Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of

Proposed Amendments to the Service Rules Governing Public Safety Narrowband Operations in the 769-775/799-805 MHz Bands

National Public Safety Telecommunications

Council Petition for Rulemaking on Aircraft Voice Operations at 700 MHz National Public Safety Telecommunications

Council Petition for Rulemaking to Revise 700 MHz Narrowband Channel Plan Region 24

700 MHz Regional Planning Committee Petition for Rulemaking

State of Louisiana Petition for Rulemaking

PETITION FOR RECONSIDERATION

BY THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION
I.  INTRODUCTION

Pursuant to Section 1.429 of the Commission’s rules, the Telecommunications Industry Association ("TIA")\(^\text{1}\) hereby respectfully files this Petition for Reconsideration. TIA requests that the 700 MHz Public Safety Narrowbanding Order \(^\text{2}\) be amended to reflect that at the time a manufacturer submits to the Commission a device for type approval it may not yet be feasible or possible to have completed yet all the requirements for Project 25 Compliance Assessment Program (P25 CAP) certification.

As the Commission notes in the Report and Order: “The record indicates that 700 MHz equipment manufacturers are uniformly participating in the voluntary CAP certification program, which has helped to ensure that 700 MHz radios operating on the narrowband interoperability channels are, in fact, interoperable.” The Commission appropriately acts “rather than mandate CAP certification” to “amend our rules to further encourage voluntary CAP compliance and to give licensees information regarding the basis for vendor assertions that equipment is interoperable.” \(^\text{3}\)

\(^{1}\) TIA is a Washington, DC-based trade association and standard developer that represents the global information and communications technology (“ICT”) industry through standards development, advocacy, tradeshows, business opportunities, market intelligence and world-wide environmental regulatory analysis. For over eighty years, TIA has enhanced the business environments for broadband, mobile wireless, information technology, networks, cable, satellite, and unified communications. TIA’s hundreds of member companies’ products and services empower communications in every industry and market, including healthcare, education, security, public safety, transportation, government, the military, the environment, and entertainment.


\(^{3}\) See, R & O Para 60
TIA strongly concurs with the Commission’s conclusion about “voluntary CAP compliance to give licensees information regarding the basis for vendor assertions that equipment is interoperable and complies with Project 25 standards and is interoperable across vendors.” However, for the reason discussed in greater detail below, the Commission should not condition the completion of CAP assessment as a critical step in the device approval process ahead of submission to the FCC for type acceptance.

II. STRONG INDUSTRY SUPPORT EXISTS FOR THE P-25 CONFORMITY ASSESSMENT PROGRAM

A. CAP Background

TIA and its members strongly support the Project 25 Compliance Assessment Program (P25 CAP). 2014 marked the 25th anniversary of the creation of Project 25 (P25), a critical suite of standards that have created the foundation for interoperable, digital, two-way wireless communications for public safety and emergency responders since 1989. Creating a single land mobile radio (LMR) standard serving the diverse needs of the nation’s first responders, federal government, and military users with interoperable equipment from a variety of different manufacturers represented a tremendous engineering challenge. In addition, the Project 25 standard had to offer efficient, reliable, public safety grade performance in urban, suburban, rural, and wild land environments and be backward compatible to existing technology in use. The standard also needed to offer efficient wide-area coverage with a minimum of tower sites as

4 Ibid
well as a direct mode for unit-to-unit operation outside of the infrastructure coverage. All of these technical requirements were to be met using half the bandwidth of existing analog systems, but delivering comparable audio quality and significantly improved encryption.

Because of these standards, radios from different jurisdictions and suppliers can talk to one another using a Project 25 standard common (over the) air interface (CAI) as well as a variety of standardized system interfaces. The communications interoperability provided by Project 25 improves public safety for all citizens by allowing coordinated multi-agency response and mutual aid during natural disasters, terrorist incidents, civil unrest, and mass public gatherings. The Project 25 suite of standards is also referred to as the TIA-102 series of standards for land mobile radio communications. Once a TIA-102 series document is approved for publication by TIA, the Project 25 Steering Committee determines whether to adopt the document as part of the Project 25 suite of standards.”

Interoperability for emergency responders has come a long way since 1989, and the Project 25 standards have evolved to meet changing needs and technical requirements for emergency communications. The Conformity Assessment Program makes a significant contribution to public safety communications by furnishing users with an independent assessment of Project 25 compliance.
In the Department of Homeland Security Appropriations Act, 2007 (P.L. 109-295) Congress provided for coordination of emergency communication grants. This led to the creation of the Compliance Assessment Program (CAP). CAP is a partnership of the Department of Homeland Security’s Command, Control and Interoperability Division, the National Institute of Standards and Technology, industry, and the emergency response community, managed by the Science and Technology Directorate, the Command, Control and Interoperability (CCI) Division. As its charter states: “The purpose of the program is to provide emergency response agencies with evidence that the communications equipment they are purchasing meet P25 standards for performance, conformance, and interoperability.”

Even while recognizing CAP’s contributions, the program nevertheless faces certain challenges. Perhaps most significantly CAP remains subject to vagaries associated with funding support from the Department of Homeland Security. Additionally the CAP Governing Board, which is appointed by DHS, has not met in over a year (P25 Compliance Assessment Program Governing Board (P25 CAP/GB). CAP is not currently recognizing new laboratories, although the status of previously approved labs continues. Although TIA is hopeful that these hurdles can appropriately be addressed, we caution that the FCC type approval process should not be structured to depend on that.

See, P.L. 109-295, Title VI, Sec. 671(b), “Title XVIII, “Sec. 1804; 120 STAT. 1438.


Although the so-called Cromnibus funds most of the government through Sept. 30, 2015, but the Department of Homeland Security (DHS) only through Feb. 27, 2015, so-called “non-essential” activities at DHS have been threatened with possible lapse in funding.
B. CAP Processes in Detail

The Assessment Program contains three broad categories of tests: 1) Performance Tests, 2) Conformance Tests & 3) Interoperability Tests. These include FDMA (RF) Performance testing for Trunking and Conventional, ISSI FDMA Trunking Interoperability testing and ISSI Trunking Conformance testing.\(^8\)

Of the three compliance test categories, Interoperability Tests in advance of submission for FCC type approval presents particular challenges. CAP Interoperability testing requires the product to be sufficiently mature to be tested. Testing is based on shipping product versions, in contrast with FCC Type Acceptance which can performed long before the equipment actually performs/implements all intended functionality. For example, FCC Type Acceptance evaluation to addresses emissions compliance does not require that a product actually implement any higher level software features to pass.

For interoperability testing, a manufacturer identifies only those Project 25 features that the product’s design has intended to interoperable. CAP testing documentation identifies the tests which have been passed and the functionality has been tested for interoperability with other manufacturers. Consequently CAP review is limited to the extent that it does not mandate that any particular test or subset of tests be passed.
Thus the actual Project 25 CAP compliant functionality for device, particularly an entirely new device implementation, may not happen until many months after FCC Type Approval could be completed. Because CAP requires testing with other similar manufacturer’s products to demonstrate compliance, interoperability testing cannot realistically be completed for “first to market” products in the absence of competing products.9

III. PROPOSED ALTERNATIVE TO THE REPORT AND ORDER’S APPROACH

TIA requests that the Commission amend the Order to reflect that at the time a manufacturer submits a device for type approval it may not yet be feasible or possible to have completed yet all the requirements for Project 25 Compliance Assessment Program (P25 CAP) certification. At the time of equipment type approval application, the manufacturer may only be able to state that the product has been being designed to the Project 25 Standards, and to identify which Project 25 Common Air Interface capabilities that design intends to be compliant/interoperable. Alternately stated, a manufacturer could identify which Project 25 CAP tests that design intends to pass which is a direct reflection of intended Project 25 compliance and interoperability.

The objective of advancing interoperability can be furthered if, at the time of submission for FCC type approval, a manufacturer stated that the product has been is

9 To the extent that a future delay occurs to future Project 25 updates being fully reflected in revised CAP testing protocols, it may be appropriate for an alternative to Project 25 CAP rules/updates to allow for the most current P25 requirements.
• Designed to the Project 25 Standards, and
• Can identify which Project 25 Common Air Interface capabilities that design intends to be compliant/interoperable.

Alternately stated, a manufacturer could identify which P25 CAP tests that design intends to pass which is a direct reflection of intended P25 compliance and interoperability. As Congress intended for the CAP, Public Safety purchasers can reference the completion of interoperability testing in procurement specifications.

To accomplish these changes, TIA proposes revising paragraph 60 of the Report and Order to delete the following language: “Alternatively, a manufacturer may elect not to submit its equipment for CAP certification, but must disclose in its equipment certification application to the Commission how it determined that its device complies with Project 25 standards and is interoperable across vendors.”

Paragraph 60 would read instead:

The record indicates that 700 MHz equipment manufacturers are uniformly participating in the voluntary CAP certification program, which has helped to ensure that 700 MHz radios operating on the narrowband interoperability channels are, in fact, interoperable. No commenting party has suggested otherwise. Therefore, rather than mandate CAP certification, we amend our rules to further encourage voluntary CAP compliance and to give licensees information regarding the basis for vendor assertions that equipment is interoperable. Thus, we adopt a presumption that a manufacturer that submits its equipment for CAP certification is compliant with Section 90.548 of the Commission’s rules.

Finally, while we do not mandate CAP certification, we encourage 700 MHz licensees to require CAP compliance in their contracts for purchase of equipment."


III. CONCLUSION

For the foregoing reasons, TIA urges the Commission to amend the Commission’s rules to more fully reflect the product development process in which devices are mature enough for submission for FCC type acceptance before CAP certification testing is feasible.

Respectfully submitted,

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