued, the license will be automatically forfeited the day after local programming service is discontinued.

(g) Applications filed by cable television companies, or affiliates, for BRS channels prior to February 8, 1990, will not be subject to the prohibitions of this section. Applications filed on February 8, 1990, or thereafter will be returned. Lease arrangements between cable and BRS entities for which a lease or a firm agreement was signed prior to February 8, 1990, will also not be subject to the prohibitions of this section. Leases between cable television companies, or affiliates, and BRS station licensees, conditional licensees, or applicants executed on February 8, 1990, or thereafter, are invalid.

(1) Applications filed by cable operators, or affiliates, for BRS channels prior to February 8, 1990, will not be

subject to the prohibitions of this section. Except as provided in paragraph (g)(2)of this section, applications filed on February 8, 1990, or thereafter will be returned. Lease arrangements between cable and BRS entities for which a lease or a firm agreement was signed prior to February 8, 1990, will also not be subject to the prohibitions of this section. Except as provided in paragraph (g)(2) of this section, leases between cable operators, or affiliates, and BRS/EBS station licensees, conditional licensees, or applicants executed on or before February 8, 1990, or thereafter are invalid.

(2) Applications filed by cable operators, or affiliates for BRS channels after February 8, 1990, and prior to October 5, 1992, will not be subject to the prohibition of this section, if, pursuant to the then existing overbuild or rural exceptions, the applications were allowed under the then existing cable/BRS cross-ownership prohibitions. Lease arrangements between cable operators and BRS entities for which a lease or firm agreement was signed after February 8, 1990, and prior to October 5, 1992, will not be subject to the prohibitions of this section, if, pursuant to the then existing rural and overbuild exceptions, the lease arrangements were allowed.

(3) The limitations on cable television ownership in this section do not apply to any cable operator in any franchise area in which a cable operator is subject to effective competition as determined under section 623(l) of the Communications Act.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35190, June 19, 2006]

§ 27.1203 EBS programming requirements.

(a) Except as provided in paragraphs (b), (c), and (d) of this section, BRS and EBS licensees are authorized to provide fixed or mobile service, except aeronautical mobile service, subject to the technical requirements of subparts C and M of this part.

(b) Educational Broadband Service stations are intended primarily through video, data, or voice transmissions to further the educational mission of accredited public and private schools, colleges and universities providing a formal educational and cultural development to enrolled students. Authorized educational broadband channels must be used to further the educational mission of accredited schools offering formal educational courses to enrolled students.

(c) In furtherance of the educational mission of accredited schools, Educational Broadband Service stations may be used for:

(1) In-service training and instruction in special skills and safety programs, extension of professional training, informing persons and groups engaged in professional and technical activities of current developments in their particular fields, and other similar endeavors;

(2) Transmission of material directly related to the administrative activities of the licensee, such as the holding of conferences with personnel, distribution of reports and assignments, exchange of data and statistics, and other similar uses.

(d) Stations, including high-power EBS signal booster stations, may be licensed in the EBS as originating or relay stations to interconnect educational broadband fixed stations in adjacent areas, to deliver instructional and cultural material to, and obtain such material from, commercial and noncommercial educational television broadcast stations for use on the educational broadband system, and to deliver instructional and cultural material to, and obtain such material from, nearby terminals or connection points of closed circuit educational television systems employing wired distribution systems or radio facilities authorized under other parts of this chapter, or to deliver instructional and cultural material to any cable television system serving a receiving site or sites which would be eligible for direct reception of EBS signals under the provisions of § 27.1201.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35190, June 19, 2006]

§ 27.1206 Geographic Service Area.

(a) The Geographic Service Area (GSA) is either:

(1) The area for incumbent site-based licensees that is bounded by a circle having a 35 mile radius and centered at

the station's reference coordinates, which was the previous PSA entitled to incumbent licensees prior to January 10, 2005, and is bounded by the chord(s) drawn between intersection points of the licensee's previous 35 mile PSA and those of respective adjacent market, co-channel licensees; or:

(2) The BTA that is licensed to the respective BRS BTA authorization holder subject to the exclusion of overlapping, co-channel incumbent GSAs as described in paragraph (a)(1) of this section.

(b) If the license for an incumbent BRS station cancels or is forfeited, the GSA area of the incumbent station shall dissolve and the right to operate in that area automatically reverts to the GSA licensee that held the corresponding BTA.

§ 27.1207 BTA license authorization.

(a) Winning bidders must file an application (FCC Form 601) for an initial authorization.

(b) Initial authorizations for BRS granted after January 1, 2008, shall be blanket licenses for all BRS frequencies identified in §27.5(i)(2) and based on the geographic areas identified in §27.1208. Blanket licenses cover all mobile and response stations.

(1) A station would be required to be individually licensed if

(i) International agreements require coordination;

(ii) Submission of an Environmental Assessment is required under §1.1307 of this chapter;

(iii) The station would affect the radio quiet zones under §1.924 of this chapter.

(2) Any antenna structure that requires notification to the Federal Aviation Administration (FAA) must be registered with the Commission prior to construction under §17.4 of this chapter.

[69 FR 72034, Dec. 10, 2004, as amended at 73 FR 26040, May 8, 2008]

§ 27.1208 BTA service areas.

Except for incumbent BRS licenses, BRS service areas are Basic Trading Areas (BTAs) or additional service areas similar to BTAs adopted by the Commission. BTAs are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38–39. The following are additional BRS service areas in places where Rand McNally has not defined BTAs: American Samoa; Guam; Gulf of Mexico Zone A; Gulf of Mexico Zone B; Gulf of Mexico Zone C; Northern Mariana Islands; Mayaguez/Aguadilla-Ponce, Puerto Rico; San Juan, Puerto Rico; and the United States Virgin Islands. The boundaries of Gulf of Mexico Zone A are from an area twelve nautical miles from the shoreline at mean high tide on the north and east, to the limit of the Outer Continental Shelf to the south, and to longitude 91°00′ to the west. The boundaries of Gulf of Mexico Zone B are from an area twelve nautical miles from the shoreline at mean high tide on the north, to the limit of the Outer Continental Shelf to the south, to longitude 91°00′ to the east, and to longitude 94°00′ to the west. The boundaries of Gulf of Mexico Zone C are from an area twelve nautical miles from the shoreline at mean high tide on the north and west, to longitude 94°00′ to the east, and to a line 281 kilometers from the reference point at Linares, N.L., Mexico on the southwest. The Mayaguez/Aguadilla-Ponce, PR, service area consists of the following municipios: Adjuntas, Aguada, Aguadilla, Anasco, Arroyo, Cabo Rojo, Coamo, Guanica, Guayama, Guayanilla, Hormigueros, Isabela, Jayuya, Juana Diaz, Lajas, Las Marias, Maricao, Maunabo, Mayaguez, Moca, Patillas, Penuelas, Ponce, Quebradillas, Rincón, Sabana Grande, Salinas, San German, Santa Isabel, Villalba and Yauco. The San Juan service area consists of all other municipios in Puerto Rico.

[69 FR 72034, Dec. 10, 2004, as amended at 73 FR 26040, May 8, 2008]

§ 27.1209 Conversion of incumbent EBS and BRS stations to geographic area licensing.

(a) Any EBS or BRS station licensed by the Commission, other than BTA authorizations and facilities authorized pursuant to BTA authorizations, shall be considered an incumbent station.

(b) As of January 10, 2005, all incumbent EBS and BRS licenses shall be converted to a geographic area license.

Pursuant to that geographic area license, such incumbent licensees may modify their systems provided the modified system complies with the applicable rules. The blanket license covers all fixed stations anywhere within the authorized service area, except as follows:

(1) A station would be required to be individually licensed if

(i) International agreements require coordination;

(ii) Submission of an Environmental Assessment is required under §1.1307 of this chapter;

(iii) The station would affect the radio quiet zones under §1.924 of this chapter.

(2) Any antenna structure that requires notification to the Federal Aviation Administration (FAA) must be registered with the Commission prior to construction under §17.4 of this chapter.

(c) The frequencies associated with incumbent authorizations that have been cancelled automatically or otherwise been recovered by the Commission will automatically revert to the applicable BTA licensee.

§ 27.1210 Remote control operation.

Licensed BRS/EBS stations may be operated by remote control without further authority.

§ 27.1211 Unattended operation.

Unattended operation of licensed BRS/EBS stations is permitted without further authority. An unattended relay station may be employed to receive and retransmit signals of another station provided that the transmitter is equipped with circuits which permit it to radiate only when the signal intended to be retransmitted is present at the receiver input terminals.

§ 27.1212 License term.

(a) BRS/EBS licenses shall be issued for a period of 10 years beginning with the date of grant.

(b) An initial BTA authorization shall be issued for a period of ten years from the date the Commission declared bidding closed in the MDS auction.

§ 27.1213 Designated entity provisions for BRS in Commission auctions commencing prior to January 1, 2004.

(a) *Eligibility for small business provisions.* For purposes of Commission auctions commencing prior to January 1, 2004 for BRS licenses, a small business is an entity that together with its affiliates has average annual gross revenues that are not more than $40 million for the preceding three calendar years.

(b) *Designated entities.* As specified in this section, designated entities that are winning bidders in Commission auctions commencing prior to January 1, 2004 for BTA service areas are eligible for special incentives in the auction process. See 47 CFR 1.2110.

(c) *Installment payments.* Small businesses and small business consortia may elect to pay the full amount of their winning bids in Commission auctions commencing prior to January 1, 2004 for BTA service areas in installments over a ten (10) year period running from the date that their BTA authorizations are issued.

(1) Upon issuance of a BTA authorization to a winning bidder in a Commission auction commencing prior to January 1, 2004 that is eligible for installment payments, the Commission will notify such eligible BTA authorization holder of the terms of its installment payment plan. For BRS, such installment payment plans will:

(i) Impose interest based on the rate of ten (10) year U.S. Treasury obligations at the time of issuance of the BTA authorization, plus two and one half (2.5) percent;

(ii) Allow installment payments for a ten (10) year period running from the date that the BTA authorization is issued;

(iii) Begin with interest-only payments for the first two (2) years; and

(iv) Amortize principal and interest over the remaining years of the ten (10) year period running from the date that the BTA authorization is issued.

(2) *Conditions and obligations.* See §1.2110(g)(4) of this chapter.

(3) *Unjust enrichment.* If an eligible BTA authorization holder that utilizes installment financing under this subsection seeks to partition, pursuant to applicable rules, a portion of its BTA

containing one-third or more of the population of the area within its control in the licensed BTA to an entity not meeting the eligibility standards for installment payments, the holder must make full payment of the remaining unpaid principal and any unpaid interest accrued through the date of partition as a condition of approval.

(d) *Reduced upfront payments.* For purposes of Commission auctions commencing prior to January 1, 2004 for BRS licenses, a prospective bidder that qualifies as a small business, or as a small business consortia, is eligible for a twenty-five (25) percent reduction in the amount of the upfront payment otherwise required. To be eligible to bid on a particular BTA, a small business will be required to submit an upfront payment equal to seventy-five (75) percent of the upfront payment amount specified for that BTA in the public notice listing the upfront payment amounts corresponding to each BTA service area being auctioned.

(e) *Bidding credits.* For purposes of Commission auctions commencing prior to January 1, 2004 for BRS licenses, a winning bidder that qualifies as a small business, or as a small business consortia, may use a bidding credit of fifteen (15) percent to lower the cost of its winning bid on any of the BTA authorizations awarded in the Commission BRS auctions commencing prior to January 1, 2004.

(f) Short-form application certification; Long-form application or statement of intention disclosure. A BRS applicant in a Commission auction commencing prior to January 1, 2004 claiming designated entity status shall certify on its short-form application that it is eligible for the incentives claimed. A designated entity that is a winning bidder for a BTA service area(s) shall, in addition to information otherwise required, file an exhibit to either its initial long-form application for a BRS station license, or to its statement of intention with regard to the BTA, which discloses the gross revenues for each of the past three years of the winning bidder and its affiliates. This exhibit shall describe how the winning bidder claiming status as a designated entity satisfies the designated entity eligibility requirements, and must list and summarize all agreements that affect designated entity status, such as partnership agreements, shareholder agreements, management agreements and other agreements, including oral agreements, which establish that the designated entity will have both de facto and de jure control of the entity. See 47 CFR 1.2110(i).

(g) *Records maintenance.* All holders of BTA authorizations acquired in a Commission auction commencing prior to January 1, 2004 that claim designated entity status shall maintain, at their principal place of business or with their designated agent, an updated documentary file of ownership and revenue information necessary to establish their status. Holders of BTA authorizations or their successors in interest shall maintain such files for a ten (10) year period running from the date that their BTA authorizations are issued. The files must be made available to the Commission upon request.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35190, June 19, 2006]

§ 27.1214 EBS spectrum leasing arrangements and grandfathered leases.

(a) A licensee in the EBS that is solely utilizing analog transmissions may enter into a spectrum leasing arrangement to transmit material other than the educational programming defined in § 27.1203(b) and (c) subject to the following conditions:

(1) Before entering into a spectrum leasing arrangement involving material other than educational programming on any one channel, the licensee must provide at least 20 hours per week of EBS educational programming (as defined in § 27.1203(b) and (c)) on that channel, except as provided in paragraphs (a)(2) and (a)(3) of this section. An additional 20 hours per week per channel must be strictly reserved for EBS use and not used for non-EBS purposes, or reserved for recapture by the EBS licensee for its EBS educational usage, subject to one year's advance, written notification by the EBS licensee to its lessee and accounting for all recapture already exercised, with no economic or operational detriment to the licensee. These hours of recapture

are not restricted as to time of day or day of the week, but may be established by negotiations between the EBS licensee and the lessee. The 20 hours per channel per week EBS educational usage requirement and the recapture and/or reservation requirement of an additional 20 hours per channel per week shall apply spectrally over the licensee's whole actual service area.

(2) For the first two years of operation, an EBS entity may enter into a spectrum leasing arrangement involving material other than educational programming if it provides EBS educational usage for at least 12 hours per channel per week, provided that the entity does not employ channel loading technology.

(3) The licensee may shift its requisite EBS educational usage onto fewer than its authorized number of channels, via channel mapping or channel loading technology, so that it can enter into a spectrum leasing arrangement involving full-time channel capacity on its EBS station and/or associated EBS booster stations, subject to the condition that it provide a total average of at least 20 hours per channel per week of EBS educational usage on its authorized channels. The use of channel mapping or channel loading consistent with the Rules shall not be considered adversely to the EBS licensee in seeking a license renewal. The licensee also retains the unabridgeable right to recapture, subject to six months' advance written notification by the EBS licensee to the spectrum lessee, an average of an additional 20 hours per channel per week, accounting for all recapture already exercised. Regardless of whether the licensee has educational receive sites within its GSA, the licensee may lease booster stations in the entire GSA, provided that the licensee maintains the unabridgeable right to ready recapture at least 40 hours per channel per week for EBS educational usage. The licensee may agree to the transmission of this recapture time on channels not authorized to it, but which are included in the wireless system of which it is a part. A licensee under this paragraph which enters into a spectrum leasing arrangement on any one of its channels to an operator may ''channel shift'' pursuant to and under the conditions of paragraph (d)(2) of this section.

(b) A licensee utilizing digital transmissions on any of its licensed channels may enter into a spectrum leasing arrangement to transmit material other than the educational programming defined in §27.1203(b) and (c), subject to the following conditions:

(1) The licensee must reserve a minimum of 5% of the capacity of its channels for educational uses consistent with §27.1203 paragraphs (b) and (c), and may not enter into a spectrum leasing arrangement involving this reserved capacity. In addition, before leasing excess capacity, the licensee must provide at least 20 hours per licensed channel per week of EBS educational usage. This 5% reservation and this 20 hours per licensed channel per week EBS educational usage requirement shall apply spectrally over the licensee's whole actual service area. However, regardless of whether the licensee has an educational receive site within its GSA served by a booster, the licensee may lease excess capacity without making at least 20 hours per licensed channel per week of EBS educational usage, provided that the licensee maintains the unabridgeable right to recapture on one months' advance notice such capacity as it requires over and above the 5% reservation to make at least 20 hours per channel per week of EBS educational usage.

(2) The licensee may shift its requisite EBS educational usage onto fewer than its authorized number of channels, via channel mapping or channel loading technology, and may shift its requisite EBS educational usage onto channels not authorized to it, but which are included in the wireless system of which it is a part (''channel shifting''), so that it can enter into a spectrum leasing arrangement involving full-time channel capacity on its EBS station, associated EBS booster stations, and/or EBS response stations and associated response station hubs, subject to the condition that it provide a total average of at least 20 hours per licensed channel per week of EBS educational usage. The use of channel

mapping, channel loading, and/or channel shifting consistent with the Rules shall not be considered adversely to the EBS licensee in seeking a license renewal. In addition, an EBS entity receiving interference protection will continue to receive such protection if it elects to swap channels with another EBS or BRS station.

(c) All spectrum leasing arrangements involving EBS spectrum must afford the EBS licensee an opportunity to purchase or to lease the dedicated or common EBS equipment used for educational purposes, or comparable equipment in the event that the spectrum leasing arrangement is terminated.

(d) All leases of current EBS spectrum entered into prior to January 10, 2005 and in compliance with leasing rules formerly contained in part 74 of this chapter may continue in force and effect, notwithstanding any inconsistency between such leases and the rules applicable to spectrum leasing arrangements set forth in this chapter. Such leases entered into pursuant to the former part 74 rules of this chapter may be renewed and assigned in accordance with the terms of such lease. All spectrum leasing arrangements leases entered into after January 10, 2005, pursuant to the rules set forth in part 1 and part 27 of this chapter, must comply with the rules in those parts.

(e) The maximum permissible term of an EBS spectrum leasing arrangement entered into on or after July 19, 2006 (including the initial term and all renewal terms that commence automatically or at the sole option of the lessee) shall be 30 years. In furtherance of the educational purposes for which EBS spectrum is primarily allocated, any spectrum leasing arrangement in excess of 15 years that is entered into on or after July 19, 2006 must include terms which provide the EBS licensee on the 15th year and every 5 years thereafter, with an opportunity to review its educational use requirements in light of changes in educational needs, technology, and other relevant factors and to obtain access to such additional services, capacity, support, and/or equipment as the parties shall agree upon in the spectrum leasing arrangement to advance the EBS licensee's educational mission.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35190, June 19, 2006; 73 FR 26041, May 8, 2008]

§ 27.1215 BRS grandfathered leases.

(a) All leases of current BRS spectrum entered into prior to January 10, 2005 and in compliance with rules formerly contained in part 21 of this chapter may continue in force and effect, notwithstanding any inconsistency between such leases and the rules applicable to spectrum leasing arrangements set forth in this chapter. Such leases entered into pursuant to the former part 21 of this chapter may be renewed and assigned in accordance with the terms of such lease. All spectrum leasing arrangements leases entered into after January 10, 2005, pursuant to the rules set forth in part 1 and part 27 of this chapter must comply with the rules in those parts.

§ 27.1216 Grandfathered E and F group EBS licenses.

(a) Except as noted in paragraph (b) of this section, grandfathered EBS licensees authorized to operate E and F group co-channel licenses are granted a geographic service area (GSA) on July 19, 2006. The GSA is the area bounded by a circle having a 35 mile radius and centered at the station's reference coordinates, and is bounded by the chord(s) drawn between intersection points of that circle and those of respective adjacent market, co-channel licensees.

(b) If there is more than 50 percent overlap between the calculated GSA of a grandfathered EBS license and the protected service area of a co-channel BRS license, the licensees shall not be immediately granted a geographic service area. Instead, the grandfathered EBS license and the co-channel BRS licensee must negotiate in good faith to reach a solution that accommodates the communication needs of both licensees. If the co-channel licensees reach a mutually agreeable solution on or before October 17, 2006, then the GSA of each co-channel license shall be as determined pursuant to the agreement of the parties. If a mutually agreeable solution between

co-channel licensees is not reached on or before October 17, 2006, then each co-channel licensee shall receive a GSA determined pursuant to paragraph (a) of this section and § 27.1206(a).

[71 FR 35191, June 16, 2006]

§ 27.1217 Competitive bidding procedures for the Broadband Radio Service.

Mutually exclusive initial applications for BRS licenses in the 2500–2690 MHz band are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

[73 FR 26041, May 8, 2008]

§ 27.1218 Designated entities.

(a) *Eligibility for small business provisions.* (1) A small business is an entity that, together with all attributed parties, has average gross revenues that are not more than $40 million for the preceding three years.

(2) A very small business is an entity that, together with all attributed parties, has average gross revenues that are not more than $15 million for the preceding three years.

(3) An entrepreneur is an entity that, together with all attributed parties, has average gross revenues that are not more than $3 million for the preceding three years.

(b) *Bidding credits.* (1) A winning bidder that qualifies as a small business, as defined in this section, or a consortium of small businesses, may use a bidding credit of 15 percent, as specified in § 1.2110(f)(2)(iii) of this chapter, to lower the cost of its winning bid on any of the licenses in this subpart.

(2) A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses, may use a bidding credit of 25 percent, as specified in § 1.2110(f)(2)(ii) of this chapter, to lower the cost of its winning bid on any of the licenses in this subpart.

(3) A winning bidder that qualifies as an entrepreneur, as defined in this section, or a consortium of entrepreneurs, may use a bidding credit of 15 percent, as specified in § 1.2110(f)(2)(i) of this chapter, to lower the cost of its winning bid on any of the licenses in this subpart.

[73 FR 26041, May 8, 2008]

TECHNICAL STANDARDS

§ 27.1220 Transmission standards.

The width of a channel in the LBS and UBS is 5.5 MHz, with the exception of BRS channels 1 and 2 which are 6.0 MHz. The width of all channels in the MBS is 6 MHz. However, the licensee may subchannelize its authorized bandwidth, provided that digital modulation is employed and the aggregate power does not exceed the authorized power for the channel. The licensee may also, jointly with other licensees, transmit utilizing bandwidth in excess of its authorized bandwidth, provided that digital modulation is employed, all power spectral density requirements set forth in this part are met and the out-of-band emissions restrictions set forth in § 27.53 are met at the edges of the channels employed.

§ 27.1221 Interference protection.

(a) Interference protection will be afforded to BRS and EBS on a station-by-station basis based on the heights of the stations in the LBS and UBS and also on height benchmarking, although the heights of antennas utilized are not restricted.

(b) *Height benchmarking.* Height benchmarking is defined for pairs of base stations, one in each of two proximate geographic service areas (GSAs). The height benchmark, which is defined in meters (hb_m) for a particular base station relative to a base station in another GSA, is equal to the distance, in kilometers, from the base station along a radial to the nearest point on the GSA boundary of the other base station squared (D_{km}^2) and then divided by 17. That is, $hb\ (_m) = D_{km}^2/17$. A base station antenna will be considered to be within its applicable height benchmark relative to another base station if the height in meters of its centerline of radiation above average elevation (HAAE) calculated along the straight line between the two base stations in accordance with § 24.53(b) and (c) of this chapter does not exceed the height benchmark (hb_m). A base station antenna will be considered to exceed its

applicable height benchmark relative to another base station if the HAAE of its centerline of radiation calculated along the straight line between the two base stations in accordance with §24.53(b) and (c) of this chapter exceeds the height benchmark (hb_m).

(c) *Protection for receiving antennas not exceeding the height benchmark.* Absent agreement between the two licensees to the contrary, if a transmitting antenna of one BRS/EBS licensee's base station exceeds its applicable height benchmark and such licensee is notified by another BRS/EBS licensee that it is generating an undesired signal level in excess of −107 dBm/5.5 megahertz at the receiver of a co-channel base station that is within its applicable height benchmark, then the licensee of the base station that exceeds its applicable height benchmark shall either limit the undesired signal at the receiver of the protected base station to −107dBm/5.5 megahertz or less or reduce the height of its transmission antenna to no more than the height benchmark. If the interfering base station has been modified to increase the EIRP transmitted in the direction of the protected base station, it shall be deemed to have commenced operations on the date of such modification. Such corrective action shall be completed no later than:

(i) 24 hours after receiving such notification, if the base station that exceeds its height benchmark commenced operations after the station that is within its applicable height benchmark; or

(ii) 90 days after receiving such notification, if the base station that exceeds its height commenced operations prior to the station that is within its applicable height benchmark. For purposes of this section, if the interfering base station has been modified to increase the EIRP transmitted in the direction of the victim base station, it shall be deemed to have commenced operations on the date of such modification.

(d) *No Protection from a transmitting antenna not exceeding the height benchmark.* The licensee of a base station transmitting antenna less than or equal to its applicable height benchmark shall not be required pursuant to paragraph (c) of this section to limit that antennas undesired signal level to −107dBm/5.5 megahertz or less at the receiver of any co-channel base station.

(e) *No protection for a receiving-antenna exceeding the height benchmark.* The licensee of a base station receive antenna that exceeds its applicable height benchmark shall not be entitled pursuant to paragraph (c) of this section to insist that any co-channel base station limit its undesired signal level to −107dBm/5.5 megahertz or less at the receiver.

(f) *Information exchange.* A BRS/EBS licensee shall provide the geographic coordinates, the height above ground level of the center of radiation for each transmit and receive antenna, and the date transmissions commenced for each of the base stations in its GSA within 30 days of receipt of a request from a co-channel BRS/EBS licensee with an operational base station located in a proximate GSA. Information shared pursuant to this section shall not be disclosed to other parties except as required to ensure compliance with this section.

[69 FR 72034, Dec. 10, 2004, as amended at 70 FR 1190, Jan. 6, 2005; 71 FR 35191, June 19, 2006; 73 FR 26041, May 8, 2008]

§ 27.1222 Operations in the 2568–2572 and 2614–2618 bands.

All operations in the 2568–2572 and 2614–2618 MHz bands shall be secondary to adjacent-channel operations. Stations operating in the 2568–2572 and 2614–2618 MHz must not cause interference to licensees in operation in the LBS, MBS, and UBS and must accept any interference from any station operating in the LBS, MBS, and UBS in compliance with the rules established in this subpart. Stations operating in the 2568–2572 and 2614–2618 bands may cause interference to stations in operation in the LBS, MBS, and UBS if the affected licensees consent to such interference.

POLICIES GOVERNING THE TRANSITION OF THE 2500–2690 MHZ BAND FOR BRS AND EBS

§ 27.1230 Conversion of the 2500–2690 MHz band.

BRS and EBS licensees in the 2500–2690 MHz band on the pre-transition A-I Channels will be transitioned from the frequencies assigned to them under § 27.5(i)(1) to the frequencies assigned to them under § 27.5(i)(2). The transition, which will be undertaken by one or more proponent(s), will occur in the following five phases: initiating the transition process (see § 27.1231), planning the transition (see § 27.1232), reimbursing transition costs (see §§ 27.1233 and 27.1237–1239), terminating existing operations in transitioned markets that do not comport with § 27.5(i)(2) (see § 27.1234), and filing the post-transition notification (see § 27.1235). Licensees may also self-transition (see § 27.1236).

[71 FR 35191, June 19, 2006]

§ 27.1231 Initiating the transition.

(a) *Transition areas.* Unless paragraph (b) of this section applies, the transition will occur by Basic Trading Area (BTA). BTAs are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38–39, that identifies 487 BTAs based on the 50 States; it also includes the following additional BTA-like areas: American Samoa; Guam; Northern Mariana Islands; Mayaguez/Aguadilla-Ponce, Puerto Rico; San Juan, Puerto Rico; and the United States Virgin Islands, for a total of 493 BTAs. The Mayaguez/Aguadilla-Ponce BTA-like area consists of the following municipios: Adjuntas, Aguada, Aguadilla, Anasco, Arroyo, Cabo Rojo, Coamo, Guanica, Guayama, Guayanilla, Hormigueros, Isabela, Jayuya, Juana Diaz, Lajas, Las Marias, Maricao, Maunabo, Mayaguez, Moca, Patillas, Penuelas, Ponce, Quebradillas, Rincon, Sabana Grande, Salinas, San German, Santa Isabel, Villalba, and Yauco. The San Juan BTA-like area consists of all other municipios in Puerto Rico. The BTA associated with the Gulf of Mexico will not be transitioned.

(b) *Overlapping GSAs.* When a Geographic Service Area (GSA) overlaps two or more BTAs:

(1) The proponents of the adjacent BTAs may agree on how to transition a GSA that overlaps their respective BTAs.

(2) If an agreement has not been reached between or among the proponents of the adjacent BTAs:

(i) Each proponent must transition all of the facilities associated with the GSA that are inside the GSA and inside the proponent's BTA if all of the adjacent BTAs are transitioning; or

(ii) The proponent of the BTA that is transitioning must transition all of the facilities associated with the GSA that are within the GSA but outside the BTA, if the adjacent BTA is not transitioning.

(c)(1) *Proponent(s).* The proponent or co-proponent must:

(i) Be a BRS or EBS licensee or BRS or EBS lessee;

(ii) Send a Pre-Transition Data Request (see paragraph (d) of this section) and a Transition Notice (see paragraph (e) of this section) to every BRS and EBS licensee in the BTA, using the contact information in the Commission's Universal Licensing System; and

(iii) Be first to file an Initiation Plan (see paragraph (f) of this section) with the Secretary of the Commission.

(2) Before filing an Initiation Plan, BRS or EBS licensees or BRS or EBS lessees may agree to be co-proponents. After the Initiation Plan is filed the proponent may accept a co-proponent at its sole discretion.

(d) *Pre-Transition Data Request.* The Pre-Transition Data Request must include the potential proponent's full name, postal mailing address, contact person, e-mail address, and phone and fax numbers.

(1) BRS and EBS licensees that receive a Pre-Transition Data Request must provide the following information to the potential proponent within 45 days of receiving the Pre-Transition Data Request:

(i) The BRS or EBS licensee's full name, postal mailing address, contact person, e-mail address, and phone and fax number.

(ii) The location (by street address and by geographic coordinates) of

every constructed EBS receive site that, as of the date of receipt of the Pre-Transition Data Request, is entitled to a replacement downconverter (see § 27.1233(a)). The response must:

(A) Specify whether the downconverting antenna is mounted on a structure attached to the building or on a free-standing structure;

(B) Specify the approximate height above ground level of the downconverting antenna; and

(C) Specify, if known, the adjacent channel D/U ratio that can be tolerated by any receiver(s) at the receive site.

(iii) The location (street address and geographic coordinates) of the main station or booster serving each EBS receive site entitled to protection, including:

(A) The make and model of the antenna for that main station or booster, along with the radiation pattern if it is not included within the Commission's database;

(B) The ground elevation, above mean sea level (AMSL), of the building or antenna supporting structure on which the main station or booster transmission antenna is installed;

(C) The height above ground level (AGL) of the center of radiation of the transmission antenna;

(D) The orientation of the main lobe of the transmission antenna;

(E) Any mechanical beamtilt or electrical beamtilt not reflected in the radiation pattern provided or included within the Commission's database;

(F) The bandwidth of each channel or subchannel, the emission type for each channel or subchannel, and the EIRP measured in the main lobe for each channel or subchannel; and

(G) The make and model of the receive antenna installed at that site, along with the radiation pattern if it is not included within the Commission's database.

(iv) The number and identification of EBS video programming or data transmission tracks the EBS licensee is entitled to receive in the MBS and whether the EBS licensee will accept fewer tracks in the MBS (see § 27.1233(b)).

(v) Whether it will seek or has sought a waiver from the Commission as a Multichannel Video Programming Distributor (MVPD).

(2) BRS and EBS licensees that do not respond to the Pre-Transition Data Request within 45 days of its receipt may not object to the Transition Plan.

(e) *The Transition Notice.* The potential proponent(s) must send a Transition Notice to all BRS and EBS licensees in the BTA(s) being transitioned. The potential proponent(s) must include the following information in the Transition Notice:

(1) The potential proponent(s)'s full name; postal mailing address, contact person, e-mail address, and phone and fax numbers;

(2) The identification of the BRS and EBS licensees that will be transitioned;

(3) Copies of the most recent response to the Pre-Transition Data Request for each participant in the process; and

(4) A certification that the potential proponent(s) has the funds available to pay the reasonably expected costs of the transition based on the information in the Pre-Transition Data Request.

(f) *Initiation Plan.* To initiate a transition, a potential proponent(s) must submit an Initiation Plan to the Commission at the Office of the Secretary in Washington, DC on or before January 21, 2009.

(1) An Initiation Plan must contain the following information:

(i) A list of the BTA(s) that the proponent(s) is transitioning;

(ii) A list by call sign of all of the BRS and EBS licensees in the BTA(s) that are being transitioned;

(iii) A ''best estimate'' of when the transition will be completed;

(iv) A statement indicating that an agreement has been concluded with the proponent(s) of the adjoining or adjacent BTA(s) when a licensee or licensees in an adjacent or adjoining BTA must be transitioned to avoid interference to licensees in the BTA being transitioned, or in lieu of an agreement, the proponent(s) may provide an alternative means of transitioning the licensees in an adjacent or adjoining BTA;

(v) A statement indicating that an agreement has been concluded with another proponent(s) on how a BTA will be transitioned when there are two or more proponents seeking to transition the same BTA and they agree to be co-

proponents before the Initiation Plan is filed, and a statement that identifies the specific portion of the BTA each proponent will be responsible for transitioning; and

(vi) A certification that the proponent or joint proponents have the funds available to pay the reasonable expected costs of the transition based on the information contained in the Pre-Transition Data Request (see paragraph (d) of this section).

(2) A proponent, at its own discretion, may withdraw from transitioning a BTA by notifying the Commission and all affected BRS and EBS licensees in the BTA that it is withdrawing the Initiation Plan.

(3) A proponent may amend an Initiation Plan after it has been filed with the Commission to correct minor or inadvertent errors.

(g) *MVPD waiver requests.* MVPD licensees that seek to opt-out of the transition must seek a waiver within 60 days after the proponent files the Initiation Plan or on or before April 30, 2007, whichever occurs first.

[71 FR 35191, June 19, 2006, as amended at 73 FR 26041, May 8, 2008]

§ 27.1232 Planning the transition.

(a) *The Transition Planning Period.* The Transition Planning Period is a 90-day period that commences on the day after the proponent(s) files the Initiation Plan with the Commission.

(b) *The Transition plan.* The proponent(s) must provide to each BRS and EBS licensee within a BTA, a Transition Plan no later than 30 days prior to the conclusion of the Transition Planning Period.

(1) The Transition Plan must:

(i) Identify the call signs of the stations that are transitioning;

(ii) Identify the specific channels that each licensee will receive following the transition;

(iii) Identify the receive sites at which replacement downconverters will be installed (see § 27.1233(a));

(iv) Identify the video programming and data transmission tracks that will be migrated to the MBS and provide for the MBS channels to be authorized to operate with transmission parameters that are substantially similar to those of the licensee's operation prior to transition (see § 27.1233(b));

(v) Identify the technical configuration of the MBS facilities;

(vi) Identify the approximate time line for effectuating the transition, which, unless dispute resolution procedures are used, may not exceed 18 months from the conclusion of the Transition Planning Period;

(vii) Provide for the establishment of an escrow or other appropriate mechanism for ensuring completion of the transition in accordance with the Transition Plan.

(2) The Transition Plan may provide for interruptions of EBS transmissions, so long as those interruptions are limited to a period of less than seven days at any reception site. The proponent(s) must coordinate with each EBS licensee to minimize the extent of any disruption.

(3) The Transition Plan may provide for the shifting of an EBS licensee's program to alternative channels. Such shifting may not be considered an interruption, if the EBS licensee's receive sites are equipped to receive and internally distribute the channel to which the programming is shifted.

(4) The Transition Plan may provide for the installation of an appropriate filter on an MBS transmitter if the proponent(s) determines that the installation of a filter will mitigate interference from transmissions in the MBS to operations outside the MBS.

(c) *Counterproposals.* No later than 10 days before the conclusion of the Transition Planning Period, affected BRS and EBS licensees may submit a counterproposal to the proponent(s) if they believe that the Transition Plan is unreasonable. The proponent(s) may:

(1) Accept the counterproposal, modify the Transition Plan accordingly, and send the modified Transition Plan to all EBS and BRS licensees in the BTA;

(2) Invoke dispute resolution procedures for a determination of whether the Transition Plan is reasonable and take no action until a determination of reasonableness is made; or

(3) Invoke dispute resolution procedures for a determination of whether the Transition Plan is reasonable, but

may implement the transition immediately.

(d) *Safe harbors.* An offer by a proponent(s) shall be reasonable if it meets one of the following safe harbors:

(1) *Safe harbor No. 1.* This safe harbor applies when the default high-power channel assigned to each channel group is authorized to operate after the transition with the same transmission parameters (coordinates, antenna pattern, height of center radiation, EIRP) as the downstream facilities before the transition. If the proponent(s) does not propose a change in the geographic coordinates of the facilities (other than as necessary to conform the actual location with the Commission's Antenna Survey Branch database), the proponent may also propose the following to the extent consistent with this subpart:

(i) An increase in the height of the center of radiation of the transmission antenna or a decrease in such height of no more than 8 meters (provided that such change does not result in an increase in antenna support structure lease costs to the EBS licensee and the consent of the owner of the antenna support structure is obtained).

(ii) A change in the EIRP of the transmission system of up to 1.5 dB in any direction.

(iii) Digitization, precision frequency offset, or other upgrades to the EBS transmission or reception systems that allow the proponent(s) to invoke more advantageous interference protection requirements applicable to upgraded systems.

(2) *Safe harbor No. 2.* This safe harbor applies when an EBS licensee has channel-shifted its single video programming or data transmission track to spectrum licensed to another licensee. Under § 27.5(i)(2), that track must be on the high-power channel licensed to the EBS licensee upon completion of the transition. For example, before the transition, an A Group licensee might have shifted its EBS video programming to channel C1. If one of the pre-transition A Group channels is licensed with technical parameters substantially similar to those of pre-transition channel C1, the Transition Plan may provide for high-power channel A4 to be licensed with the same technical parameters as the pre-transition channel C1. However, if the pre-transition A Group channels are licensed to operate with technical parameters materially different from those of pre-transition channel C1, the proponent(s) may:

(i) Arrange a channel swap with the licensee of the C Group so that the A Group licensee will receive high-power channel C4 (which will automatically be licensed with the same transmission parameters as the pre-transition channel C1) in exchange for channel A4.

(ii) Arrange for high-power channel A4 to operate with transmission parameters substantially similar to those of the pre-transition channel C1 (*see* paragraph (d)(1) of this section).

(3) *Safe harbor No. 3.* This safe harbor applies when a four-channel group is shared among multiple licensees in a given geographic area. Absent an agreement otherwise, a proponent may:

(i) Secure a 6 MHz MBS channel for each licensee in exchange for the non-MBS channels assigned to the group. Following the channel swap(s) necessary to secure those additional MBS channels, the Transition Plan can provide for the licensing of the remaining channels in the LBS, UBS, and Guard Bands on a pro rata basis (with channel(s) in each segment being disaggregated when and if necessary to provide each with its pro rata share of the spectrum in each segment);

(ii) Provide for pro rata segmentation of the default MBS channel for the group, provided that the proponent commits to provide each of the licensees with the technology necessary for its EBS video programming or data transmissions to be digitized, transmitted and received utilizing the provided bandwidth. The non-MBS channels would be divided among the sharing licensees on a pro rata basis (with channel(s) in each segment being disaggregated when and if necessary to provide each with its pro rata share of the spectrum in each segment); or

(iii) Assign the default MBS channel assigned to the channel group to one of the licensees, if that licensee is the only one that elects to migrate video programming or data transmission tracks to the MBS. The remaining spectrum assigned to the group may be

allocated among the licensees on a pro rata basis, with the 6 MHz in the MBS counting against that licensee's portion. To the extent necessary, the non-MBS spectrum can be disaggregated when and if necessary to provide each with its pro rata share of the spectrum in each segment. If the proponent chooses to effectuate a channel swap to provide more than one channel in the MBS, the remaining channels assigned to the group (after considering that one or more LBS/UBS channels and associated Transition Band channels will have been swapped away to provide the additional MBS channel) can be allocated among the licensees on a pro rata basis (with channel(s) in each segment being disaggregated when and if necessary to provide each with its pro rata share of the spectrum in each segment).

(4) *Safe harbor No. 4.* This safe harbor applies when an EBS licensee uses one or more of its channels for studio-to-transmitter links. The proponent may provide for one of the following options:

(i) The use of the LBS and/or UBS band for the point-to-point transmission of the EBS video or data (through superchannelization of the licensee's contiguous LBS or UBS channels), provided the proponent commits to retune the existing point-to-point equipment to operate on those channels or to replace the existing equipment with new equipment tuned to operate on those channels and the proposal complies with the LBS/UBS technical and interference protection rules;

(ii) The migration of the EBS programming to the MBS by retuning the existing point-to-point equipment to operate in the MBS or replacing it with equipment tuned to operate in the MBS; or

(iii) The replacement of the point-to-point link with point-to-point equipment licensed to the EBS licensee in alternative spectrum, so long as the replacement facilities meet the definition of ''comparable facilities'' set out in § 101.75(b) of this chapter.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35192, June 19, 2006]

§ 27.1233 Reimbursement costs of transitioning.

(a) *Replacement downconverters.* The proponent(s) must install at every eligible EBS receive site a downconverter designed to minimize the reception of signals from outside the MBS.

(1) An EBS receive site is eligible to be replaced if:

(i) A reception system was installed at that site on or before the date the EBS licensee receives its Pre-Transition Data Request (see § 27.1231(d));

(ii) The reception system was installed by or at the direction of the EBS licensee;

(iii) The reception system receives EBS programming under § 27.1203(b) and (c) or is located at a cable television system headend and the cable system relays educational or instructional programming for an EBS licensee; and

(iv) It is within the licensee's 35-mile radius GSA.

(2) Replacement downconverters must meet the following minimum technical requirements:

(i) The downconverter's input frequency range (the ''in-band frequencies'') must be 2572 MHz to 2614 MHz and output frequency range must be 294 MHz to 336 MHz;

(ii) The downconversion process must not invert frequencies;

(iii) The nominal gain of the downconverter must be 32 dB, or greater;

(iv) The downconverter must include filtering prior to the first amplifier that attenuates frequencies below 2500 MHz and above 2705 MHz by at least 25 dB;

(v) The downconverter must have an out-of-band input 3rd order intercept point (input IP3) of at least + 9 dBm, where out-of-band is defined as all frequencies below 2566 MHz and all frequencies above 2620 MHz;

(vi) The downconverter must have a typical noise figure of no greater than 3.5 dB and a worst case noise figure of no greater than 4.5 dB across all in-band frequencies and across its entire intended operating temperature range;

(vii) The downconverter must not introduce a delta group delay of more than 20 nanoseconds for digital operations or 100 nanoseconds for analog

operations over any individual six megahertz MBS channel.

(b) *Migration of Video Programming and Data Transmission Track.* (1) The proponent(s) must provide, at its cost, to each EBS licensee that intends to continue downstream high-power, high-site educational video programming or data transmission services, with one programming track on the MBS channels for each EBS video or data transmission track the licensee is transmitting on a simultaneous basis before the transition.

(i) To be eligible for migration, a program track must contain EBS programming that complies with § 27.1203 (b) and (c).

(ii) The proponent(s) must pay only the costs of migrating programming tracks being transmitted on December 31, 2002 or within six months prior thereto.

(2) The proponent(s) must migrate each eligible programming track to spectrum in the MBS that will be licensed to the affected licensee at the conclusion of the transition.

(3) After the transition, the desired-to-undesired signal level ratio at each of the receive sites securing a replacement downconverter must satisfy the following criteria:

(i) *Cochannel D/U Ratio.* (A) When the post-transition desired signal is transmitted using analog modulation, the actual cochannel D/U ratio measured at the output of the reception antenna must be at least the lesser of 45 dB or the actual pre-transmission D/U ratio less 1.5 dB.

(B) When the post-transition desired signal will be transmitted using digital modulation, the actual cochannel D/U ratio measured at the output of the reception antenna must be at least the lesser of 32 dB or the pre-transition D/U ratio less 1.5 dB.

(C) Where in implementing the Transition Plan, the proponent(s) deploys precise frequency offset in an analog system, the minimum cochannel D/U ratio is reduced to 38 dB, provided that the transmitters have or are upgraded pursuant to the Transition Plan to have the appropriate ''plus,'' ''zero,'' or ''minus'' 10,010 Hertz precision frequency offset with a ±3 Hertz (or better) stability.

(ii) *Adjacent Channel D/U Ratio.* The actual adjacent channel D/U must equal or exceed the lesser of 0 dB or the actual pre-transmission D/U ratio. However, in the event that the receive site uses receivers or is upgraded by the proponent(s) as part of the Transition Plan to use receivers that can tolerate negative adjacent channel D/U ratios, the actual adjacent channel D/U ratio at such receive site must equal or exceed −10 dB. Provided that the receive site receiver is not upgraded and cannot tolerate −10 dB, the adjacent channel D/U ratio would be 0dB.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35193, June 19, 2006]

§ 27.1234 Terminating existing operations in transitioned markets.

Licensees may discontinue operations during the transition.

§ 27.1235 Post-transition notification.

The proponent(s) must certify to the Commission at the Office of the Secretary, Washington, DC, that the Transition Plan has been fully implemented.

(a) The notification must provide the identification of the licensees that have transitioned to the band plan in § 27.5(i)(2) and the specific frequencies on which each licensee is operating.

(b) For each station in the MBS, the notification must provide the following information:

(1) The station coordinates,

(2) The make and model of each antenna,

(3) The horizontal and vertical pattern of the antenna;

(4) EIRP of the main lobe;

(5) Orientation;

(6) Height of antenna center of radiation;

(7) Transmitter output power;

(8) All line and combiner losses.

(c) The proponent(s) must provide copies of the post-transition notice to all parties of the transition.

(d) A BRS or EBS licensee must file any objection to the post-transition notification within 30 days from the date the post-transition notification is placed on Public Notice.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35193, June 19, 2006]

§ 27.1236 Self-transitions.

(a) If an Initiation Plan is not filed on or before January 21, 2009 for a BTA, BRS and EBS licensees in that BTA may self-transition by relocating to their default channel locations specified in § 27.5(i)(2) and complying with §§ 27.50(h), 27.53, 27.55 and 27.1221.

(b) To self-transition, a BRS or EBS licensee must:

(1) Notify the Secretary of the Commission on or before April 21, 2009 that it will self-transition (see paragraph (a) of this section);

(2) Send a Self-Transition Notification (see paragraph (c) of this section) to other BRS and EBS licensees in the BTA where the self-transitioning licensee's GSA geographic center point is located that it is self-transitioning;

(3) Notify other licensees whose GSAs overlap with the self-transitioning licensee that it is self-transitioning.

(4) Address interference concerns with other BRS and EBS licensees in the BTA that are also self-transitioning;

(5) File a modification application with the Commission, and

(6) Complete the self-transition on or before October 20, 2010.

(c) *Self-Transition Notification*. The Self-Transition Notification must include the EBS licensee's full name, postal mailing address, contact person, e-mail address, and phone and fax numbers. A self-transitioning EBS licensee must provide the following information to all BRS and EBS licensees located in the BTA where the self-transitioning licensees GSA geographic center point is located:

(1) The location (by street address and by geographic coordinates) of every constructed EBS receive site that, as of the date the Self-Transition Notification is sent, is entitled to a replacement downconverter (see § 27.1233(a)). The response must:

(i) Specify whether the downconverting antenna is mounted on a structure attached to the building or on a free-standing structure;

(ii) Specify the approximate height above ground level of the downconverting antenna; and

(iii) Specify, if known, the adjacent channel D/U ratio that can be tolerated by any receiver(s) at the receive site.

(2) The location (street address and geographic coordinates) of the main station or booster serving each EBS receive site entitled to protection, including:

(i) The make and model of the antenna for that main station or booster, along with the radiation pattern if it is not included within the Commission's database;

(ii) The ground elevation, above mean sea level (AMSL), of the building or antenna supporting structure on which the main station or booster transmission antenna is installed;

(iii) The height above ground level (AGL) of the center of radiation of the transmission antenna;

(iv) The orientation of the main lobe of the transmission antenna;

(v) Any mechanical beamtilt or electrical beamtilt not reflected in the radiation pattern provided or included within the Commission's database;

(vi) The bandwidth of each channel or subchannel, the emission type for each channel or subchannel, and the EIRP measured in the main lobe for each channel or subchannel; and

(vii) The make and model of the receive antenna installed at that site, along with the radiation pattern if it is not included within the Commission's database.

(3) The number and identification of EBS video programming or data transmission tracks the EBS licensee is entitled to receive in the MBS (see § 27.1233(b)).

[71 FR 35193, June 19, 2006, as amended at 73 FR 26042, May 8, 2008]

§ 27.1237 Pro rata allocation of transition costs.

(a) *Self-transitions*. EBS licensees that self-transition may seek reimbursement for their costs to replace eligible downconverters (see § 27.1233(a)) and to migrate video programming and data transmission tracks (see § 27.1233(b)) from BRS licensees and lessees, EBS lessees, and commercial EBS licensees in the BTA where the center point of the EBS licensee's GSA is located. In addition, BRS licensees and lessees, EBS lessees, and commercial EBS licensees in the LBS or UBS must reimburse the self-transitioning EBS licensee a pro rata share of the eligible

costs of transitioning EBS licensees, based on the formula in paragraph (c) of this section. Eligible costs are listed in § 27.1238.

(b) *Proponent-driven transitions.* BRS licensees and lessees, entities that lease EBS spectrum for a commercial purpose, and commercial EBS licensees must pay their own transition costs. In addition, except for MVPD operators that opt-out of the transition, BRS licensees and lessees, EBS lessees, and commercial EBS licensees in the LBS or UBS must reimburse the proponent a pro rata share of the eligible costs of transitioning EBS licensees, based on the formula in paragraph (c) of this section. Eligible costs are listed in § 27.1238.

(c) *Formula.* The pro rata share shall be based on the following formula:

$$R = \frac{L \times LP}{T \times TP}$$

(1) R equals the pro rata share;

(2) L equals the amount of spectrum used by a BRS licensee or lessee or commercial EBS licensee or lessee to provide a commercial service, either directly or through a lease agreement with an EBS or BRS licensee;

(3) T equals the total amount of spectrum licensed or leased for commercial purposes in the BTA;

(4) LP equals the population of the geographic service area or BTA served by the BRS licensee or lessee or commercial EBS licensee or lessee based on the data in the 2000 United States Census; and

(5) TP equals the population of the BTA based on the data in the 2000 United States Census.

[71 FR 35193, June 19, 2006]

§ 27.1238 Eligible costs.

(a) The costs listed in paragraphs (b) through (f) of this section are eligible costs.

(b) *Pre-transition costs:*

(1) Engineering/Consulting

(i) Evaluation of equipment;

(ii) RX site identification;

(iii) EBS Programming plan covering the BTA;

(iv) Market Analysis (MHz per POP Study);

(v) RF study (interference analysis); and

(vi) Transition Plan creation and support;

(2) Project management (may be sourced external);

(3) Filing fees;

(4) Legal fees;

(5) Site acquisition fees-contractor; and

(6) Arbitrator fee;

(c) *Transmission facility—analog conversion costs:*

(1) Transmitter upgrading or retuning;

(2) Combiner re-tuning or new;

(3) Power divider/circulator adjacent channel combiner hardware;

(4) STL/fiber relocation;

(5) Miscellaneous material costs (including cabling and connectors);

(6) Contract labor:

(i) Tower;

(ii) Building modifications;

(iii) Electrical/HVAC; and

(iv) Mechanical

(7) Engineering:

(i) Structural; and

(ii) Pathway Interference Analysis.

(8) Equipment disposal/shipping

(9) Program Management (third party or internal costs to manage the BTA conversion); and

(10) Travel and Per Diem Cost.

(d) *Transmission facility-digital conversion costs:*

(1) New transmitter or retuning;

(2) Digital compression equipment-TX site (including encoders, controller, and software);

(3) Combiners-new or retune;

(4) Power divider/circulator adjacent channel combiner hardware;

(5) Cabinets, cabling, feedline and connectors;

(6) STL—fiber digital upgrade;

(7) Installation cost due to adding additional broadcast antenna (4 or more digital channels required);

(8) Contract labor:

(i) Tower;

(ii) Building modifications;

(iii) Electrical/HVAC; and

(iv) Mechanical.

(9) Proof of performance testing (may be contracted);

(10) Engineering:

(i) Structural; and
(ii) Path engineering analysis.
(11) Equipment disposal/shipping;
(12) Training;
(13) Program management (third party or internal costs to manage BTA conversion);
(14) Travel and per diem costs.
(e) *Qualified receive-sites only-modifications (analog and digital):*
(1) Digital set top boxes;
(2) Downconverters (with filtering)/antennas (replacement downconverters);
(3) Contract labor:
(i) Antenna change/DC install (antenna change may be necessary); and
(ii) Electrical; and mechanical
(4) Project management (third party or internal costs to manage the BTA conversion);
(5) Proof of performance testing (may be contracted);
(6) Mini headend (cost effective distribution method):
(i) Modulators, combiners;
(ii) Equipment racks; and
(iii) Amplifiers
(7) Cable, connectors; and
(8) Training.
(f) *Miscellaneous transition fees.* (1) Filing fees;
(2) Arbitrator fee; and
(3) Legal fees.

[71 FR 35193, June 19, 2006]

§ 27.1239 Reimbursement obligation.

(a) A proponent may request reimbursement from BRS licensees and lessees, EBS lessees, and commercial EBS licensees in a BTA after the Transition Notification has been filed with the Secretary of the Commission and the proponent has accumulated the documentation to substantiate the full and accurate cost of the transition. A self-transitioning licensee may request reimbursement from BRS licensees and lessees, EBS lessees, and commercial EBS licensees in a BTA where its GSA geographic center point is located after it has completed the self-transition and has filed a modification application with the Commission and has accumulated the documentation to substantiate the full and accurate cost of the transition.

(b) If a license is assigned, transferred, partitioned, or disaggregated, all parties to the assignment, transfer, disaggregation, or partition are jointly and severally liable for paying the reimbursement obligation until that obligation is paid.

[71 FR 35193, June 19, 2006]

Relocation Procedures for the 2150–2160/62 MHz Band

Source: Sections 27.1250 through 27.1255 appear at 71 FR 29840, May 24, 2006, unless otherwise noted.

§ 27.1250 Transition of the 2150–2160/62 MHz band from the Broadband Radio Service to the Advanced Wireless Service.

The 2150–2160/62 MHz band has been allocated for use by the Advanced Wireless Service (AWS). The rules in this section provide for a transition period during which AWS licensees may relocate existing Broadband Radio Service (BRS) licensees using these frequencies to their assigned frequencies in the 2496–2690 MHz band or other media.

(a) AWS licensees and BRS licensees shall engage in mandatory negotiations for the purpose of agreeing to terms under which the BRS licensees would:

(1) Relocate their operations to other frequency bands or other media; or alternatively

(2) Accept a sharing arrangement with the AWS licensee that may result in an otherwise impermissible level of interference to the BRS operations.

(b) If no agreement is reached during the mandatory negotiation period, an AWS licensee may initiate involuntary relocation procedures. Under involuntary relocation, the incumbent is required to relocate, provided that the AWS licensee meets the conditions of § 27.1252.

(c) Relocation of BRS licensees by AWS licensees will be subject to a three-year mandatory negotiation period. BRS licensees may suspend the running of the three-year negotiation period for up to one year if the BRS licensee cannot be relocated to comparable facilities at the time the AWS licensee seeks entry into the band.

§ 27.1251 Mandatory Negotiations.

(a) Once mandatory negotiations have begun, a BRS licensee may not refuse to negotiate and all parties are required to negotiate in good faith. Good faith requires each party to provide information to the other that is reasonably necessary to facilitate the relocation process. The BRS licensee is required to cooperate with an AWS licensee's request to provide access to the facilities to be relocated, other than the BRS customer location, so that an independent third party can examine the BRS system and prepare an appraisal of the costs to relocate the incumbent. In evaluating claims that a party has not negotiated in good faith, the FCC will consider, *inter alia*, the following factors:

(1) Whether the AWS licensee has made a bona fide offer to relocate the BRS licensee to comparable facilities in accordance with § 27.1252(b);

(2) If the BRS licensee has demanded a premium, the type of premium requested (*e.g.*, whether the premium is directly related to relocation, such as analog-to-digital conversions, versus other types of premiums), and whether the value of the premium as compared to the cost of providing comparable facilities is disproportionate (*i.e.*, whether there is a lack of proportion or relation between the two);

(3) What steps the parties have taken to determine the actual cost of relocation to comparable facilities;

(4) Whether either party has withheld information requested by the other party that is necessary to estimate relocation costs or to facilitate the relocation process.

(b) Any party alleging a violation of our good faith requirement must attach an independent estimate of the relocation costs in question to any documentation filed with the Commission in support of its claim. An independent cost estimate must include a specification for the comparable facility and a statement of the costs associated with providing that facility to the incumbent licensee.

(c) Mandatory negotiations will commence for each BRS licensee when the AWS licensee informs the BRS licensee in writing of its desire to negotiate. Mandatory negotiations will be conducted with the goal of providing the BRS licensee with comparable facilities, defined as facilities possessing the following characteristics:

(1) *Throughput.* Communications throughput is the amount of information transferred within a system in a given amount of time. System is defined as a base station and all end user units served by that base station. If analog facilities are being replaced with analog, comparable facilities may provide a comparable number of channels. If digital facilities are being replaced with digital, comparable facilities provide equivalent data loading bits per second (bps).

(2) *Reliability.* System reliability is the degree to which information is transferred accurately within a system. Comparable facilities provide reliability equal to the overall reliability of the BRS system. For digital systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital video transmission, it is measured by whether the end-to-end transmission delay is within the required delay bound. If an analog system is replaced with a digital system, only the resulting frequency response, harmonic distortion, signal-to-noise ratio and its reliability will be considered in determining comparable reliability.

(3) *Operating Costs.* Operating costs are the cost to operate and maintain the BRS system. AWS licensees would compensate BRS licensees for any increased recurring costs associated with the replacement facilities (*e.g.*, additional rental payments, and increased utility fees) for five years after relocation. AWS licensees could satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the BRS licensee would be equivalent to the replaced system in order for the replacement system to be comparable.

(d) AWS licensees are responsible for the relocation costs of end user units served by the BRS base station that is being relocated. If a lessee is operating under a BRS license, the BRS licensee may rely on the throughput, reliability, and operating costs of facilities

in use by a lessee in negotiating comparable facilities and may include the lessee in negotiations.

§ 27.1252 Involuntary Relocation Procedures.

(a) If no agreement is reached during the mandatory negotiation period, an AWS licensee may initiate involuntary relocation procedures under the Commission's rules. AWS licensees are obligated to pay to relocate BRS systems to which the AWS system poses an interference problem. Under involuntary relocation, the BRS licensee is required to relocate, provided that the AWS licensee:

(1) Guarantees payment of relocation costs, including all engineering, equipment, site and FCC fees, as well as any legitimate and prudent transaction expenses incurred by the BRS licensee that are directly attributable to an involuntary relocation, subject to a cap of two percent of the ''hard'' costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. There is no cap on the actual costs of relocation. AWS licensees are not required to pay BRS licensees for internal resources devoted to the relocation process. AWS licensees are not required to pay for transaction costs incurred by BRS licensees during the mandatory period once the involuntary period is initiated, or for fees that cannot be legitimately tied to the provision of comparable facilities; and

(2) Completes all activities necessary for implementing the replacement facilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are used, identifying and obtaining, on the incumbents' behalf, new microwave frequencies and frequency coordination.

(b) *Comparable facilities.* The replacement system provided to an incumbent during an involuntary relocation must be at least equivalent to the existing BRS system with respect to the following three factors:

(1) *Throughput.* Communications throughput is the amount of information transferred within a system in a given amount of time. System is defined as a base station and all end user units served by that base station. If analog facilities are being replaced with analog, the AWS licensee is required to provide the BRS licensee with a comparable number of channels. If digital facilities are being replaced with digital, the AWS licensee must provide the BRS licensee with equivalent data loading bits per second (bps). AWS licensees must provide BRS licensees with enough throughput to satisfy the BRS licensee's system use at the time of relocation, not match the total capacity of the BRS system.

(2) *Reliability.* System reliability is the degree to which information is transferred accurately within a system. AWS licensees must provide BRS licensees with reliability equal to the overall reliability of their system. For digital data systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital video transmissions, it is measured by whether the end-to-end transmission delay is within the required delay bound.

(3) *Operating costs.* Operating costs are the cost to operate and maintain the BRS system. AWS licensees must compensate BRS licensees for any increased recurring costs associated with the replacement facilities (*e.g.*, additional rental payments, increased utility fees) for five years after relocation. AWS licensees may satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the BRS licensee must be equivalent to the replaced system in order for the replacement system to be considered comparable.

(c) AWS licensees are responsible for the relocation costs of end user units served by the BRS base station that is being relocated. If a lessee is operating under a BRS license, the AWS licensee shall on the throughput, reliability, and operating costs of facilities in use by a lessee at the time of relocation in determining comparable facilities for involuntary relocation purposes.

(d) *Twelve-month trial period.* If, within one year after the relocation to new facilities, the BRS licensee demonstrates that the new facilities are

not comparable to the former facilities, the AWS licensee must remedy the defects or pay to relocate the BRS licensee to one of the following: Its former or equivalent 2 GHz channels, another comparable frequency band, a land-line system, or any other facility that satisfies the requirements specified in paragraph (b) of this section. This trial period commences on the date that the BRS licensee begins full operation of the replacement system. If the BRS licensee has retained its 2 GHz authorization during the trial period, it must return the license to the Commission at the end of the twelve months.

§ 27.1253 Sunset Provisions.

(a) BRS licensees will maintain primary status in the 2150–2160/62 MHz band unless and until an AWS licensee requires use of the spectrum. AWS licensees are not required to pay relocation costs after the relocation rules sunset (*i.e.* fifteen years from the date the first AWS license is issued in the band). Once the relocation rules sunset, an AWS licensee may require the incumbent to cease operations, provided that the AWS licensee intends to turn on a system within interference range of the incumbent, as determined by § 27.1255. AWS licensee notification to the affected BRS licensee must be in writing and must provide the incumbent with no less than six months to vacate the spectrum. After the six-month notice period has expired, the BRS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the BRS licensee to continue to operate on a mutually agreed upon basis.

(b) If the parties cannot agree on a schedule or an alternative arrangement, requests for extension will be accepted and reviewed on a case-by-case basis. The Commission will grant such extensions only if the incumbent can demonstrate that:

(1) It cannot relocate within the six-month period (*e.g.*, because no alternative spectrum or other reasonable option is available); and

(2) The public interest would be harmed if the incumbent is forced to terminate operations.

§ 27.1254 Eligibility.

(a) BRS licensees with primary status in the 2150–2162 MHz band as of June 23, 2006, will be eligible for relocation insofar as they have facilities that are constructed and in use as of this date.

(b) *Future licensing and modifications.* After June 23, 2006, all major modifications to existing BRS systems in use in the 2150–2160/62 MHz band will be authorized on a secondary basis to AWS systems, unless the incumbent affirmatively justifies primary status and the incumbent BRS licensee establishes that the modification would not add to the relocation costs of AWS licensees. Major modifications include the following:

(1) Additions of new transmit sites or base stations made after June 23, 2006;

(2) Changes to existing facilities made after June 23, 2006, that would increase the size or coverage of the service area, or interference potential, and that would also increase the throughput of an existing system (*e.g.*, sector splits in the antenna system). Modifications to fully utilize the existing throughput of existing facilities (*e.g.*, to add customers) will not be considered major modifications even if such changes increase the size or coverage of the service area, or interference potential.

§ 27.1255 Relocation Criteria for Broadband Radio Service Licensees in the 2150–2160/62 MHz band.

(a) An AWS licensee in the 2150–2160/62 MHz band, prior to initiating operations from any base or fixed station that is co-channel to the 2150–2160/62 MHz band, must relocate any incumbent BRS system that is within the line of sight of the AWS licensee's base or fixed station. For purposes of this section, a determination of whether an AWS facility is within the line of sight of a BRS system will be made as follows:

(1) For a BRS system using the 2150–2160/62 MHz band exclusively to provide one-way transmissions to subscribers, the AWS licensee will determine whether there is an unobstructed signal path (line of sight) to the incumbent licensee's geographic service area (GSA), based on the following criteria:

use of 9.1 meters (30 feet) for the receiving antenna height, use of the actual transmitting antenna height and terrain elevation, and assumption of 4/3 Earth radius propagation conditions. Terrain elevation data must be obtained from the U.S. Geological Survey (USGS) 3-second database. All coordinates used in carrying out the required analysis shall be based upon use of NAD–83.

(2) For all other BRS systems using the 2150–2160/62 MHz band, the AWS licensee will determine whether there is an unobstructed signal path (line of sight) to the incumbent licensee's receive station hub using the method prescribed in ''Methods for Predicting Interference from Response Station Transmitters and to Response Station Hubs and for Supplying Data on Response Station Systems. MM Docket 97–217,'' in Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket No. 97–217, *Report and Order on Further Reconsideration and Further Notice of Proposed Rulemaking,* 15 FCC Rcd 14566 at 14610, Appendix D.

(b) Any AWS licensee in the 2110–2180 MHz band that causes actual and demonstrable interference to a BRS licensee in the 2150–2160/62 MHz band must take steps to eliminate the harmful interference, up to and including relocation of the BRS licensee, regardless of whether it would be required to do so under paragraph (a), of this section.

Subpart N—600 MHz Band

SOURCE: 79 FR 48539, Aug. 15, 2014, unless otherwise noted.

§ 27.1300 600 MHz band subject to competitive bidding.

As required by section 6403(c) of the Spectrum Act, applications for 600 MHz band initial licenses are subject to competitive bidding. The general competitive bidding procedures set forth in 47 CFR part 1, subpart Q will apply unless otherwise provided in this subpart.

§ 27.1301 Designated entities in the 600 MHz band.

Eligibility for small business provisions:

(a) *Small business.* (1) A small business is an entity that, together with its affiliates, its controlling interests, the affiliates of its controlling interests, and the entities with which it has an attributable material relationship, has average gross revenues not exceeding $40 million for the preceding three (3) years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests, the affiliates of its controlling interests, and the entities with which it has an attributable material relationship, has average gross revenues not exceeding $15 million for the preceding three (3) years.

(b) *Bidding credits.* A winning bidder that qualifies as a small business as defined in this section or a consortium of small businesses may use the bidding credit specified in §1.2110(f)(2)(iii) of this chapter. A winning bidder that qualifies as a very small business as defined in this section or a consortium of very small businesses may use the bidding credit specified in §1.2110(f)(2)(ii) of this chapter.

EFFECTIVE DATE NOTE: At 80 FR 56817, Sept. 18, 2015, §27.1301 was revised, effective Nov. 17, 2015. For the convenience of the user, the revised text is set forth as follows:

§ 27.1301 Designated entities in the 600 MHz band.

(a) *Small business.* (1) A small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding $55 million for the preceding three (3) years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding $20 million for the preceding three (3) years.

(b) *Eligible rural service provider.* For purposes of this section, an eligible rural service provider is an entity that meets the criteria specified in §1.2110(f)(4) of this chapter.

(c) *Bidding credits.* (1) A winning bidder that qualifies as a small business as defined in this section or a consortium of small businesses may use the bidding credit specified in §1.2110(f)(2)(i)(C) of this chapter. A winning bidder that qualifies as a very small

business as defined in this section or a consortium of very small businesses may use the bidding credit specified in §1.2110(f)(2)(i)(B) of this chapter.

(2) An entity that qualifies as eligible rural service provider or a consortium of rural service providers may use the bidding credit specified in §1.2110(f)(4) of this chapter.

PART 32—UNIFORM SYSTEM OF ACCOUNTS FOR TELECOMMUNICATIONS COMPANIES

Subpart A—Preface

Subpart B—General Instructions

Subpart C—Instructions for Balance Sheet Accounts