

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band)	PS Docket No. 06-229
)	
Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Communications Requirements through The Year 2010)	WT Docket No. 96-86 RM 11551
)	

COMMENTS OF MOTOROLA, INC.

Motorola Inc. (“Motorola”) hereby submits these comments in response to the petition for rulemaking filed by Region 24 Regional Planning Committee (“Region 24”) addressing the Commission’s rules that mandate 700 MHz public safety licensees to use 6.25 kHz equipment by a future date-certain.¹ As further discussed below, Motorola agrees with Region 24 that the deadline for requiring 700 MHz public safety narrowband licensees to use 6.25 kHz or equivalent efficiency equipment should be extended to account for delays in the availability of relevant equipment caused by the extended implementation of the Digital Television (“DTV”) transition and standards setting activities. Accordingly, Motorola urges the Commission to initiate a rulemaking proceeding in order to make the requisite changes to Section 90.535 of its rules as requested by the Petition.

¹ Petition for Rulemaking of the Region 24 700 MHz Regional Planning Committee, PS Docket No. 06-229, WT Docket No. 96-86, RM-11551 (filed May 15, 2009) (“Petition”). Consumer & Governmental Affairs Bureau, Reference Information Center, Petition for Rulemaking Filed, Public Notice, Report No. 2893 – CORRECTED (July 31, 2009).

In 2002, the Commission required that all systems licensed in the 700 MHz General Use and State License channels must cease all 12.5 kHz operations on these channels and instead operate 6.25 kHz or equivalent efficiency technology by December 31, 2016.² In choosing that date, the Commission noted “that the transition to 6.25 kHz efficiency will be driven by equipment availability” and further indicated that “several equipment manufacturers have indicated their ability to manufacture 6.25 kHz equipment (that meets the Interoperability capability requirement) before December 31, 2006.”³ Based on manufacturer estimates of 6.25 kHz equivalent efficiency equipment availability before the end of 2006, the Commission reasoned that a transition date of December 31, 2016 would provide affected public safety entities a reasonable equipment life of at least 10 ten years.⁴

While not linking these migration dates to the DTV transition, the Commission also acknowledged that the pace of the DTV transition could impact equipment availability.⁵ Accordingly, the Commission indicated it will monitor – through the equipment certification process – whether 6.25 kHz equipment is likely to be commercially available relative to the deadline, and reserve that right to alter the implementation schedule as necessary.⁶

² Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket 96-86, Fifth Report and Order, 17 FCC Rcd 14999 (2002) (“Fifth R&O”) at ¶ 17.

³ *Id.* at ¶ 11.

⁴ *Id.* at ¶ 15.

⁵ *Id.* at ¶ 12.

⁶ *Id.*

The Commission partially reconsidered these dates in 2005 when it deferred its ban on the marketing, manufacture and importation of 12.5 kHz equipment (as well as the filing of applications for new systems operating at 12.5 kHz in the General Use and State License channels) from the December 31, 2006 originally adopted in the in the Fifth R&O to December 31, 2014.⁷ The Commission based this action on concerns about the availability of 6.25 kHz equipment by the December 31, 2006 deadline and thus “depriving licensees of a ten-year life cycle on 12.5 kHz equipment.”⁸ At that time, however, the Commission elected not to extend the December 31, 2016, date whereby all licensees must cease operation of 12.5 kHz equipment and operate solely at 6.25 kHz equivalent efficiency on the General Use and State Licensee channels.⁹ The Commission noted that licensees who elect to purchase dual mode 12.5 kHz/6.25 kHz equivalent efficiency equipment or 6.25 kHz equivalent efficiency equipment ahead of the transition date will avoid needing to replace their equipment before the end of its useful life. At the time of that decision, only one land mobile equipment manufacturer was stating that it would have dual mode equipment available by January 2007.¹⁰

Motorola agrees with Region 24 that the FCC should again consider extending the deadline for using 12.5 kHz equivalent to ensure that equipment being purchased today is not required to be prematurely retired by government mandate. A short extension of less

⁷ Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket 96-86, Fifth Memorandum Opinion and Order, Sixth Report and Order, and Seventh Notice of Proposed Rulemaking, 20 FCC Rcd 831 (2005) (“Fifth MO&O”) at ¶ 12.

⁸ *Id.* at ¶ 14.

⁹ *Id.* at ¶ 13.

¹⁰ *Id.*

than 2.5 years – as requested by the Petition – is not likely to adversely affect spectrum efficiency in the 700 MHz band but will ensure that those agencies buying equipment today to fulfill mission critical duties will be assured of an appropriate life span for that equipment.

There are several reasons why the extension of time is warranted and why the Commission's original expectations for 6.25 kHz equipment availability have not become reality.

First, the DTV transition was longer than anticipated. When the Commission adopted the original time frames for 700 MHz deployment, it had anticipated that the DTV transition would end by January 1, 2007, but the actual end date turned out to be June 12, 2009. The result is that in many of the major metro areas, public safety agencies could not implement any of the much needed 700 MHz narrowband systems because of remaining incumbent TV broadcasters. The legislative and regulatory uncertainty and the lack of customers for 700 MHz public safety equipment led manufacturers to defer product development plans.

The impact of product development caused by the uncertainty surrounding the DTV transition was exacerbated by Project 25 Phase 2 TDMA standard setting process. The Phase 2, 6.25 kHz equivalent efficiency technology standard is now targeted for completion and publication as an ANSI accredited standard by the second half of 2010. Without completion of this 6.25 kHz equivalent efficiency standard, system and radio manufacturers would be required to develop public safety equipment that is proprietary and will require subsequent modification to meet the standard upon completion. Most manufacturers have been unwilling to take that risk, not knowing final standard

requirements.¹¹ However, with the standard largely defined and the end of the process now in sight, Motorola has completed the development – and is now shipping – a dual mode 12.5 kHz FDMA/two slot in 12.5 kHz TDMA radio, which also operates multi-band in 700/800 MHz and VHF or UHF. The TDMA portion of the radio is currently proprietary but once the P25 Phase 2 TDMA standard is completed, these radios can be modified via software upgrade to operate on that standard.

Finally, because of spectrum congestion in the other public safety frequency bands, many public safety agencies have been implementing 12.5 kHz efficiency 700 MHz narrowband systems and equipment in areas clear of TV broadcasters prior to the availability of 6.25 kHz equivalent efficiency technology. The Commission is aware of the approximately 45 systems that are in various stages of completion under the original band plan, which now require relocation to the new narrowband channels. Additional public safety agencies are currently planning and implementing 12.5 kHz efficiency systems under the new narrowband channel plan rather than wait for the completion of the P25 Phase 2 TDMA standard, and manufacturers to develop and field test such 6.25 kHz equivalent efficiency products. Motorola agrees with Region 24's concern that public safety agencies that have implemented, or are in the process of implementing, 700 MHz 12.5 kHz efficiency narrowband systems in the past several years are faced with too short a time before they have to replace their systems with 6.25 kHz equivalent efficiency technology in order to meet this mandate.

¹¹ Normally, manufacturers estimate a twelve to eighteen month time requirement to develop and ship equipment once the standard has been completed.

For these reasons, Motorola supports the Region 24 Petition to delay the January 1, 2017 deadline until June 12, 2019 for all licensees to be operating in 6.25 kHz equivalent efficiency on the General Use and State License channels.¹² We urge the Commission to delay this date as requested by Region 24 to allow public safety agencies to realize the full potential of their 12.5 kHz systems and equipment. As discussed above, 6.25 kHz equivalent efficiency technology is now being introduced, and more products are expected to be introduced within the next two years.

Respectfully Submitted,

/S/ Steve B. Sharkey

Steve B. Sharkey
Senior Director
Regulatory and Spectrum Policy
Motorola, Inc.
1455 Pennsylvania Avenue, NW
Washington, DC 20004
TEL: 202.371.6900

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¹² Motorola takes no position on the other aspects of the Petition addressing construction benchmarks.