



**The Collective Voice of
Public Safety
Communications**

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 Association
US Department of Agriculture
US Department of Justice
NIJ CommTech Program
US Department of Homeland Security
FEMA
SAFECOM Program
US Department of Interior

68 Inverness Lane East, Suite 204
Englewood, CO 80112-5108
PH: 303-649-1843
FAX: 303-649-1844
Toll free: 1-866-807-4755
www.NPSTC.org
NPSTC@highlands-group.com

National Public Safety Telecommunications Council Third Quarter Report, 2005

This Quarterly Report documents the activities of the National Public Safety Telecommunications Council (NPSTC), its Governing Board, Committees, and Working Groups for the Third Quarter, 2005.

Governing Board

During the third quarter of 2005, NPSTC's Governing Board approved a number of filings and correspondence with the Federal Communications Commission (FCC).

NPSTC filed two ex parte letters with the FCC, one regarding Digital Low Power TV (LPTV)/Public Safety Coordination Requirements in TV Channels 60-69, which had previously been circulated and approved by the Governing Board to communicate NPSTC's position to the FCC and to raise awareness in the LPTV community regarding the complexity of the issues.

The second filing was an ex parte letter regarding the interim transitional provisions of the Commission's Order addressing the *Promotion of Spectrum Efficient Technologies on Certain Frequencies*, WT Docket 99-87. NPSTC believes that the objective of moving to 12.5 kHz technology is undermined by the challenges the interim transitional provisions present in regards to equipment repair, replacement, and the potential of the agency's changing their contour or expanding their area of operations. The letter asks the FCC to change their ruling to one date, the final date of 2013.

Also regarding 99-87, *Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies*, where the FCC had asked for further comments on a stayed rule, NPSTC filed a reply comment reiterating its original position. The provision requires that applications for Part 90 equipment certification of transmitters designed to operate on frequencies in the 150-174 MHz and/or 421-512 MHz bands, received on or after January 1, 2005, include a certification that the equipment meet a spectrum efficiency standard of one voice channel per 6.25 kHz of channel bandwidth. The Commission requested comment on whether a revised rule would place burdens on manufacturers or whether it would jeopardize interoperability. NPSTC believes that the rule should be deferred until at least 5 years after a 6.25 kHz interoperability standard has been defined and published by the Telecommunications Industry Association (TIA) and/or the American National Standards Institute (ANSI).

NPSTC filed also regarding the FCC's mandated movement to 6.25 kHz in 700 by December 31, 2006, in the form of a pleading rather than a letter. Motorola commented that 6.25 kHz is not developed technology and objected to the date. The FCC removed the mandated date. Subsequently, M/A COM filed a Petition for Reconsideration (PFR) of the decision to remove date. Again, NPSTC has taken a strong position that 6.25 should remain a future issue.

Executive Committee

NPSTC's Executive Committee (EC) met in Washington, D.C., on September 7, 2005, to begin annual planning discussions, finalize FCC filings, and to meet with the FCC for a quarterly public safety review.

The EC also discussed a draft NPSTC response to the FCC WT Docket 02-55, *In the Matter of Improving Public Safety Communications in the 800 MHz Band/Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels*, recommending

procedural steps for processing the applications related to spectrum that will be left over from the Nextel 800 MHz Rebanding. Leaving spectrum assignments on a first come/first served basis would be a problem. NPSTC sought a solution to the issue short of asking for a rule. The solution would be a mutually agreed upon process of the four frequency coordinators. The procedure was slated for discussion at the next Governing Board meeting to be held in Los Angeles, California, on November 10, 2005.

At the September meeting, the EC discussed Regional Planning Committee (RPC) Region 8’s response to the issue of standards in 4.9 GHz, which differs from the NPSTC position. Region 8 does not want a standard while NPSTC recommends that a standard be developed. In earlier discussions at the Las Vegas meeting in June, NPSTC reiterated its position on standards for 700 MHz, but the position is not so clear on 4.9 GHz. The issue was also tabled for discussion at the November Governing Board meeting.

In August, NPSTC held a panel discussion at the Association of Public Safety Communications Officials – International (APCO) meetings in Denver, Colorado, and hosted an information booth to serve the conference attendees and participants. At the conference, almost 1,000 *spectrum* newsletters were distributed and generated a great deal of interest in the community.

The Executive Committee also began coordination with the Department of Homeland Security (DHS’s) SAFECOM Program regarding the Statewide Interoperability Executive Committee (SIEC) Working Group to provide support on the development of the SAFECOM portal, and to begin an outreach program and to liaison with partners to provide support to the RPCs.

Committee listserv membership has steadily grown since the new NPSTC structure has been introduced, more than doubling in size over the last year. There was continued growth since the past quarter.

Quarter	Interoperability	Spectrum Management	Technology	RPC
Jun-04	29	28	27	
Sep-04	42	38	39	
Dec-04	47	44	42	
Mar-05	61	58	56	
Jun-05	66	61	59	20
Sep-05	72	64	61	28

Spectrum Management Committee

The NPSTC Spectrum Management Committee currently oversees the activities of the following Working Groups: Broadband, Border Issues, 700 MHz Outreach, and VHF Rebanding.

Broadband

Work has commenced for the study on 4.9 GHz applications and network management platforms that will be riding above the anticipated 802.11 PHY/MAC layers. The Working Group is developing a 4.9 GHz survey to send out to the RPCs that will specifically target broadband and wideband applications as noted. During the second quarter, the TIA TR-8.8 Working Group merged with the Broadband Working Group. During the third quarter, the physical-level simulation efforts will now be partitioned so that TR-8.18 will work on the propagation modeling aspects of the simulations. NPSTC and the NSO will be involved in both efforts as they evolve. There will be continued conference calls within TR-8.8 to move along the standards development activities

The Broadband Chair and NPSTC’s Support Office participated at the International Association of Electrical and Electronics Engineers (IEEE) 802 meetings in Los Angeles, California, in September 2005. The Broadband Chair has been asked to moderate a technical panel at the October CANAPCO Conference in Vancouver, British Columbia.

700 MHz Outreach

During the third quarter, the Working Group provided a presentation on 700 MHz availability in New York City and other constrained areas. Their sub-working group will continue to develop TV short-spacing guidelines. This is expected to undergo final input and review by the November NPSTC meetings, with completion by December 2005.

The Chair also prepared a draft document addressing Low Power TV (LPTV) and distributed it on the NPSTC listserv for comment. Once finalized, the NPSTC document will be used to help educate and advise public safety users on LP-TV/LP-DTV issues related to the 700 MHz band.

NPSTC filed two ex parte comments to the FCC-released 05-24 Notice of Proposed Rulemaking (NPRM), reaffirming their support for not delaying mandatory DTV tuner requirements. The comments were sent in prior to the Executive Committee meeting with the FCC staff in September.

Border Issues

FCC, U.S., and Canadian negotiations have completed, and a new 700 MHz international Letter of Understanding (LoU) has been adopted; this will allow operations on channels 63 and 68 in the border areas. The Border Issues Working Group in collaboration with the 700 MHz Working Group will summarize the details of this new agreement.

The Working Group continues to work with the Radio Advisory Board of Canada (RABC) within the Joint Broadcast and Public Safety Working Group. This group is working with Industry Canada to develop the TV Band sharing and interference protection rules for public safety and broadcast services.

VHF Rebanding

NPSTC continues to maintain a holding pattern regarding additional public safety spectrum in VHF (150 and 153-154 MHz). The NSO and the Working Group have discussed the provision of as-needed assistance in generating responses to any FCC-issued docket, and performing analyses on how these channels may be leveraged to re-band portions of the VHF spectrum in certain areas of the country.

Technology Committee

The NPSTC Technology Committee currently oversees the activities of the following Working Groups: NCC Recommendations, Narrowbanding Below 512 MHz, Amateur Radio Services and Broadband Over Powerline Technology, Voice over Internet Protocol, Security, Paging Technologies, and Surveying Equipment.

NCC Recommendations

The NCC Recommendations Working Group and the Technology Committee has continued to engage in debate of wideband data standards, seeking to answer its own question: Should NPSTC retain its prior position on wideband data standards? In June, the Committee created an ad hoc task group to further examine the pros and cons of the issue and make recommendations on what NPSTC's position should be and to put the question to a larger public safety group for comment. Further discussion of the issue was planned for the November Governing Board meeting.

Narrowbanding Below 512 MHz

During the second quarter, the FCC released a Memorandum Opinion and Order (MO&O) establishing new "must" implement dates for Narrowbanding below 512 MHz. The target dates are: January 2013 for all systems, January 2011 for all changes to existing systems, and January 2011 for manufacture/import of radios. The Working Group drafted comments as well as a draft Petition for Reconsideration (PFR) that was filed ex parte by the Governing Board in September asking for one final date in 2013.

Voice over Internet Protocol (VoIP)

The National Law Enforcement and Corrections Technology Center (NLECTC)-Northeast, developed a VoIP position paper with the help of ITS Boulder. The Working Group will begin working on a draft VoIP user requirements document that will be circulated to the Technology Committee for input/comments. It is expected that the VoIP requirements will be incorporated into the SAFECOM Statement of Requirements (SoR) v.2.

Amateur Radio Services/Broadband Over Powerline Technology

During the second quarter, a resolution was introduced in the House of Representatives by Representative Michael Ross, Alaska, and legislation proposed in Nebraska banning the use of Broadband over Powerlines (BPL) in that state. The Governing Board submitted NPSTC BPL filings to Representative Ross's office for reference material in the third quarter.

Security

In September, the Security Working Group was asked to lead a cross-Committee effort to identify high-level security issues that public safety will face in future deployments of advanced technologies and services. This group will then generate a high-level gap analysis with recommendations that NPSTC may use to bring focus to the necessary areas of policy and architecture development necessary to support these deployments. The issue will be a topic at the November NPSTC meetings.

700 Wideband Technology

The 700 Wideband Technology Working Group is completing guidelines that will be accompanied by an example wideband "pack" of Region 5. All of TR-8.18's work on the SAM and IOTA parameters has been completed and will now be assimilated into NPSTC's guidelines. Data Radio has been contacted for their technology parameters as well.

Paging Technologies

In the last quarter, the Paging Technologies Working Group filed comments requesting the FCC to allow public safety to access spectrum at 900 MHz for public safety paging applications. The Working Group awaits FCC action. The Working Group has also identified a need to follow through with the user community, particularly the fire service, regarding the operational impact of paging technology transitions, particularly from voice to alphanumeric/data technologies.

Surveying Equipment

The Working Group is continuing to develop a formal Charter and Scope Statement. It has been suggested that the scope of this Working Group encompass all geo-location spectrum allocations in support of public safety.

Interoperability Committee

The NPSTC Interoperability Committee currently oversees the activities of the following Working Groups: Statewide Interoperability Executive Committee, Project MESA, Software Defined Radio, System Interconnect, and International Telecommunications Union.

Statewide Interoperability Executive Committee (SIEC)

The Working Group Chair has drafted an SIEC support plan reported on in the second quarter that was reviewed at the June NPSTC meetings. In response to suggestions for amendments, including the need to address regional interoperability issues, solicit "Requests for Help" from the public safety community, and position itself at the "Interoperability Portal" on a national basis, the plan was revised.

During the quarter, the SIEC Working Group met with the NSO to provide input regarding the portal development and public safety needs. The portal is intended to provide seamless web access with multiple sites for public safety responders looking for communications information. The Working Group is currently assembling a list of points of contact at SIECs and SIEC-like entities.

Project MESA

The National Institute of Standards and Technology (NIST) is stepping into a lead role for the technical group looking at applicable technologies, system reference models, and a parameters matrix within Project MESA. This group will be leveraging TR-8.8-8 efforts as well. The next meeting will be held in Scotland, October 2005, and a representative from NPSTC plans to attend.

Software Defined Radio (SDR)

The SDRF Public Safety Interest Group (PSIG) continues to work on completion of its Request for Information (RFI) storyboards and report. They report that they need more help and participation from the user community.

International Telecommunications Union (ITU)

The ITU Working Party has decided to shift to an “Ad Hoc Group approach” from the previous SDR Forum-led “Correspondence Group approach.” SDRF has been asked to defer its Correspondence Group leadership until further notice. There is a high probability that completion of the report by WP8A will be deferred to the early 2006 meeting.

System Interconnect

The System Interconnect Working Group submitted its white paper for comment and review and will formally submit it to the Governing Board in November, and then on to FCC as an ex parte narrowband filing.

Regional Planning Committee (RPC) Committee

The RPC Committee is a new Committee dedicated to regional planning issues at the three dedicated public safety bands – 700 MHz, 800 MHz, and 4.9 GHz. The Committee has no formal Working Groups as of yet.

The RPC Committee has already made significant strides in developing contacts for each of the regions and has assigned Working Group membership assistance to verify the POCs from the FCC’s RPC list. The Chair plans to schedule conference calls with all four regions to solicit nominations and hold elections to identify a region’s representative to serve on the RPC Core Committee that will be used to do the following:

- To solicit RPC’s input on a needs analysis and get their perspective on issues concern them.
- To establish an open dialogue with RPCs for national support for a “Common Nomenclature” to improve regional and wide-area interoperability.
- To promote policy and procedures for RPC funding reimbursements and for proposed RPC support funding.
- To establish interest in participation in NPSTC Meetings.
- To establish ways and means for successful outreach of information to RPCs (email, Web Bulletin Board, Webinars, etc.).

On the FCC 96-86 Docket, *The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication Requirements Through the Year 2010*, Regions 1, 8, and 54, and the Chair of Region 6 filed opposition to the adoption of the SAM standard as a mandated 700 MHz wideband interoperability mode. As reported earlier, NPSTC established an ad hoc task force to build a better consensus position on this issue. This issue will be discussed at the November meeting. The Region 8 700/800 MHz and Region 19 RPCs filed a PFR on allowing active RPCs to disseminate any public safety 800 MHz spectrum that freed by the rebanding process under their defined and equitable matrix process.

Formed on May 1, 1997, NPSTC is a federation of organizations representing public safety telecommunications. NPSTC was originally formed to encourage and facilitate implementation of the findings and recommendations of the Public Safety Wireless Advisory Committee (PSWAC), established in 1994 by the Federal Communications Commission (FCC) and National Telecommunications and Information Administration (NTIA) to evaluate the wireless communications needs of local, tribal, State, and Federal public safety agencies through the year 2010, identify problems, and recommend possible solutions.

NPSTC has since taken on additional responsibilities including implementing the recommendations of the FCC Public Safety National Coordination Committee (NCC) and the support and development of the Computer Assisted Pre-coordination and Resource Database System (CAPRAD) for 700 MHz spectrum to assist the Regional Planning Committees (RPCs). NPSTC develops and makes recommendations to appropriate governmental bodies regarding public safety communications issues and policies that promote greater interoperability and cooperation between Federal, State and local agencies. Issues include: 4.9 GHz rebanding, Software Defined Radio (SDR), US/Canadian/DTV Transition, Project MESA, Spectrum Resources, Amateur Radio (ARRL), 800 MHz, State Interoperability Executive Committees (SIECs) Broadband, and the International Telecommunications Union.