



**MOTOROLA**  
*intelligence everywhere™*

September 30, 2009

# FCC NARROWBANDING MANDATES

## Radio Users

**VHF/UHF** (150-174 MHz and 421-512 MHz)

**Jan. 1, 2011** Applications for new systems or modification applications that expand the authorized contour of an existing system operating at greater than 12.5 kHz equivalent spectrum efficiency will not be accepted.

**Jan. 1, 2013** Radio systems must operate in 12.5 kHz equivalent spectrum efficiency or better.

**No Date Set** Applications for new systems or modification to existing systems must employ equipment capable of operating in 6.25 kHz channels or equivalent spectrum efficiency.

**No Date Set** Radio systems must operate in 6.25 kHz channels or equivalent spectrum efficiency.

## Radio Manufacturers

**VHF/UHF** (150-174 MHz and 421-512 MHz)

**Jan. 1, 2011** Manufacturers cannot manufacture or import equipment operating with a maximum channel bandwidth greater than 12.5 kHz unless it demonstrates a 12.5 kHz or better equivalent spectrum efficiency.

**Jan. 1, 2011** Any new equipment submitted to FCC for certification must be capable of operating in 6.25 kHz channels or equivalent spectrum efficiency, e.g., two voice paths in a 12.5 kHz channel.

## MOTOTRBO Systems

**VHF/UHF** (150-174 MHz and 421-512 MHz)

Motorola MOTOTRBO™ radio products meet today's FCC narrowband requirements and provide for any future 6.25 kHz equivalent spectrum efficiency requirement.

6.25 kHz equivalent operation with MOTOTRBO™ digital radio products will allow the user to simply modify their existing FCC License to optimize the 12.5 kHz assignment and gain an additional voice path without applying for a new channel license.

For digital channel use, the FCC License must include a digital emission designator. The emission designators for MOTOTRBO™ are 7K60FXE (Voice) and 7K60FXD (Data).

MOTOTRBO™ radio products may also operate in analog and digital mode – allowing users to migrate from 25/12.5 kHz analog systems to narrowband digital operations gracefully – with one radio, at their own pace, within FCC requirements.

The FCC's "Narrowbanding Rules" for the 150–174 and 421– 512 MHz bands are found in Sections 90.209 and 90.203 of the Code of Federal Regulations (CFR), which was last revised on October 1, 2008. These rules are based on the decisions adopted by the FCC in its Third Memorandum Opinion and Order released on December 23, 2004, and the Third Report and Order released on March 26, 2007, in WT Docket No. 99-87.

To learn more about Motorola narrowbanding assistance, or about MOTOTRBO products, contact Motorola at [www.motorola.com](http://www.motorola.com) or 1-800-367-2346

