

November 24, 1999

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
The Portals, TW-A325
445 12th Street, S.W.
Washington, D.C. 20554

Re: Ex Parte Notification – WT Docket No. 99-168

Dear Ms. Salas:

The attached letter is being filed on behalf of Motorola, Inc. (Motorola). Here Motorola suggests rules for the 746-764 MHz and 776-794 MHz spectrum to be used in conjunction with Motorola's proposed band plan for that spectrum. As such, this letter should be associated with the record of WT Docket No. 99-168. Motorola looks forward to working with the Commission to further refine these rules where necessary.

Please contact Leigh Chinitz at (202) 371-6940 regarding any questions concerning this matter.

Respectfully Submitted,

Leigh M. Chinitz
Motorola, Inc.

Attachment

cc:
Martin D. Liebman

APPENDIX XXX

FINAL RULES FOR REPORT AND ORDER

Part 27 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 27 is revised to read as follows:

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

2. Section 27.1 is amended by revising paragraph (b) to read as follows:

§ 27.1 Basis and purpose.

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(a) * * *

(b) Purpose. This part states the conditions under which the 746-764 MHz, 776-794 MHz, 2305-2320 MHz and 2345-2360 MHz bands are made available and licensed for the provision of WCS.

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3. Section 27.50 is amended by redesignating paragraph (c) as paragraph (g) and adding new paragraphs (c), (d), (e) and (f) to read as follows:

§ 27.50 Power limits.

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(c) Fixed land stations transmitting in the 746 to 747.5 MHz and 762.5 to 764 MHz bands must follow the power and height restrictions found in § 90.635.

(d) Fixed land stations transmitting in the 747.5 to 762.5 MHz band are limited to 1000 watts effective radiated power (ERP).

(e) Mobile stations transmitting in the 776 to 777.5 MHz and 792.5 to 794 MHz bands are limited to a maximum of 100 watts output power.

(f) Mobile stations transmitting in the 777.5 to 792.5 MHz band are limited to 7 watts ERP peak power.

(g) 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.

4. Section 27.53 is amended by revising paragraph (a), redesignating paragraph (c) as paragraph (h) and adding new paragraphs (c), (d), (e), (f), and (g) to read as follows:

§ 27.53 Emission limits.

(a) For operations in the bands 2305-2320 MHz and 2345-2360 MHz, 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, by the following amounts:

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(c) For operations in the 747.5 to 762.5 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 747.5 to 762.5 MHz, the power of any emission shall be attenuated outside the block below the transmitter power (p) by at least $43 + 10 \log (P)$ dB;

(2) By a factor not less than $87 + 10 \log (P)$ dB in a 6.25 kHz measurement bandwidth on all frequencies between 764 to 776 MHz;

(3) By a factor not less than $69 + 10 \log (P) + 12 * (747.5 - f)$ dB (where f is the center frequency) in a 6.25 kHz measurement bandwidth on all frequencies between 746 to 747.5 MHz;

(4) By a factor not less than $69 + 10 \log (P) + 12 * (f - 762.5)$ dB (where f is the carrier frequency) in a 6.25 kHz measurement bandwidth on all frequencies between 762.5 to 764 MHz.

(5) Compliance with these provisions 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 frequency block, a resolution bandwidth of at least 30 kHz 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.

(d) For operations in the 777.5 to 792.5 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, by at least $43 + 10 \log (P)$ dB.

Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz 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.

(e) For operations in the band 746 to 747.5 MHz, 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 746 to 747.5 MHz, the power any emission shall be attenuated outside the block below the transmitter power (p) by at least $43 + 10 \log (P)$ dB;

(2) By a factor not less than $69 + 10 \log (P)$ dB in a 6.25 kHz measurement bandwidth on all frequencies between 740 to 746 MHz;

(3) For paragraphs (1) and (2), compliance 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 frequency block, a resolution bandwidth of at least 30 kHz 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.

(f) For operations in the 762.5 to 764 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated to meet the emission limitations found in Section 90.543 of this chapter.

(g) For operations in the bands 776 to 777.5 MHz and 792.5 to 794 MHz, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated meet the emission limitations found in Section 90.543 of this chapter.

(h) 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.

5. A new Section 27.60 is added to read as follows:

§ 27.60 Frequency coordination requirements for the 746 to 806 MHz band.

Licensees in the bands 746 to 747.5 MHz, 762.5 to 764 MHz, 776 to 777.5 MHz and 792.5 to 794 MHz must follow the frequency coordination procedures contained in § 90.175 of this chapter. Licensees are not required to file demonstration of frequency coordination with the

Commission, but must keep such documentation with their station files. The Commission at its discretion may request such documentation be provided on a case-by-case basis.

§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 Field strength limits. - The predicted or measured median field strength at any location on the border of a WCS service area shall not exceed 47 dBmV/m unless the parties agree to a different field strength. This value applies to both the initially offered MEA and REAG service areas and to partitioned service areas.