960.0 MHz bands, as well as assignments or transfers of such stations approved by the Commission and consummated as of January 19, 2000, shall be considered incumbent.

(b) Incumbent operators in the 928.0–928.85 MHz/952.0–952.85 MHz/956.25–956.45 MHz bands are grandfathered as of January 19, 2000, and may continue to operate and expand their systems pursuant to the interference protection and co-channel spacing criteria contained in § 101.105.

(1) MAS operators are prohibited from acquiring additional frequencies in the 928.0–928.85 MHz/952.0–952.85 MHz/956.25–956.45 MHz bands and the 932.25625–932.49375 MHz/941.25625–941.49375 MHz bands for the purpose of expanding private carrier service and from changing the use of their frequencies in any manner that is inconsistent with this part. Refer to § 101.147 for designated uses.

(2) Incumbent operators in the 928.0–928.85 MHz/952.0–952.85 MHz/956.25–956.45 MHz bands will include incumbents as defined in § 101.1331(a), as well as, their transferees and/or assignees and the successors of the transferees and/or assignees and retain their grandfathered status, provided that the use of the MAS frequencies remains unchanged from that of the transferor and/or assignor of the license.

(c) Incumbent operators in the 928.85–929.0/959.85–960.0 MHz bands are grandfathered as of January 19, 2000, and may expand their systems provided that the signal level of the additional transmitter(s) does not increase the composite contour that occurs at a 40.2 kilometer (25-mile) radius from the center of each master station transmitter site. Incumbent operators and geographic area licensees may negotiate alternative criteria.

(d) The frequencies associated with incumbent authorizations in the 928/959 MHz bands that have cancelled automatically or otherwise been recovered by the Commission will automatically revert to the applicable EA licensee.

(e) The frequencies associated with incumbent authorizations in the 928/952/956 MHz bands that have cancelled automatically will revert to the Commission.

[65 FR 17450, Apr. 3, 2000, as amended at 66 FR 35111, July 3, 2001]

§ 101.1333 Interference protection criteria.

(a) *Frequency coordination.* All EA licensees are required to coordinate their frequency usage with co-channel adjacent area licensees and all other affected parties.

(b) EA licensees are prohibited from exceeding a signal strength of 40 dBμV/m at their service area boundaries, unless a higher signal strength is agreed to by all affected co-channel, adjacent area licensees.

(c) EA licensees are prohibited from exceeding a signal strength of 40 dBμV/m at incumbent licensees' 40.2 kilometer (25-mile) radius composite contour specified in § 101.1331(c).

(d) In general, licensees shall comply with the appropriate coordination agreements between the United States and Canada and the United States and Mexico concerning cross-border sharing and use of the applicable MAS frequencies.

(1) *Canada—932.0–932.25 MHz and 941.0–941.25 MHz.* (i) Within Lines A, B, C, and D, as defined in § 1.928(e) of this chapter, along the U.S./Canada border, U.S. stations operating in the 932.0–932.25 MHz and 941.0–941.25 MHz bands are on a secondary basis and may operate provided that they shall not transmit a power flux density (PFD) at the border greater than −100 dBW/m^2 nor −94 dBW/m^2, respectively. The U.S. has full use of the frequencies in these regions up to the border in the bands 932.25–932.50 MHz and 941.25–941.50 MHz, and Canadian stations may operate on a secondary basis provided they do not exceed the respective PFDs shown above. PFD can be determined using the following formula: PFD (dBW/m^2) = 10 log [EIRP/4π(D^2], where EIRP is in watts, D is in meters, and the power is relative to an isotropic radiator. The technical parameters are also limited by tables 1 and 2:

TABLE 1—MAXIMUM RADIATED POWER

Class of station	Band MHz	Maximum EIRP		Maximum ERP[1]	
		Watts	dBW	Watts	dBW
Master	941.0–941.5	1000	30	600	27.8
Fixed Remote and Master	932.0–932.5	50	17	30	14.8

[1] Where ERP = EIRP/1.64.≤

(ii) Maximum antenna height above average terrain for master stations operating at a maximum power shall not exceed 150 meters. Above 150 meters, the power of master stations shall be in accordance with following table:

TABLE 2—ANTENNA HEIGHT—POWER REDUCTION TABLE

Antenna height above average terrain (meters)	EIRP		ERP	
	Watts	dBW	Watts	dBW
Above 305	200	23	120	20.8
Above 275 to 305	250	24	150	21.8
Above 245 to 275	315	25	190	22.8
Above 215 to 245	400	26	240	23.8
Above 180 to 215	500	27	300	24.8
Above 150 to 180	630	28	380	25.8

NOTE TO TABLE 2: This information is from the *Arrangement between the Federal Communications Commission and the National Telecommunications and Information Administration of the United States of America, and Industry Canada concerning the use of the bands 932 to 935 MHz and 941 to 944 MHz along the United States-Canada border* signed in 1994. This agreement also lists grandfathered stations that must be protected.

(2) *Canada—928–929 MHz and 952–960 MHz.* Between Lines A and B and between Lines C and D, as defined in §1.928(e) of this chapter, along the U.S./Canada border, U.S. stations operating in the 928.50–928.75 MHz and 952.50–952.75 MHz bands are on an unprotected basis and may operate provided that they shall not transmit a power flux density (PFD) at or beyond the border greater than −100 dBW/m^2. The U.S. has full use of the frequencies in these regions up to the border in the bands 928.25–928.50 MHz and 952.25–952.50 MHz, and Canadian stations may operate on an unprotected basis provided they do not exceed the PFD above. Frequencies in the bands 928.00–928.25 MHz, 928.75–929.00 MHz, 952.00–952.25 MHz, and 952.75–952.85 MHz are available for use on a coordinated, first-in-time, shared basis subject to protecting grandfathered stations. New stations must provide a minimum of 145 km (90 miles) separation or alternatively limit the actual PFD of the proposed station to −100 dBW/m^2, at the existing co-channel master stations of the other country, or as mutually agreed upon on a case-by-case basis. Coordination is not required if the PFD at the border is lower than −100 dBW/m^2. The technical criteria are also limited by the following:

Maximum EIRP for master stations in the MHz band: 1000 watts (30 dBW) 952–953

Maximum EIRP for fixed remote stations or stations in the 928–929 MHz band: 50 watts (17 dBW) master

Maximum EIRP for mobile master stations: 25 watts (14 dBW)

Maximum antenna height above average master or control stations: 152 m at 1000 watts terrain for EIRP, power derated in accordance with the following table:

Antenna height above average terrain (m)	EIRP	
	Watts	dBm
Above 305	200	53
Above 275 to 305	250	54
Above 244 to 274	315	55
Above 214 to 243	400	56
Above 183 to 213	500	57
Above 153 to 182	630	58
Below 152	1000	60

NOTE TO TABLE IN PARAGRAPH (d)(2): This information is from the *Arrangement between the Department of Communications of Canada and the Federal Communications Commission of the United States of America Concerning the Use of the Bands 928 to 929 MHz and 952 to 953 MHz along the United States-Canada Border* signed in 1991. This agreement also lists grandfathered stations that must be protected.

(3) *Mexico.* Within 113 kilometers of the U.S./Mexico border, U.S. stations operating in the 932.0–932.25 MHz and 941.0–941.25 MHz bands are on a secondary basis (non-interference to Mexican primary licensees) and may operate provided that they shall not transmit a power flux density (PFD) at or beyond the border greater than −100 dBW/m^2. Upon notification from the Commission, U.S. licensees must take proper measures to eliminate any harmful interference caused to Mexican primary assignments. The U.S. has full use of the frequencies in these regions up to the border in the bands

932.25–932.50 MHz and 941.25–941.50 MHz, and Mexican stations may operate on a secondary basis (non-interference to U.S. primary licensees) provided they do not exceed the PFD shown above. Stations using the 932–932.5 MHz band shall be limited to the maximum effective isotropic radiated power of 50 watts (17 dBW). Stations using the 941–941.5 MHz band shall meet the limits in the following table:

Antenna height above average mean sea level (meters)	EIRP	
	Watts	dBW
Above 305	200	23
Above 274 to 305	250	24
Above 243 to 274	315	25
Above 213 to 243	400	26
Above 182 to 213	500	27
Above 152 to 182	630	28
Up to 152	1000	30

NOTE TO TABLE IN PARAGRAPH (d)(3): This information is from the *Agreement between the Government of the United States of America and the Government of the United Mexican States Concerning the Allocation and Use of Frequency Bands by Terrestrial Non-Broadcasting Radiocommunication Services Along the Common Border, Protocol #6 Concerning the Allotment and Use of Channels in the 932–932.5 and 941–941.5 MHz Bands for Fixed Point-to-Multipoint Services Along the Common Border* signed in 1994.

[65 FR 17450, Apr. 3, 2000, as amended at 68 FR 4961, Jan. 31, 2003]

Subpart P—Multichannel Video Distribution and Data Service Rules for the 12.2–12.7 GHz Band

SOURCE: 69 FR 31746, June 7, 2004, unless otherwise noted.

§ 101.1401 Service areas.

Multichannel Video Distribution and Data Service (MVDDS) is licensed on the basis of Designated Market Areas (DMAs). The 214 DMA service areas are based on the 210 Designated Market Areas delineated by Nielsen Media Research and published in its publication entitled U.S. Television Household Estimates, September 2002, plus four FCC-defined DMA-like service areas.

(a) Alaska—Balance of State (all geographic areas of Alaska not included in Nielsen's three DMAs for the state: Anchorage, Fairbanks, and Juneau);

(b) Guam and the Northern Mariana Islands;

(c) Puerto Rico and the United States Virgin Islands; and

(d) American Samoa.

§ 101.1403 Broadcast carriage requirements.

MVDDS licensees are not required to provide all local television channels to subscribers within its area and thus are not required to comply with the must-carry rules, nor the local signal carriage requirements of the *Rural Local Broadcast Signal Act*. See Multichannel Video and Cable Television Service Rules, Subpart D (Carriage of Television Broadcast Signals), 47 CFR 76.51–76.70. If an MVDDS licensee meets the statutory definition of Multiple Video Programming Distributor (MVPD), the retransmission consent requirement of section 325(b)(1) of the Communications Act of 1934, as amended (47 U.S.C. 325(b)(1)) shall apply to that MVDDS licensee. Any MVDDS licensee that is an MVPD must obtain the prior express authority of a broadcast station before retransmitting that station's signal, subject to the exceptions contained in section 325(b)(2) of the Communications Act of 1934, as amended (47 U.S.C. 325(b)(2)). Network nonduplication, syndicated exclusivity, sports blackout, and leased access rules shall not be imposed on MVDDS licensees.

§ 101.1405 Channeling plan.

Each license shall have one spectrum block of 500 megahertz per geographic area that can be divided into any size channels. Disaggregation is not allowed.

§ 101.1407 Permissible operations for MVDDS.

MVDDS licensees must use spectrum in the 12.2–12.7 GHz band for any digital fixed non-broadcast service (broadcast services are intended for reception of the general public and not on a subscribership basis) including one-way direct-to-home/office wireless service. Mobile and aeronautical services are not authorized. Two-way services may be provided by using other spectrum or media for the return or upstream path.