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 di-

vision 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.

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(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: 2569.0000-2569.33333 MHz EBS Channel JB2: 2569.33333-2569.66666 MHz

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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: 2571.66666–2571.66666 MHz EBS Channel JD2: 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: 2614.0000–2614.33333 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 KF1: 2616.00000–2616.33333 MHz. BRS Channel KF2: 2616.33333–2616.66666 MHz. BRS Channel KF2: 2616.6666–2617.00000 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 KE3: 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 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

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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 caseby-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.

(1) 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