

**Before the
Federal Communications Commission
Washington, DC 20554**

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

**COMMENTS OF
THE NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL**

The National Public Safety Telecommunications Council (NPSTC) submits these comments in response to the Commission’s Further Notice of Proposed Rulemaking (Further NPRM) in the above-captioned proceedings. The Further NPRM seeks input on follow-up rules to its Project 25 Compliance Assessment Program reconsideration decision, on any rule changes needed to help enable 700 MHz vehicular repeater systems and on a petition for clarification submitted by Motorola Solutions, Inc.¹ In these comments, NPSTC responds to the proposals and questions raised in the Further NPRM on these issues. These comments set forth specific

¹ Order on Reconsideration and Further Notice of proposed Rulemaking, released August 22, 2016.

recommendations on which P25 CAP features should be required and support the Commission's proposal to exempt vehicular repeaters from the trunking requirement in Section 90.537 of the rules. The comments also address the petition for clarification submitted by Motorola Solutions, Inc.

The National Public Safety Telecommunications Council

The National Public Safety Telecommunications Council is a federation of public safety organizations whose mission is to improve public safety communications and interoperability through collaborative leadership. NPSTC pursues the role of resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. NPSTC has promoted implementation of the Public Safety Wireless Advisory Committee (PSWAC) and the 700 MHz Public Safety National Coordination Committee (NCC) recommendations. NPSTC explores technologies and public policy involving public safety telecommunications, analyzes the ramifications of particular issues and submits comments to governmental bodies with the objective of furthering public safety telecommunications worldwide. NPSTC serves as a standing forum for the exchange of ideas and information for effective public safety telecommunications.

The following 16 organizations serve on NPSTC's Governing Board:

- American Association of State Highway and Transportation Officials
- American Radio Relay League
- Association of Fish and Wildlife Agencies
- Association of Public-Safety Communications Officials-International
- Forestry Conservation Communications Association
- International Association of Chiefs of Police
- International Association of Emergency Managers
- International Association of Fire Chiefs
- International Municipal Signal Association
- National Association of State Chief Information Officers

National Association of State Emergency Medical Services Officials
National Association of State Foresters
National Association of State Technology Directors
National Council of Statewide Interoperability Coordinators
National Emergency Number Association
National Sheriffs' Association

Several federal agencies are liaison members of NPSTC. These include the Department of Homeland Security (the Federal Emergency Management Agency, the Office of Emergency Communications, the Office for Interoperability and Compatibility, and the SAFECOM Program); Department of Commerce (National Telecommunications and Information Administration); Department of the Interior; and the Department of Justice (National Institute of Justice, Communications Technology Program). Also, Public Safety Europe is a liaison member. NPSTC has relationships with associate members: The Canadian Interoperability Technology Interest Group (CITIG) and the Utilities Technology Council (UTC), and affiliate members: The Alliance for Telecommunications Industry Solutions (ATIS), Open Mobile Alliance (OMA), Telecommunications Industry Association (TIA), TETRA Critical Communications Association (TCCA), and Project 25 Technology Interest Group (PTIG).

NPSTC Comments

On August 22, 2016, the Commission released an Order on Reconsideration and Further Notice of Proposed Rulemaking (Further NPRM) on the Project 25 Compliance Assessment Program (P25 CAP), as well as other issues regarding the 700 MHz narrowband public safety channels. The Order on Reconsideration granted the relief sought by the Telecommunications Industry Association (TIA) and modified the rules to allow P25 CAP compliance or equivalent demonstrations of interoperability to be completed after equipment certification, but prior to

marketing or sale of radios. Separate from the reconsideration issue, the Commission made several rule clarifications. These include clarification that states may delegate administration of the 700 MHz band air-ground channels to the 700 MHz Regional Planning Committees (RPCs).

The companion Further NPRM seeks comments on follow-up issues re the P25 CAP with respect to conventional 700 MHz equipment. On a separate issue, the Further NPRM also asks for input on what if any rules need to be changed to accommodate vehicular repeater systems in the 700 MHz band. In addition, the Further NPRM seeks comments on a request for clarification filed by Motorola Solutions regarding the rule requirements for P25 capability on 700 MHz radios.

1. P25 CAP Features

NPSTC reaffirms its strong support for the P25 CAP. As noted by the Commission in the Further NPRM:

“P25 CAP is a formal, independent compliance testing program for land mobile radios for ensuring that communications equipment declared by a supplier to be P25 compliant is tested against the standards with publicly available results.²”

Confirming that P25 equipment in fact is interoperable is important to the public safety community, especially given the increased competitive P25 market that currently exists.

In previous filings prior to the Reconsideration Order, NPSTC and TIA recommended that the rules be clear on what subset of features must meet the CAP requirements under the P25 Phase I conventional mode of operation for 700 MHz interoperability channels. NPSTC and TIA both noted that the Department of Homeland Security (DHS) had established the P25 CAP Advisory Panel (P25 CAP AP) and that P25 CAP AP members may be able to offer guidance on applicable

² Further NPRM, footnote 95.

features.

On February 1, 2016, the P25 CAP AP submitted its recommendations regarding feature sets and capabilities that should be tested. These recommendations included a list of 15 feature sets on which the Commission seeks comment in the Further NPRM. NPSTC supports the intent of the 15 feature sets from a user need standpoint. However, not all 15 are appropriate to include as a CAP requirement at this time. It is possible to segment these 15 feature sets into three categories:

- a) The feature set is in the P25 standard and there is a CAP test already;
- b) The feature set is in the P25 standard but there is not yet a CAP test; or
- c) The feature set is not in the P25 standard and is only listed as part of the P25 CAP AP recommendations on user requirements.

In NPSTC's view, feature sets in category (a) are ready for inclusion in the rules. As noted above, the Commission describes the P25 CAP as a formal process with compliance tested to a standard. Accordingly, NPSTC recommends that features required by the Commission must be ones included in the standard for which a P25 CAP test has been documented.

Feature sets in category (b) will be ready for inclusion in the requirements when the P25 CAP test is defined and finalized. Testing for feature sets in category (c) would be problematic as they are not in the standard. However category (c) feature sets may be ready in the future if/when they are included as part of the P25 standard and a CAP test is defined and finalized.

Category (a) feature sets include items 1, 2, 4, 5, 6, 8, 11, 12, 13 and 15 from the list provided by the P25 CAP AP.³ As for the remaining feature sets, #3 is not in the standard and has no CAP test defined, #7 appears to be a duplicate of #6, #9 is in the standard but no P25 CAP test

³ NPSTC reviewed the categorization of each of the 15 feature sets with a representative of the P25 CAP AP and a representative of TIA.

exists. Item 10 is in the standard, however, there is no P25 CAP test to verify the “compatible with” requirement stated in this feature. Item 14 on status symbols is in the standard but has no associated P25 CAP test.

The P25 standard and the associated CAP tests evolve over time. Therefore, NPSTC recommends the Commission take whatever steps are possible to reference any requirements to the latest versions of the standard and the P25 CAP test completed and documented. Further discussion may be needed on a mechanism to accomplish this goal. Perhaps, the Commission could provide the Public Safety and Homeland Security Bureau delegated authority to update the details surrounding any requirements, consistent with finalized updates to the standard and/or the P25 CAP tests. Ideally, the Commission will find a mechanism to reference the latest version of the P25 standard and associated CAP tests.

NPSTC appreciates the support that the Department of Homeland Security has provided to re-invigorate the P25 CAP in support of public safety interoperability. Accordingly, in developing any final requirements, NPSTC recommends the Commission give appropriate deference to the P25 CAP AP, consistent with the above recommendations.

2. 700 MHz Band Vehicular Repeater Systems

The Commission requests comments on what rules need to be modified to enable the use of vehicular repeaters in the 700 MHz band. As the Commission recognizes, the use of vehicular repeater systems (VRS) has significantly expanded since the original 700 MHz rules were adopted. In the Further NPRM, the Commission proposes to exempt VRS from the requirement

in Section 90.537 of the rules that a system with six or more general use or state channels be trunked. NPSTC supports this proposal.

NPSTC recommends that additional steps be taken to enable the deployment of VRS as communications tools in support of public safety. NPSTC recommends that the Commission provide states with greater flexibility in deciding what operational restrictions are needed for VRS use on the 700 MHz narrowband designated state channels, as long as the current LMR technical rules are maintained to help minimize interference and promote interoperability. Similarly, the Commission could provide a regional planning committee (RPC) with greater flexibility in deciding what operational restrictions are needed for VRS on the 700 MHz narrowband general use channels within its region, as long as the current LMR technical rules are maintained to help minimize interference and promote interoperability.

While not specifically related to vehicular repeaters, NPSTC recommends additional clarification of the requirements in Section 90.537 of the rules. For general use and state channels, that section specifies that all systems using six or more narrowband channels in the 700 MHz frequency band must be trunked. The application of the term “system” as referenced in this requirement needs clarification. NPSTC recommends that the rule be clarified to apply to 6 channels or more at a given site, not to all conventional operations under a given license, which can cover multiple systems used by multiple agencies in a jurisdiction. In such situations, the restriction as currently applied can be incompatible with operational requirements.

3. Motorola Petition for Clarification

The Further NPRM requested comments on a request for clarification filed by Motorola Solutions, Inc. regarding the rule requirements for P25 capability on 700 MHz radios.

Motorola requested that the Commission clarify the requirement in Section 90.547 of the Commission's rules, as modified in the Report and Order, that 700 MHz narrowband radios must be "capable of being programmed to operate" on all the designated interoperability channels in that band. According to the Further NPRM:

Motorola asks the Commission to "further specify" that while this language gives public safety agencies discretion over which interoperability channels to program into a device, it does not refer to "any other software, air interface, or technology changes that might be necessary in order for a device to operate over the interoperability channels in a compliant manner." Motorola states "[w]ithout such an interpretation, 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."⁴

NPSTC discussions with the National Regional Planning Council and public safety frequency coordinators indicate the intent of the Motorola request for clarification regarding P25 capability is not totally clear. However, there is concern that the request could inadvertently impact data operations as the P25 data standard is only 9.6 kbps whereas a number of LMR data systems operate at faster data rates. Further discussion is needed on the Motorola request for clarification. NPSTC would appreciate any additional information regarding this petition that may be available in comments or reply comments submitted in this proceeding.

Conclusion

NPSTC appreciates the Commission's continued attention to public safety interoperability and specifically to the applicable rules for the 700 MHz narrowband spectrum. NPSTC reaffirms its support of the P25 CAP as a means to demonstrate equipment interoperability among multiple manufacturers in the increasingly competitive P25 market. When specifying which features must be tested, NPSTC recommends the Commission include those features that are specified in the P25

⁴ Further NPRM at paragraph 40. (Footnote notations deleted)

standard and have a related CAP test defined. Given the P25 standard and the associated CAP tests evolve over time, NPSTC also recommends the Commission find a mechanism to reference the latest version of the P25 standard and associated CAP tests as this evolution takes place.

NPSTC supports the Commission proposal to exempt vehicular repeaters systems from the trunking requirement of Section 90.537 and recommends the trunking rule be clarified with respect to its application to base/mobile systems as well. Finally, based on discussions with the National Regional Planning Council (NRPC) and public safety frequency coordinators, NPSTC believes the Motorola Solutions, Inc. petition for clarification itself needs some additional clarity and looks forward to any relevant information in the comments or reply comments.

Paul R. Patrick, Vice Chairman

A handwritten signature in dark ink, appearing to read "Paul R. Patrick". The signature is stylized and cursive.

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