



MEMBER ORGANIZATIONS

American Association of State Highway and Transportation Officials
American Radio Relay League
American Red Cross
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 Association of Fish and Wildlife Agencies
International Municipal Signal Association
National Association of State Emergency Medical Services Directors
National Association of State Foresters
National Association of State Telecommunications Directors

LIAISON ORGANIZATIONS

Federal Communications Commission
Federal Partnership for Interoperable Communications
Telecommunications Industry Assn
U.S. Dept. of Agriculture
U.S. Dept. of Justice
CommTech Program
U.S. Dept. of Homeland Security
FEMA
Safecom Program
U.S. Department of Interior

FILED ELECTRONICALLY

September 28, 2004

John Muleta, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Reference: WT Docket 96-86
Public Safety 700 MHz Band

Chief Muleta,

Since the sunset of the 700 MHz National Coordination Committee (NCC) in July 2003, NPSTC has continued to follow outstanding issues from the NCC's *Final Report*, as well as several new items that have surfaced since that report was issued.

Additionally, since the NCC's last meeting there has been significant interoperability activity spurred in large part by Federal grants from the Department of Homeland Security and Department of Justice. NPSTC's members have been heavily involved in these activities and offer additional observations and recommendations on this topic for consideration by the Commission as it forms its final decision on this docket.

This letter first addresses technology issues, and finally focuses on interoperability.

With regard to technology issues, the Telecommunication Industry Association (TIA) has revised or reaffirmed several documents referenced in current 700 MHz rules with regards to the ANSI/EIA/TIA-102 (Project 25) standards for voice and low speed data. They have also completed the wideband technical standards suite for wideband interoperability channels identified in the 700 MHz rules. While NPSTC can not speak for TIA, we are providing a reference to these documents, along with an attachment provided to us by TIA (20040913 TIA TR8 Doc Summary) showing the document name and current TIA status. We have been in communication with TIA's leadership on this issue and you should expect a formal letter from them following their meeting next week.

Specifically, the following Project 25 voice and low speed data documents are referenced in CFR 47 §90.548, and have revision or reaffirmation dates as noted below and in the attachment:

Project 25 FDMA Common Air Interface, ANSI/TIA/EIA-102.BAAA
Project 25 Vocoder Description, ANSI/TIA/EIA-102.BABA
Project 25 Data Overview, ANSI/TIA/EIA-102.BAEA
Project 25 Packet Data Specification, ANSI/TIA/EIA-102.BAEB
Project 25 Radio Control Protocol (RCP), ANSI/TIA/EIA-102.BAEE

§ 90.548 Interoperability Technical Standards. (1) Transmitters designed for voice operation shall include a 12.5 kHz bandwidth mode of operation conforming to the following standards, which are incorporated by reference: Project 25 FDMA Common Air Interface-New Technology Standards Project-Digital Radio Technical Standards, approved April 15, 1998, Telecommunications Industry Association, ANSI/TIA/EIA-102.BAAA-1998; **(Revision A published September 2003)**

Project 25 Vocoder Description, approved May 5, 1998, Telecommunications Industry Association, ANSI/TIA/EIA-102.BABA-1998. **(Reaffirmed December 2003)**

(2) Transmitters designed for data transmission shall include a 12.5 kHz bandwidth mode of operation conforming to the following standards, which are incorporated by reference: Project 25 Data Overview-New Technology Standards Project-Digital Radio Technical Standards, approved March 3, 2000, Telecommunications Industry Association, ANSI/TIA/EIA-102.BAEA-2000; **(Revision A published June 2004)** Project 25 Packet Data Specification-New Technology Standards Project-Digital Radio Technical Standards, approved March 3, 2000, Telecommunications Industry Association, ANSI/TIA/EIA-102.BAEB-2000; **(Approved for Default ballot to remove reference to Trunking Procedures TSB so the document can pass TIA publication rules.)**

Project 25 Radio Control Protocol (RCP)-New Technology Standards Project-Digital Radio Technical Standards, approved March 3, 2000, Telecommunications Industry Association, ANSI/TIA/EIA-102.BAEE-2000; **(Editorial change to remove reference to Jeff Anderson's name so that document can pass TIA publication rules, to be published this week as Revision A.)** Project 25 FDMA Common Air Interface-New Technology Standards Project-Digital Radio Technical Standards, approved April 15, 1998, Telecommunications Industry Association, ANSI/TIA/EIA-102.BAAA-1998; **(Revision A published September 2003)**

Wideband I/O standards, which are not in the current FCC 700 rules, were part of NCC's final recommendations:

TIA-902.BAAB has been upgraded to ANSI as TIA-902.BAAB-A (SAM Physical Layer)
TIA-902.BAAD has been upgraded to ANSI as TIA-902.BAAD-A (SAM Radio Channel Coding Layer)

The remainder of the wideband I/O RF standards documents (MAC, LLC, PDS, and MM) will be upgraded to ANSI standards within the next 6-9 months. These include:

TIA-902.BAAC
TIA-902.BAAE
TIA-902.BAEB
TIA-902.BAAF

The TIA Private Radio Section previously submitted updates to the FCC on both narrowband and wideband emissions (Adjacent Channel Power tables) referenced in 47 CFR §90.543, including ACP tables for all three wideband data channel bandwidths: 50, 100, and 150 kHz. TIA also asked that Out of Band Emissions (OOBE) into paired receive bands be relaxed by 15 dB. These documents were filed by TIA's Private Radio Section on 08/23/2001, 07/10/2002, 07/16/2002, 2/9/2003, and 12/23/2002.

Two other important areas not addressed in the current rules are (1) requirements for digital base station ID, and (2) secondary fixed operation. It is our recommendation that both of these items follow the same rules as for the 800 MHz band. For example, 47 CFR §90.647(c) addresses ID issues for the 800 MHz band.

With regard to interoperability issues, we have attached a revised version of NCC Document IO-0107 (Revision F dated 7/23/03) that we believe is now error free, and includes footnotes on I/O channels whose frequencies could change due to 800 MHz re-banding. As interoperability solutions are implemented across the country, planning and exercises are highlighting the need for the FCC to implement three major recommendations from the NCC's Final Report. The mandatory channel names recommended in the NCC's *Final Report* are now more relevant than ever. Likewise, Statewide Interoperability Executive Committees (SIECs) have formed rapidly; to ensure they are inclusive of all layers of government and manage all resources in all public safety bands, their definition and authority over all interoperability spectrum in all bands must be clearly delineated in the FCC's rules. Finally, it is essential that regions/states implement interoperability plans and review/update them at least every two years. These plans must be available for review by appropriate authorities, noting that our CAPRAD is being configured as a plan repository. *Interoperability deficiencies highlighted in the 9-11 Commission Report can be adequately addressed only if these two issues, among others, are properly addressed.*

However, NPSTC's work with multiband interoperability gateways has highlighted one exception that must be made to these required names. When these channels are configured through a gateway, having interoperability channels linked together, but with different names, would be problematic for identification purposes. We therefore recommend that, during the time channels are linked through a gateway, they be exempt from a naming requirement but be required to conform to a local or regional plan that is on file with, and included in, the state plan(s) for that area as recommended in the NCC's *Final Report* on state plans.¹

¹ As an example, a two state/seven county region in the Kansas City MO area is installing, with significant funding from a DHS Office for Domestic Preparedness UASI grant, a gateway system that will link the Call and two tactical channels together 100% of the time in the VHF, UHF and 800 bands across the entire region using a simulcast system with over a dozen sites. Specifically, the VHF, UHF and 800 MHz call channels will be combined into a single grouping. The interconnect of tactical channels in the same bands will form two additional groupings, one designated primarily for fire and the other for law

Two of the strongest objections raised on the channel naming issue during the NCC's deliberations were (1) the cost of reprogramming the thousands of existing radios to display the new channel names, and (2) reprogramming of radios in a region at the same time to preserve interoperability during the transition. Recent action by the Commission set in place a process that will alleviate these concerns in spectrum where most interoperability channels exist today, specifically at 800 MHz. When it adopted the *Consensus Plan* for 800 MHz rebanding, the FCC put in motion a process that will include reprogramming of almost all existing public safety radios in the 800 MHz band over a 3 year period, with all radios in a given region being changed in the same time frame. Designated spectrum in the lower bands (primarily the new VHF, UHF and 700 MHz 12.5 kHz channels) is so new that we do not believe a significant number of radios have yet been programmed for these channels. Thus the time is most appropriate for this recommendation to be adopted, with the mandatory renaming timeline linked directly to that imposed for 800 MHz re-banding on a region-by-region basis.

FCC staff has questioned NPSTC about the penalty for agencies that choose not to use the naming convention. We believe that agencies will follow the rules, and such a convention can be pointed to by local/state planners as a requirement. Further, there could be significant liability attached to activities of an agency that went awry because of interoperability problems where they were found to be out of compliance with Federal regulations. Finally, if this is of significant concern to the Commission, we suggest a regulation that says simply, "You can use these interoperability channels if you call them by this name."

NPSTC strongly support the final recommendations of the NCC with regard to Statewide Interoperability Executive Committees, particularly with regard to their inclusiveness of all disciplines and levels of government within each state. However, at the time of the NCC's *Final Report*, many of these SIECs were just forming, and there had been little real-world experience with them at that time. One issue that has surfaced across the United States has to do with a number of states choosing to name these committees something other than "SIEC" resulting in confusion with neighboring regions and states, and with outside (e.g. Federal) planners who need to work with those committees. We strongly urge the Commission, when it revisits the issue of SIEC's, to authorize them to manage interoperability spectrum in all bands if they meet the constructs recommended by the NCC's *Final Report*, and if they are specifically called Statewide Interoperability Executive Committees.

In its final deliberations, the NCC's Interoperability Subcommittee made a number of other recommendations that remain critical today. These included a rewrite of the rules to consolidate all interoperability rules into a common section. To again highlight those, the two final documents prepared by that committee (IO-0117C and IO-0120A) are also attached.

enforcement. This feature will require that responding units in a multi-agency incident, a police pursuit for example, only change channels on their radios one time during the incident across the entire region. Using the call channel as an example, if these agencies were required to maintain the recommended names for each channel depending upon operating radio band (1CAL18, 4CAL27, and 8CAL90) it would be confusing to users on the same gateway group in the other bands. They should, in this example, be allowed to rename this grouped gateway channel on all radios to simply CALL.

NPSTC remains available to assist the Commission in resolving any outstanding 700 MHz or interoperability issues in other bands that you will be addressing on this item. Please contact our National Support Office and we will direct you to the most appropriate persons to assist you.

Sincerely,

Marilyn B. Ward, Chair
National Public Safety Communications Council

cc: Chief Michael Wilhelm, Public Safety and Critical Infrastructure Division