

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

In the Matter of)	
)	
Proposed Amendments to the Service Rules Governing Public Safety Narrowband Operations in the 769-775/799-805 MHz Bands)	PS Docket No. 13-87
)	
National Public Safety Telecommunications Council Petition for Rulemaking on Aircraft Voice Operations at 700 MHz)	RM-11433
)	
National Public Safety Telecommunications Council Petition for Rulemaking to Revise 700 MHz Narrowband Channel Plan)	RM-11433
)	
Region 24 700 MHz Regional Planning Committee Petition for Rulemaking)	WT Docket No. 96-86 PS Docket No. 06-229
)	
State of Louisiana Petition for Rulemaking)	RM-11577

Comments of Motorola Solutions, Inc.

Motorola Solutions, Inc. (“Motorola Solutions”), submits these Comments in response to the Further Notice of Proposed Rulemaking in the above-captioned rulemaking.¹ Motorola Solutions urges the Commission to work closely with the user and manufacturing communities to bring expeditious resolution to these long-standing technical and operational issues affecting the use of the public safety narrowband channel allotment in the 769-775/799-805 MHz (“700 MHz”) band.

¹ *Proposed Amendments to the Service Rules Governing Public Safety Narrowband Operations in the 769-775/799-805 MHz Bands, et al.*, PS Docket 13-87, *et al.*, Order on Reconsideration and Further Notice of Proposed Rulemaking, 81 FR 65984 (2016) (*Further Notice*).

I. Background and Summary.

This proceeding was initiated in 2013 to consider proposals that would promote spectrum efficiency, interoperability, and flexibility in 700 MHz public safety narrowband operations.² Throughout the various phases of this proceeding, the Commission has acted to eliminate the mandated transition from 12.5 kHz to 6.25 kHz channel bandwidth technology and, also, has revised a number of technical rules in order to enhance interoperability and open up certain channels to new uses.³

The instant *Further Notice* is an outgrowth of its companion *Order on Reconsideration*⁴ which, in large part, modified the process adopted in the *2014 Report and Order* that equipment manufacturers must use to demonstrate compliance with the Project 25 Compliance Acceptance Program (CAP).⁵ More specifically, the *Order on Reconsideration* amended the Commission's rules to allow CAP compliance to be completed after equipment certification, but prior to the marketing or sale of equipment.⁶ This policy change was accomplished by modifying Sections 2.1033(c) and 90.548 of the Commission's Rules to require a manufacturer to have a CAP Supplier's Declaration of Conformity and Summary Test Report, or other alternative documentation, detailing that its equipment complies with the interoperability requirements of Section 90.548 and that its equipment is interoperable across vendors. The *Further Notice*

² *Proposed Amendments to the Service Rules Governing Public Safety Narrowband Operations in the 769-775/799-805 MHz Bands, et al.*, PS Docket 13-87, *et al.*, Notice of Proposed Rulemaking, 28 FCC Rcd 4783 (2013) (*NPRM*).

³ *See e.g., Proposed Amendments to the Service Rules Governing Public Safety Narrowband Operations in the 769-775/799-805 MHz Bands, et al.*, PS Docket 13-87, *et al.*, Report and Order, 29 FCC Rcd 13283 (2014) (*2014 Report and Order*).

⁴ *See n. 1, supra.*

⁵ *Id.* at ¶ 1.

⁶ *Id.* at ¶ 2.

considers additional modifications to this scheme by seeking comment on a list of 15 recommended feature sets and capabilities submitted by the Project 25 Compliance Assessment Advisory Council that would be included in Section 90.548 to facilitate interoperable communications between radios operating in the conventional mode of P25 using the Common Air Interface on the designated 700 MHz interoperability channels.⁷

The *Further Notice* addresses two issues in addition to CAP compliance. First, it seeks comment on the provisions of Section 90.537 that requires all systems using six or more General Use or State License channels to be trunked. The Commission seeks comment on the costs and benefits on applying this rule to licenses for Vehicular Repeater Systems (“VRS”).⁸

Second, the *Further Notice* seeks comments on a Petition for Clarification submitted by Motorola Solutions asking the Commission to confirm that Section 90.547 of the Commission’s rules requires that all 700 MHz narrowband radios be capable of operating on all of the designated interoperability channels in that band.⁹ As described by the *Further Notice*, Motorola Solutions states that without clarification, “there is a risk that devices might go into the hands of public safety users without the active capability to operate on any of the interoperability channels using an interoperable technology.”¹⁰

⁷ *Further Notice* at ¶¶ 35 - 39.

⁸ VRS are installed on-vehicles to enable low-power, hand-held radios to communicate with their associated network fixed infrastructure when attempting to operate from a low signal strength environment.

⁹ *Further Notice* at ¶ 40.

¹⁰ *Id.*

II. Comments to the Further Notice.

A. CAP Compliance.

Motorola Solutions has a long-standing commitment of support for the Department of Homeland Security's Project 25 Compliance Assessment Program. The program enhances public safety communications by offering a rigorous, standardized, and independent assessment of various aspects of Project 25 compliance which enables more predictable levels of interoperability of equipment developed by various manufacturers.

Nonetheless, Motorola Solutions continues to have concerns about how this program, originally designed to be performed voluntarily, can be implemented within the FCC's rules without impeding innovation. In comments filed before the adoption of the *Order on Reconsideration*, Motorola Solutions noted in particular that requiring CAP certification prior to equipment authorization creates several logistical problems.¹¹ For example, the CAP program is designed to evaluate finished products whereas equipment authorization is generally pursued at a much earlier stage of development. Therefore, layering CAP compliance obligations into the equipment certification process would necessarily delay product approvals.¹² In addition, Motorola Solutions notes that the CAP compliance program requires testing against products from three different manufacturers to demonstrate interoperability. Application of this requirement threatens to delay the introduction of new products until three other manufacturers produce sufficiently similar technologies, which would be a perverse disincentive to innovation for public safety technologies.¹³

¹¹ Comments of Motorola Solutions, Inc., PS Docket No. 13-87, submitted February 11, 2015, at 4.

¹² *Id.*

¹³ *Id.* at 4-5.

The *Order on Reconsideration* partially addressed these concerns by removing CAP compliance from the equipment certification process while maintaining a prohibition against marketing and sale of devices until CAP compliance is achieved. At the same time, the *Further Notice* seeks comment on P25-recommended feature sets that would better define interoperability for purposes of achieving CAP compliance.

Motorola Solutions has actively engaged in industry discussions to advance a unified position from manufacturers on the proposals related to Section 90.548. To that end, Motorola Solutions fully supports the comments that are being submitted today by the TIA's Private Radio Section and urges the Commission to act favorably on those recommendations. Motorola Solutions will provide further comment on these proposals in reply comments, if warranted.

On a related matter, Motorola Solutions notes that new Section 2.1033(c) as adopted in the *Order on Reconsideration*, essentially compels compliance with the interoperability requirements specified in Section 90.548. That rule section, however, remains under scrutiny in this further notice phase of this proceeding and is likely to face significant revisions in a future order. Implementing Section 2.1033(c) before the provisions of Section 90.548 are finalized is premature and could create confusion and processing delays until the rules are finalized. For this reason, Motorola Solutions intends to request that the Commission act to suspend enforcement of new Section 2.1033(c) until the final provisions of Section 90.548 become effective.¹⁴

B. Trunking Requirement.

Motorola Solutions supports allowing low-power (5 watts or less), mobile-only operations on more than 5 channels per license without requiring trunking technology on the 700

¹⁴ The *Order on Reconsideration* was published in the Federal Register on September 29, 2016 and does not become effective until October 31, 2016. If it does file a request to suspend enforcement of the rule, Motorola Solutions will do so on that date.

MHz General Use or State License channels. While the primary application of this policy change would enable the use of Vehicular Repeaters on multiple frequencies, Motorola Solutions sees no reason why the policy should not be broadened to cover other low power, mobile-only use. Provided that the number of frequencies requested are justified by demonstrated need, spectrum efficiency would be maintained by the low power and itinerant nature of the devices.

C. Motorola Solutions' Petition for Clarification.

In its Petition for Clarification, Motorola Solutions urged the Commission to clarify that only subscriber devices capable of operating on the designated nationwide interoperability channels in conformance with the technical standards contained in Section 90.548 of the Commission's rules are permitted to operate in the 700 MHz public safety narrowband spectrum.¹⁵ Without this clarification, Motorola Solutions stated that non-interoperable technologies could be introduced into the 700 MHz narrowband spectrum on the premise that the devices could be later programmed and reconfigured to include the mandated interoperability protocols. Motorola Solutions argued that such an outcome would undermine the Commission's fundamental "objective . . . [for] requiring all 700 MHz equipment to be capable of operating on these channels . . . to ensure that all public safety entities could communicate with one another, especially during disaster situations," and thus would be contrary to the public interest.¹⁶

Motorola Solutions believes that this fundamental articulation of policy should be straightforward – all 700 MHz public safety narrowband users should have ready access to operate on mutual aid channels. It is not sufficient for the radios simply to be capable of being programmed to operate on the designated interoperability channels with licensees deciding

¹⁵ Petition for Clarification of Motorola Solutions, Inc., PS Docket No. 13-87, submitted March 1, 2016 at 1.

¹⁶ *Id.* at p. 2.

whether to enable interoperability capability on some radios but not others. No user should be sent out into the field without the capability for immediately changing channels to communicate in the proscribed mode on at least some portion of the interoperability channels. Stated another way, for voice services, the P25 mode must always be available for immediate use on the interoperability channels regardless if the radio is also configured to also operate in a different, non-P25 mode on non-interoperability channels. Failure to affirm this fundamental operational feature would undermine the expressed intent of Commission and Congress to enhance public safety interoperability through the allocation of 700 MHz spectrum.

Respectfully submitted,

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October 26, 2016