



NEW RULEMAKINGS & DEVELOPMENTS FOR LICENSED SERVICES

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Overview

- R & O - FCC 03-283: Part 25 Rule Changes
- R & O - FCC 04-292: Part 90 Rule Changes
- R & O - FCC 04-135: Part 27 Rule Changes
- R & O - FCC 04-265: Part 90 Rule Changes
- Reminders



R & O - FCC 03-283: Part 25 Rule Changes

Report and Order, adopts rules and policies pertaining to portable “GMPCS” transceivers – *i.e.*, satellite telephones and other portable transceivers operated by end users for communication via direct radio links with satellites.



R & O - FCC 03-283: Part 25 Rule Changes

- §25.129 Equipment authorization for portable earth-station transceivers:

Certification must be obtained pursuant to the procedure in Part 2, Subpart J, for importation, sale or lease in the United States of portable earth-station transceivers subject to regulation under Part 25.

This requirement does not apply to devices imported, sold or leased before November 20, 2004.



R & O - FCC 04-292: Part 90 Rule Changes

Part 90 re-farming bands of 150-174 MHz, and 421-512 MHz, would have a narrow-banding order go into effect after 12/31/2004. This would eliminate 25 kHz channel, and require 6.25 kHz channel operation with spectrum efficiency.



R & O - FCC 04-292: Part 90 Rule Changes

FCC 04-292 available at:

http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-292A1.doc

- ❑ Specifically clause # 60; the January 1, 2005 deadline is stayed, and the narrow-banding requirement will not go into effect at this time



R & O - FCC 04-135: Rule Changes Made

Report and Order (R&O) takes important steps to transform rules and policies governing the licensing of the Instructional Television Fixed Service (ITFS), the Multipoint Distribution Service (MDS), and the Multichannel Multipoint Distribution Service (MMDS) in the 2500-2690 MHz band



R & O - FCC 04-135: Rule Changes Made

- Restructures the 2500-2690 MHz band into upper and lower-band segments for low-power operations (UBS and LBS, respectively), and a mid-band segment (MBS) for high-power operations.
- Consolidates the new rules for the band into Part 27.



R & O - FCC 04-135: Rule Changes Made

New rules related to FCC 04-135 Order:

- ❑ Section 15.205(a) is amended by deleting “2655-2900 MHz” and replacing that listing with “2690-2900 MHz.”
- ❑ Decreases restricted band spectrum allowing Part 15 operation in the 2655-2690 MHz band.



R & O - FCC 04-135: Rule Changes Made

§ 27.50 Power limits:

- ❑ (h) The following power limits shall apply in the BRS and EBS:
 - (1) *LBS and UBS*. Base stations are limited to 2000 watts peak EIRP. Mobile stations are limited to 2.0 watts EIRP. Response stations are limited to 2.0 watts transmitter output power.
 - (2) *MBS*. (i) The maximum EIRP of a main or booster station in the MBS shall not exceed $33 \text{ dBW} + 10\log(X/6) \text{ dBW}$, where X is the actual bandwidth if other than 6 MHz.



R & O - FCC 04-135: Rule Changes Made

§ 27.53 Emission limits:

- (1) For analog operations in the MBS with an EIRP in excess of -9 dBW.
- (2) For fixed and temporary fixed digital stations.
- (3) For mobile digital stations



R & O - FCC 04-135: Rule Changes Made

§ 27.53 Emission limits:

- ❑ (4) 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 frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.



R & O - FCC 04-265: Part 90 Rule Changes

A Petition for Reconsideration was filed on July 30, 2003, by the National Public Safety Telecommunications Council (NPSTC), requesting FCC to reconsider certain of the technical rules in the Memorandum Opinion and Order and Third Report and Order, in which the Commission adopted licensing and service rules for the 4940-4990 MHz (4.9 GHz) band.



R & O - FCC 04-265: Part 90 Rule Changes

- ❑ FCC grants the NPSTC petition in part by adopting new 4.9 GHz emission masks – one for high power operations (the DSRC-C mask), and one for low power operations (the DSRC-A mask).



R & O - FCC 04-265: Part 90 Rule Changes

Part 90 of Title 47 of the Code of Federal Regulations, is revised to read as follows:

- ❑ Section 90.210 is amended specifically by amending the entry in the table for the 4940-4990 MHz frequency band.



R & O - FCC 04-265: Part 90 Rule Changes

§ 90.210 Emission masks

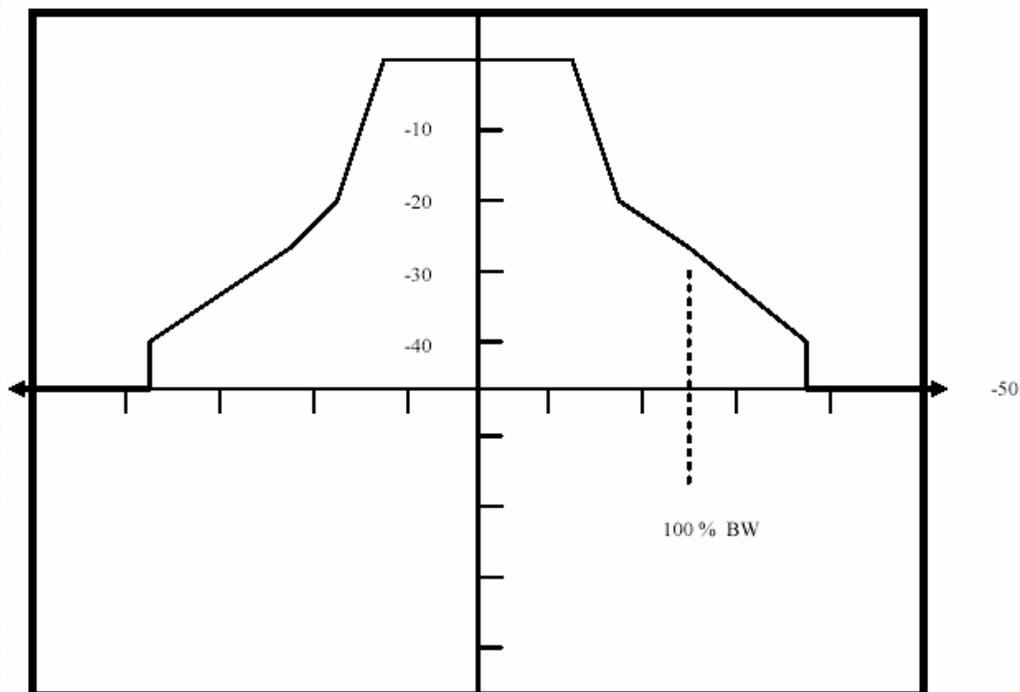
Frequency band (MHz)	Mask for equipment with audio low pass filter	Mask for equipment without audio low pass filter
*****	*****	*****
4940-4990 MHz	L or M.....	L or M
*****	*****	*****



R & O - FCC 04-265: Part 90 Rule Changes

§ 90.210 Emission masks

- I) *Emission Mask L*. For low power transmitters (20 dBm or less) operating in the 4940-4990 MHz frequency band.

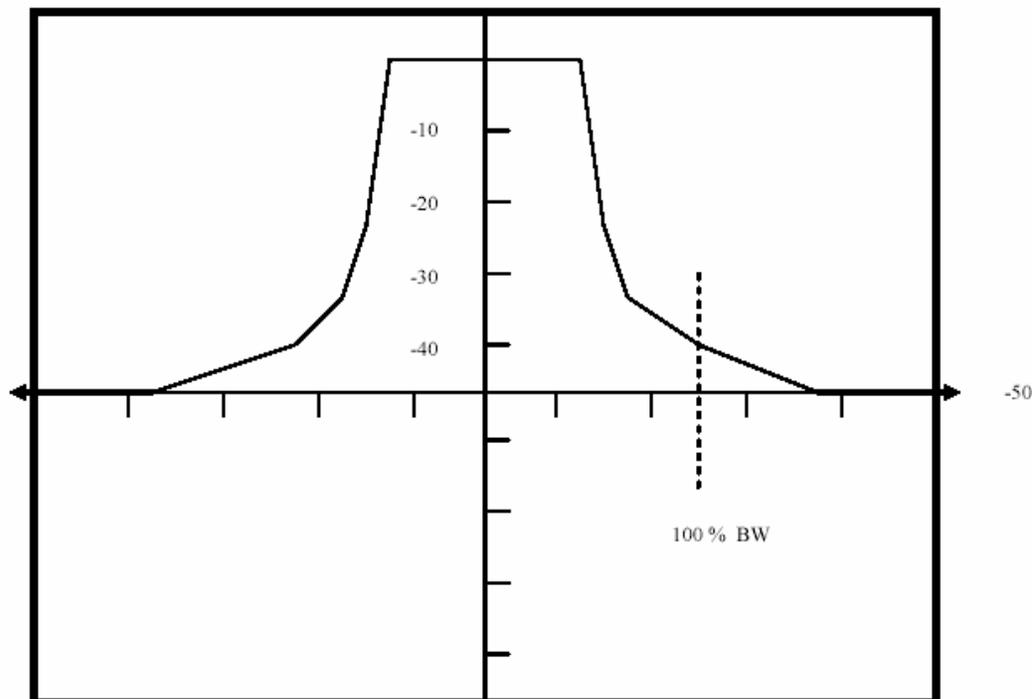




R & O - FCC 04-265: Part 90 Rule Changes

§ 90.210 Emission masks

- (m) *Emission Mask M*. For high power transmitters (greater than 20 dBm) operating in the 4940-4990 MHz frequency band.





R & O - FCC 04-265: Part 90 Rule Changes

§ 90.1215 Power limits: 4940 – 4990 MHz

Channel Bandwidth (MHz)	Low power peak transmitter power (dBm)	High power peak transmitter power (dBm)
1	7	20
5	14	27
10	17	30
15	18.8	31.8
20	20	33



Licensed Rules Reminders

Addition of Rule Parts on Part 90 Transmitters

Example: Adding Parts 22, and 74 to a Part 90 Grant has been common practice.

- Each Rule part must be justified to add on grant.
- Be specific as to rule part and subpart such as 74H, 22E, etc...



Licensed Rules Reminders

Addition of Rule Parts on Part 90 Transmitters

- ❑ Provide test data to show compliance or compatibility between rule parts, with specific technical RF parameters such as power, bandwidth, channel spacing, emission mask, out-of-band spurious, modulation limits, frequency tolerance, and RF exposure.
- ❑ Justify all applicable rule parts in cover letter, or at beginning of test report.



Summary

- ❑ R & O - FCC 03-283: Equipment authorization must be obtained for portable earth-station transceivers, subject to regulation under Part 25, if imported, sold or leased after November 20, 2004.

- ❑ R & O - FCC 04-292: Applications for new operations using 25 kHz channels will be accepted until January 1, 2011.

- ❑ R & O - FCC 04-135: Restructures the 2500-2690 MHz band, and consolidates the new rules for the band into Part 27.



Summary

- ❑ R & O - FCC 04-265: New 4.9 GHz emission masks – one for high power operations (the DSRC-C mask), and one for low power operations (the DSRC-A mask).
- ❑ Reminders – MURS combo prohibited; Additional Rule Parts on Grant must be justified.



Questions and Answers

Thanks!