

FCC Adopts New Mobile Radio Rules, Seeks Comment on Additional Changes

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While a number of changes to the FCC's Part 90 rules governing PLMR and CMRS services are scheduled to go into effect on May 14, 2010, interested parties also have until that date to comment on additional, proposed rules.

The Federal Communications Commission (FCC) has adopted several rule changes to Part 90 of the FCC's rules governing Private Land Mobile Radio (PLMR) services and certain Commercial Mobile Radio Services (CMRS). The new Part 90 rules will be effective on May 14, 2010. The FCC has also requested comment on several proposed rules changes. Comments are due on May 14, 2010, with reply comments due on June 1, 2010.

The rule changes are part of the FCC's continuing effort to streamline its rules to facilitate new wireless technologies, devices and services and to make the FCC's rules easier for the public to understand. The FCC has revised or eliminated certain provisions in its rules that are duplicative, outmoded or otherwise unnecessary. As discussed below, the FCC has eliminated the coordination requirement for Part 90 applications that only propose a reduction in bandwidth, which will greatly facilitate and reduce the cost of modifying licenses to add narrowband emission designators. The FCC also seeks comment on several rule changes, including revisions designed to clarify the trunking rules under Section 90.187.

In a Second Report and Order, the FCC took the following actions on certain Part 90 rules and provisions:

- **Frequency Coordination:** The FCC amended Section 90.175 so that frequency coordination is no longer required for applications that propose to (1) only reduce authorized bandwidth while remaining on the original center frequencies, and do not seek any other changes in technical parameters; (2) lower antenna height or decrease power; or (3) convert a CMRS license to PLMR operations.
- **Mobile Repeaters:** The FCC amended Section 90.427(b) to eliminate the restriction that, for frequencies below 450 MHz in the Industrial/Business pool, only low-power frequencies (where power is limited to two watts) may be assigned for use by mobile repeaters and

associated hand-held units, when separate frequencies are assigned for that purpose. As defined in Section 90.7, a mobile repeater is a mobile station authorized to retransmit automatically, on a mobile service frequency, communications to or from hand-held transmitters. Such transmitters and mobile repeaters still must comply with other relevant Part 90 power limitations, and may not exceed the FCC's radio frequency exposure criteria.

- **Expired Licenses:** The FCC informally approved, but declined to incorporate into its rules, a policy agreed to by all Part 90 frequency coordinators that they will not coordinate frequencies associated with an expired license until the license's status in the Universal Licensing System database is changed from "Active" to "Expired" or "Cancelled" and the frequencies become available for reassignment. The FCC will enforce the policy in the event a third party objects to a premature coordination.
- **Multiple Licensing:** The FCC preserved Section 90.185 to continue to allow multiple licensing of radio transmitting equipment in the mobile radio service, whereby the entity that owns and operates mobile relays (repeaters) shares the base station with a number of other users and the FCC issues a separate license to the station to each user of the mobile relay station (commonly called a "community repeater").
- **Industrial/Business Pool Eligibility:** The FCC amended Section 90.35 to provide that state and local government entities may be licensed on Industrial/Business Pool spectrum for use in commercial activities (e.g., electric utilities or golf courses that are government-operated), but not for public safety operations.
- **Disturbance of AM Broadcast Station Antenna Parameters:** The FCC declined to adopt new rules for the protection of AM broadcast stations whose antenna patterns can be altered by the proximity of new land mobile towers and antennas, stating that this issue would more appropriately be addressed in another pending proceeding.
- **Wireless Medical Telemetry Service:** The Wireless Medical Telemetry Service (WMTS) was established in 2000 to enhance the reliability of medical telemetry equipment that is vital to the care of patients with acute and chronic health problems, and to ensure that such equipment can operate free of harmful interference. The 1427-1432 MHz band is shared between medical and non-medical telemetry operations. The FCC informally approved, but declined to incorporate into its rules, an agreement between a hospital trade association and the Part 90 frequency coordinators to share information with each other in order to avoid interference between medical and non-medical telemetry operations. The FCC also amended Section 95.1111 to clarify that it is not permissible to register WMTS devices on portions of the 1427-1432 MHz band where WMTS operations do not hold primary status.
- **Reorganization of Part 90:** The FCC declined to adopt any structural changes to the Part 90 rules.
- **FB8T Station Class:** In 2000, the FCC established a new station class code, FB8, to identify those trunked radio systems' base and mobile relay channels that are not subject to a monitoring requirement because the applicant has obtained the necessary consent from co-channel licensees or has exclusive use of the channel. Approximately 35 authorizations were issued with a station class of FB8T, allowing temporary use of base and mobile relay channels in trunked systems that are not subject to a monitoring requirement. The FCC stated that FB8T stations will be renewed as FB2T (private, internal systems) or FB6T (for-profit private carriers), as appropriate, which would make it clear that these operations are subject to the monitoring requirements under Section 90.187(b), (c).

The FCC also requested comment on the following proposed rule changes:

- **Trunking Rules:**

- The FCC proposes a clarification that Section 90.187 does not require applicants for decentralized trunked systems in the PLMR frequency bands below 800 MHz to obtain consent from affected licensees, and that decentralized trunked systems must monitor frequencies prior to transmitting.
- Under Section 90.187, trunked systems operating on frequencies between 150 and 512 MHz must employ equipment that prevents transmission on a trunked frequency if the signal from another system is present on that frequency. The purpose of this rule is to ensure that trunked systems operating in a shared frequency environment would not have a detrimental impact on the operation of existing systems. However, this monitoring requirement does not apply if certain conditions are met. Applicants for centralized trunked systems that do not have the exclusive use of a channel must obtain the written consent of "affected licensees." The current rules allow applicants to choose between alternate methods of determining which incumbents are considered affected licensees by using either a distance analysis based on mileage separation or a contour analysis based on protecting incumbents' service contours. The FCC proposes to eliminate the distance analysis option because it understands that almost all applications now rely on the contour analysis.
- Under the current rules, the contour analysis must be performed only to demonstrate that the proposed system's interference contour does not overlap any incumbent system's service contour. The Land Mobile Communications Council (LMCC) argues that the contour analysis for certain proposed stations should also demonstrate that the proposed system's service contour will not be overlapped by any affected licensee's interference contour. LMCC recommends that this requirement should apply to proposed systems using 6.25 kHz bandwidth equipment with less than 12.5 kHz separation from an adjacent 12.5 kHz or 25 kHz system. If LMCC's proposal is adopted, the FCC believes it will prevent the coordination of new trunked systems that would be of limited use, but the existence of which would prevent the expansion of existing systems.
- LMCC also requests that the rules be amended to provide that a non-centralized trunked station that is coordinated based upon a determination that its interference contour does not overlap the service contour of a centralized trunked station shall not be considered an affected licensee with respect to the centralized trunked station in the event of a modification of the centralized trunked station, provided that the modification does not extend the centralized trunked station's interference contour in the direction of the non-centralized trunked station. The FCC states that LMCC does not explain why this rule change is requested and that it is unclear why it is needed. Accordingly, the FCC does not propose to modify the rules as requested, but seeks comment on LMCC's proposal.
- Whether an incumbent is an affected licensee also depends on spectral separation. LMCC proposes that a 25 kHz bandwidth incumbent station be deemed an affected licensee if its assigned frequency is 15 kHz or less from the assigned frequency of a proposed 12.5 kHz bandwidth station, and that incumbents be deemed affected licensees with respect to a proposed 6.25 kHz bandwidth station if the assigned frequencies are within 15 kHz (for 25 kHz bandwidth incumbents), 7.5 kHz (for 12.5 kHz bandwidth incumbents) or 3.125 kHz (for 6.25 kHz bandwidth incumbents).
- The FCC previously clarified that frequency coordinators must base their contour calculations for systems that have no permanent base stations on mobile units operating at the edge of the authorized service area in the direction of the proposed or incumbent station, utilizing any propagation curves and derating factors adopted by

the coordinators. The FCC requests comment on revising this rule to treat mobile-only stations as follows: (1) for systems where the authorized operating area is defined as a radius around geographic coordinates, contour calculations should be based on a mobile unit operating at the geographic coordinates, and (2) mobile-only systems where the license does not specify geographic coordinates for the authorized area would not be deemed affected licensees and thus would not need to be considered in an interference analysis. The FCC also seeks comment on other methods, such as using the boundary of the authorized operating area as the service contour and a specified distance therefrom as the interference contour.

- The FCC proposes removing Section 90.187(d), which permits potential applicants for centralized trunked operations to file written notice with a frequency coordinator, which will in turn notify the other frequency coordinators, so that none of them may accept a conflicting application for 60 days. This provision was added to prevent "strike" applications against prospective applicants that have begun the process of seeking consent from existing stations.
- **470-512 MHz Band Offset Channels:** The FCC proposes incorporating by rule the coordination procedures used for the 12.5 kHz offset channels in the 470-512 MHz band based on the TIA/EIA/TSB-88 interference criteria, whereby an application shall not be certified if an incumbent or the applicant has unacceptable interference of more than five percent reduction of the calculated service area reliability.
- **Station Identification:** The FCC proposes modifying Section 90.425 to permit VHF or UHF PLMR licensees to transmit the required station identification using digital signals instead of Morse code. Also, the FCC proposes modifying Section 90.425(e) to allow PLMR licensees to use a single call sign for commonly owned facilities that are operated as part of a single system, as is currently allowed for CMRS licensees.
- **WMTS Secondary Operations:** The FCC proposes permitting WMTS devices to operate on a secondary basis on those portions of the 1427-1432 MHz band where non-medical telemetry is primary.
- **End-of-Train Devices:** The FCC proposes modifying Section 90.238(e) to allow railroads that employ end-of-train devices, which operate on frequency pair 452/457.9375 MHz, to operate with up to eight watts transmitter output power.