

Member Organizations

American Association of State Highway and Transportation Officials

American Radio Relay League

American Red Cross

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 Telecommunications Directors

Liaison Organizations

Federal Communications Commission

National Telecommunications and Information Administration

Telecommunications Industry Association

US Department of Agriculture

US Department of Justice NIJ CommTech Program

US Department of Homeland Security FEMA Office of Interoperability and Compatibility SAFECOM Program

US Department of Interior



This Quarterly Report documents the activities of the National Public Safety Telecommunications Council (NPSTC), Governing Board, Committees, and Working Groups for the Second Quarter, 2007. NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

Governing Board

During the Second Quarter, 2007, NPSTC held its quarterly Governing Board and Committee meetings on June 11-13, 2007, in Denver, Colorado. The Governing Board reviewed and approved a number of changes, appointments, and activities of the four Committees and their Working Groups, detailed below in the individual Committee reports. The member organizations that comprise NPSTC's Governing Board approved filings and correspondence with the Federal Communications Commission (FCC), detailed below in FCC filings.

In June 2007, NPSTC's fourteen member organizations celebrated the tenth anniversary of their collaboration on behalf of public safety telecommunications. Honored guests attending the Governing Board meeting and celebration of achievements included Colonel Victoria Velez, Acting Director, Office of Emergency Communications (OEC), DHS; Dr. David Boyd, Office of Interoperability and Compatibility (OIC), DHS; Jeff Cohen, Senior Legal Counsel to the Bureau Chief, Public Safety and Homeland Security Bureau, FCC; and Marilyn Praisner, Chair, SAFECOM Executive Committee.

The celebration was a wonderful gathering filled with great stories, a review of growth and achievements and history. Service awards were distributed to those participants who have volunteered many hours to NPSTC's collaborative success. Colonel Velez spoke on the goals of OEC and the valuable opportunity to work with NPSTC, requesting that OEC be formally identified as a liaison organization. Dr. Boyd was given an award of appreciation for his consistent support of NPSTC and for his recognition of the value of the major public safety associations working together to find consensus on national issues. All celebration activities and awards were funded by external sponsors.

Second Quarter Highlights

Notable highlights during the quarter include the following coordinated responses to complex issues:

• The approval of the *Common Channel Naming Report*, a testament to the success of NPSTC member associations' consensus-building style that was exhibited in the Public Forum on Common Radio Channel Naming held in



conjunction with the February Governing Board meeting. SAFECOM's Executive Committee formally adopted the report, recommending adoption by OEC and OIC.

- The continuing effort and hours of volunteer time spent on responding to the complicated issues in the 700 MHz band, guided by the research, input, review, and consensus of many parties. Recognizing that the FCC would soon complete its deliberations in the 700 MHz proceedings, decisions that will shape critical wireless telecommunications capabilities for decades to come, NPSTC, developed a document outlining the principles that should guide decisions regarding the structure and rules of the 700 MHz band.
- The creation of the national Public Safety Spectrum Trust (PSST), developed in response to the complex proceedings in the 700 MHz band, including the possibility of a national broadband network. If a national broadband network is established, the PSST will request that the FCC designate this group as the national public safety licensee to the proposed national broadband network.
- The development of a potential process, requested by the FCC, to consolidate narrowband blocks in 700 MHz. A draft process has been developed by NPSTC with input from Access Spectrum, Pegasus, Motorola, and M/A-COM that addresses key principles and the mechanism to reimburse agencies for the cost of reprogramming 700 MHz equipment to be consistent with the new 700 MHz band plan.
- The development of the National Interoperability Information eXchange (NIIX), a library of information resources that will provide the states with a secure, web-based national repository of other states' plans and related documents, and a secure, web-based mechanism for team sharing/modification.
- The well-attended, unique training sessions created for the Regional Planning Committees (RPCs) on frequency coordination within the framework of 700 MHz broadband, wideband, and narrowband. The June meeting hosted 30 representatives from the 55 Planning Regions.
- The creation of a CAPRAD Oversight Team to represent the collective RPC point of view to the National Institute of Justice (NIJ) and other federal entities. The Oversight Team will focus on operational oversight and recommendations, and NPSTC's Governing Board would provide policy oversight.

Presentations

The following presentations were made at the Governing Board and Committee meetings at the June meeting:

- Colonel Victoria Velez, United States Air Force, Acting Director, Office of Emergency Communications (OEC), DHS, provided an overview of OEC's roles and responsibilities.
- Jeff Cohen, Senior Legal Counsel to the Bureau Chief, Public Safety and Homeland Security Bureau, FCC, provided an update on changes at the Public Safety and Homeland Security Bureau (PSHSB) and current issues at the FCC.
- Chief Harlin McEwen, Vice Chair, NPSTC, reported on the creation of the national Public Safety Spectrum Trust (PSST). Incorporated on June 6, 2007, in Washington, D.C., it will be an advisory board of nine representatives of national public safety agencies. The PSST was developed in response to the complex proceedings in the 700 MHz band, including the possibility of a national broadband network. A group of concerned national public safety organizations assembled a public safety policy group—the Association of Public Safety Communications Officials – International (APCO) International, Association of Fire Chiefs (IAFC), NPSTC, International Association of Chiefs of Police (IACP), and the National Sheriffs' Association (NSA)—to address this issue. If a national broadband network is established by the FCC, it is the intention of the PSST to request that the FCC designate this group as the national public safety licensee to the proposed national broadband network.

- Lance Valcour, Inspector, Ottawa Police Service, briefed on the Canadian Interoperability Technology Interest Group (CITIG), currently hosted by the Canadian Association of Chiefs of Police (CACP), but moving toward the goal of an independent federation of associations similar to NPSTC. CITIG is modeling its efforts to develop a collective voice for public safety telecommunication on the NPSTC model and modeling its strategies on SAFECOM's five pillars of success in achieving interoperability.
- Joe Hanna, Directions, reported on an International Trade Commission (ITC) ruling on Evolution Data Optimized (EV-DO) technology that will have a serious impact on public safety if not overturned by a Presidential veto. On June 7, in adjudicating a patent dispute between Broadcom and Qualcomm, the ITC issued a ban on the newest broadband cell phone technology that would provide the reliable high-speed communications that public safety needs for effective crisis management. The ITC decision will block EV-DO wireless technology from being imported into the United States. EV-DO technology provides critical capability to both the citizen facing an emergency and responding public safety agencies.
- Joe Ross, Andy Thiessen, and Emil Olbrech reported on the results of the 700 MHz broadband questionnaire that collected requirements on 700 MHz broadband networking standards and evaluated marketplace capabilities to meet those requirements.
- Jim Downes, OEC, DHS, provided an update on the U.S./Mexico border, focusing on the U.S. Mexico High Level Consultative Commission (HLCC) as it relates to long-term solutions for cross-border communications,
- Pam Montanari, Pinellas County, Florida, updated NPSTC on the continuing work in the Pinellas County 4.9 GHz testbed.
- Ken Budka, Alcatel-Lucent; Clark Elmore, Motorola; Frank McGhee, Ericsson; and Mac McDonald, Qualcomm, provided an overview of future directions in broadband technologies and applications. All four companies noted their commitment to broadband. Ericsson and Motorola support 4G technologies such as LTE for broadband at 700 MHz, and Alcatel-Lucent and Qualcomm support EV-DO.
- Jim Weichman, Systems Manager, City of Richmond, discussed two-way paging technologies for emergency group alerting in the City of Richmond.

Action Items

At the June Governing Board meeting, NPSTC's member organizations approved the following items:

- At the request of the Executive Committee, approved the transmission of a letter formally requesting a relationship between NPSTC and Canada's CITIG.
- Approved filing in support of New York City's Petition for Reconsideration (PFR) on the Spectral Efficiencies Technology, WT Docket 99-87, regarding the FCC's Report and Order (R&O) mandating that agencies must move to 12.5 kHz technology by the transition date of 2013 in the VHF and UHF bands.
- Approved the development of a position statement recommending that the President veto the ITC action on EV-DO technology. The underlying patent dispute, on which NPSTC takes no position, should not be allowed to result in wide-ranging harm to the public interest.
- Approved recommendation that NPSTC file a brief letter stating that NPSTC's member organizations do not concur with the position of the Spectrum Coalition for DC, which recently made a filing to the FCC on 700 MHz that was contradictory to NPSTC's filing. NPSTC will request that the Spectrum Coalition for DC remove NPSTC's name as a supporting group from the Coalition's website within 30 days.

- At the request of the Interoperability Committee, approved the broadband survey and report developed by the Broadband Working Group and approved the transition of that Working Group to the Technology Committee.
- At the request of the Channel Naming Task Group, a joint task force of the Interoperability and RPC Committees, the Governing Board approved the following items:
 - 1) The revised NPSTC Channel Naming Report
 - 2) The continued effort of the Channel Naming Task Group to work with the federal agencies to resolve National Telecommunications and Information Administration (NTIA) naming issues.
 - 3) Recommendation to the SAFECOM Program that its federal interoperability grant guidance be modified to specifically provide that the cost of reprogramming infrastructure and subscriber units for interoperability-related grants be designated as an allowable expense.
 - 4) Recommendation to the SAFECOM Program stating that within federal interoperability grant guidance the cost of revising or generating training necessary to implement the protocol be designated as an allowable expense, and that they consider developing an independent study course on interoperability fundamentals for first responders that would include common naming as a component in a training module in conjunction with DHS as part of the National Incident Management System (NIMS) curriculum.
 - 5) Revision of the 700 MHz interoperability channel layout, to be accomplished by the Channel Naming Task Group or similar group, once the FCC has determined how the 700 MHz band will change. It was further recommended that upon resolution of the entire 700 MHz channel issue, NPSTC should file a Petition for Further Rulemaking (PFRM) to adopt a recommendation of a new rule section to consolidate the rules on public safety interoperability into Part 90 including a requirement to use the protocols and channels and any revisions that are developed to the channel structure.
- At the request of the Interoperability Committee, approved the formation of a Working Group on EMS at the request of the National Association of State Emergency Medical Services Officials (NASEMSO) that would transfer NASEMSO activities to NPSTC from their current site.
- At the request of the Interoperability Committee, approved the National Interoperability Information eXchange (NIIX), a library of information resources that will provide the states with a secure, web-based national repository of other states' plans and related documents, and a secure, web-based mechanism for team sharing/modification.
- At the request of the RPC Committee, approved the proposal to create a CAPRAD Oversight Team.
- At the request of the RPC Committee, approved sending a letter to NIJ from the RPCs urging NIJ to remove the disposition of CAPRAD from the solicitation process (*Criminal Justice Technology, Centers of Excellence, Grants.gov Funding Opportunity No. 2007–NIJ–1630SL# 000799*).
- At the request of the RPC Committee, approved the RPCs' request that NPSTC send a delegation to NIJ with the RPCs at an NIJ-sponsored RPC meeting to occur in September.
- At the request of the Spectrum Management Committee, approved the process to reimburse agencies for the cost of concurrence with the new reconfigured 700 MHz band plan. The Governing Board will send a letter to the FCC outlining the process that has been developed.

- At the request of the Spectrum Management Committee, approved the transition of the Wireless Alerting Working Group from the Technology Committee to the Spectrum Committee. Technical issues have been resolved in this regard but there are remaining issues regarding spectrum to be resolved.
- At the request of the Spectrum Management Committee, approved the new Chair of the Wireless Alerting Working Group, Jim Wiechman, City of Richmond.
- At the request of the Technology Committee, approved the creation of a Technology Education Working Group and approved the Working Group's charter.
- Approved the transition of the Broadband Interoperability Working Group from the Interoperability Committee to the Technology Committee, and renamed the group the Broadband Standards Working Group.
- At the request of the Technology Committee, approved the disbanding of the following Working Groups: Security, VoIP, and Surveying Equipment; approved a refreshed charter for the Technology Committee; and approve a revised charter for the Amateur Radio Working Group.

FCC Filings and Regulatory Issues

On behalf of its member organizations, NPSTC filed the following documents during the Second Quarter.

- Ex parte comments on April 17, 2007, outlining principles for the 700 MHz band in anticipation of FCC action on 700 MHz spectrum.
- Comments on April 26, 2007, addressing FCC rule changes that seek to protect migratory birds with regard to how communications towers are constructed and maintained.
- Ex parte communication with the FCC, on May 3, 2007, advocating that the FCC designate channels in the 900 MHz band for digital paging.
- Response, on May 23, 2007, to the FCC's request for a Further Notice of Proposed Rulemaking (FNPRM) addressing the structure and rules of the commercial and public safety segments in the 700 MHz band.
- Reply comments, on June 4, 2007, in response to the Commission's FNPRM addressing the structure and rules of the commercial and public safety segments in the 700 MHz band.
- Reply comments, on June 6, 2007, to the FCC in response to the Google ex parte letter addressing the 700 MHz band.
- Ex parte communication with the FCC on June 25, 2007, regarding retuning 700 MHz radios.

Under Discussion

Amendment of Part 90 Rules, WT Docket 07-100—This amendment, released in mid-May, covers the following miscellaneous issues: 4.9 GHz; paging on public safety VHF; expired licenses/multiple licenses; industrial business pool eligibility (regarding transit systems and toll roads); reorganization of Part 90; protection of AM antenna patterns; mobile repeaters; and the FB8T station class.

Following technical discussion, it was agreed that there is not a consensus position on certain aspects of the 4.9 GHz issue. There was consensus on the need for the FCC to clarify the situation as identified by M/A-COM in the referenced Petition for Reconsideration. However, there was no consensus on the exact language to be used for the clarification. The Spectrum Management Committee will arrange a conference call on this issue to determine whether or not consensus exists for a NPSTC position and, if so, what the consensus position will be. Comments on the docket are due August 13, 2007.

Spectral Efficiencies Technology, WT Docket 99-87—The FCC issued its third Report and Order (R&O) mandating that agencies must move to 12.5 kHz technology by the transition date of 2013 in the VHF and UHF bands. NPSTC earlier filed with the Commission urging them to reconsider the incentives for early adoption; one of the incentives is that after 2011, an agency cannot change its contour unless it has moved to 12.5 kHz. NPSTC stated that emergency response agencies are not frozen in time and geographic areas of response expand and contract. While there are no rules requiring users to migrate to 6.25 kHz equivalent efficiency, the FCC has stated that 12.5 is only a transitional step to 6.25 kHz equivalent efficiency and has urged licensees to migrate directly to 6.25 kHz equivalent efficiency. Manufacturers must provide 6.25 kHz or equivalent efficiency capability in the VHF/UHF bands by Jan 2011. Since that decision, the city of New York has filed a Petition for Reconsideration (PFR). Kenwood has filed for clarification and the Land Mobile Communications Council (LMCC) has filed an ex parte.

Executive Committee

Leadership Changes

At the February Governing Board meeting, Chief McEwen announced that he would not seek re-election as Vice Chair, although he will continue to serve as IACP representative on the Governing Board. Ralph Haller, Forestry Conservation Communications Association (FCCA), was unanimously approved by the Governing Board to serve as new Vice Chair. Tom Sorley assumed the role of Chair, Technology Committee, at the June meeting. At the February Governing Board meeting, Glen Nash, Chair, Technology Committee, stepped down due to increased job responsibilities.

DeMello Award

Chief Doug Aiken, Vice Chair, NPSTC, announced the winner of this year's Richard DeMello Award, John Powell, NPSTC Chair of the Interoperability Committee.

Meetings

During the Second Quarter, the Executive Committee (EC) and the Executive Director met in person and via teleconference to discuss program planning and future meetings. The EC met monthly via teleconference.

NPSTC leadership met at the National Institute of Justice's (NIJ) CommTech meetings, in Las Vegas, Nevada, April 20-22, to discuss the issues regarding the 700 MHz and the Broadband Optimization Plan (BOP), which was ultimately rejected by the FCC at a later time. The Executive Director also met with NIJ on several occasions to discuss CAPRAD governance.

The Executive Director participated on a panel at the OIC Industry Roundtable, Washington, D.C., May 9-10, and worked to prepare NPSTC representatives for their presentations at the FCC's public safety panel at the FCC Spectrum Summit, held on June 1, in Washington, D.C.

On June 21, NPSTC Governing Board member Wanda McCarley, President, APCO, testified before the House Committee on Homeland Security Subcommittee on Emergency Communications, Preparedness, and Response on the issue of communications challenges on the border on behalf of NPSTC and APCO. Ms. McCarley also testified before the Senate Committee on Commerce, Science, and Transportation on the 700 MHz auction regarding public safety and competition issues.

On April 11, the RPC Vice Chair presented on common channel naming to the Texas Radio Coalition, and, on April 17, attended the Texas APCO conference, presenting on common channel naming during the 800 MHz rebanding update presented by the Transition Administrator (TA).

NPSTC representatives presented at the National Association of State Telecommunications Directors (NASTD) on June 17, and attended Florida's Region 5 Domestic Security Task Force meeting.

Representatives of the Council attended the Software Defined Radio Forum (SDRF) on June 18-21, in Portland Oregon. Public safety representatives from CommTech, NPSTC, and SAFECOM are taking lead roles in the SDRF's markets, regulatory, and technical areas, including security issues. With the imminent release of an SDR-based radio specifically targeted at the local/state public safety community, SDR is gaining a strong foothold in the public safety market. There are still many critical issues for public safety that are in their early development within the SDRF, including reconfigurable radios (over-the-air programming) and security.

Publications and Website

During the Second Quarter, the Council issued a number of press releases and position papers: On the principles important to public safety in the 700 MHz band and other 700 MHz issues, the *Common Channel Naming Report*, the ITC decision regarding EV-DO technology, and the statewide planning database, NIIX. NPSTC published the *Common Channel Naming Report* and additionally wrote to the TA, Sprint Nextel, and the Interoperable Communications Technical Assistance Program (ICTAP) requesting assistance in educating public safety on the common channel naming issues.

NPSTC published its quarterly newsletter, *npstc spectrum*, in June, and the monthly *What You Need To Know Today*, NPSTC's electronic bulletin; and provided an article on 800 MHz rebanding and an additional article from the Executive Director on statewide planning for OIC's *Interoperability Technology Today* newsletter.

NPSTC's member organizations released its *Annual Report 2007*, an important outreach tool and historical record of NPSTC's activities over the year. The report connects the Council's goals and outcomes and illustrates why this collaborative forum is so vital to the public safety telecommunications community.

NPSTC rolled out a completely new website with a cleaner, more organized look based on new colors, logo, and branding, incorporating many electronic features to facilitate easy access to various sections of the site. NPSTC has created CDs to distribute that are loaded with the *Common Channel Naming Report* and numerous interoperable communications and other telecommunications resource material.

Other Issues

The Council's member organizations assisted SAFECOM to develop the needs requirements for the NIIX, a database to assist the states as they develop statewide interoperable communications plans. NPSTC continues to monitor the work of the National Fire Protection Association (NFPA) Technical Committee, which develops standards on safety devices used by firefighters.

The Executive Director facilitated a discussion with the State Department and the State of Washington to discuss and find solutions for issues related to rebanding and Olympic frequencies.

Interoperability Committee

The Interoperability Committee currently oversees the activities of the following Working Groups: Statewide Interoperability Executive Committee, Project MESA, Software Defined Radio, Radio Channel Naming, and Data Interoperability.

Radio Channel Naming Working Group

During the quarter, the Radio Channel Naming Working Group focused on the additional comments and revisions to the *Report of Committee* received during the 90-day comment period, following the adoption of a revised channel naming scheme developed in February 2007. The final approved document outlines the *NCC / NPSTC Standard Channel Nomenclature for Public Safety Interoperability Channels* as revised in June of 2007 and presents a revised consensus naming format. The proposed revision was placed on public notice on NPSTC's website, and after a 90-day comment period, adopted as this revised protocol.

SIEC Working Group

In March 2007, the SIEC Working Group and NPSTC representatives participated in a Statewide Planning Workshop that was sponsored by the SAFECOM Program, NPSTC, and the National Governors Association

(NGA). To be eligible for Public Safety Interoperable Communications (PSIC) grants, the states are required to develop a Statewide Communications Interoperability Plan (SCIP) that describes the current state of interoperability and future plans.

A questionnaire was sent to all states and territories requesting suggestions for tools to assist in preparing the plans. One of the highest needs identified by the states was for a secure, web-based national repository of other states' plans and related documents, and a secure, web-based mechanism for team sharing/modification. In response, NPSTC has developed the National Interoperability Information eXchange (NIIX), a library of information resources and plans. The national repository provides the ability:

- To create multiple levels of folders and subfolders for storing various categories of documents, with associated security
- To search and easily find documents of interest
- For end users to download and upload documents of interest and support linking to outside documents and/or websites

The Statewide Communications Interoperability Planning (SCIP) Workspace will provide:

- Support to multiple communities and multiple users within each community
- Ability to customize each state's community content
- Ability for state administrator to easily contact community members (as group or individuals) to request feedback regarding posted document(s)
- Ability for end users to provide comments regarding each posted document
- Ability to schedule follow-up/next actions needed/ meetings for community members

Software Defined Radio (SDR) Working Group

The SDR Forum Public Safety Special Interest Group (PS-SIG) has been actively working on two major initiatives. Based on the need for affordable technology, identified in an earlier report, SDR PS-SIG is working to develop cost modeling tools for potential technologies—quantitative tools that would allow cost comparisons and a framework to analyze those issues. The tool captures the life cycle costs of the radio system. In validating the tool, the PS-SIG applied the cost model concept against particular problems. In the first instance, they are in the process of looking at the cost differential of adding some wireless data protocols to a land mobile radio.

PS-SIG is also involved in a study of cognitive radio (CR) use cases and how CR will work for dynamic spectrum access and other applications. In an effort to tie the concepts to activities grounded in public safety, the PS-SIG has identified three scenarios, the London underground bombing, a SAFECOM chemical plant scenario, and a human catastrophe scenario, such as Hurricane Katrina or the Indonesian tsunami. A report on the London bombing scenario has been submitted to NIJ's TWG for practitioner review.

Project MESA Working Group

Project MESA [Mobility for Emergency and Safety Applications], a joint broadband standards effort between Europe and the U.S., continues to move forward in spite of concerns about funding and user participation. More and more carriers are becoming involved. This expansion from LMR-based provider support to carrier-based support will be an important part of broadband to carrier-based services. Long term it is believed that public safety will be dependent on the carriers for broadband services and must begin to work with them now, not later. In light of that fact, Project MESA has asked the Telecommunications Industry Association (TIA) to assess their appropriate members sufficient funds to support the MESA effort and, if necessary, transfer the MESA Secretariat to the U.S. If there is no funding or commitment for funding by August or if the schedule of events is not met by January 2008, the project will end. Critical to success is user participation, and if there are not enough users attending the next two meetings to validate questions, that will be a message to close down the program as well.

OIC SAFECOM and the Federal Partnership for Interoperable Communications (FPIC) have been asked to review the MESA functional matrix developed primarily by industry to consolidate all the information from the

MESA Statement of Requirements (SoR) into categories. It is expected that FPIC will be reviewing and comparing the SoR and functional matrix and providing their results as input during the August 2007 special MESA meeting in Baltimore in conjunction with the APCO Conference. It is very important to the future of MESA to accomplish these tasks with user input since both Motorola and EADS have dropped out of the process because they do not believe there is sufficient users' participation, they believe carriers are lacking in sufficient background in public safety to provide the industry leadership necessary, and they believe the partners in Europe do not have as much interest in broadband at this time and lack the allocated spectrum that would be necessary to operate the equipment as designed; and their current objectives are focused on wideband.

Broadband Interoperability Working Group

During this quarter, the Broadband Interoperability Working Group compiled, analyzed, and reported on the results of a 700 MHz broadband needs questionnaire. The web-based questionnaire was emailed in January to public safety participants only, receiving 629 responses by the end of February. Respondents reported their desire for interoperable data—96 percent want broadband, 92 percent think broadband interoperability is "somewhat important to critical," only 27 percent have access today, and 48 percent of all users expect to have access within 5 years. Most respondents, 56 percent, are likely to build/operate their own 700 MHz broadband network, and 22 percent anticipate deployment within 4 years.

The most important data applications reported were AVL, GIS, field reporting, and email; while the least important were video, high-resolution image transmission, and building blueprints. However, the limited response from law enforcement and large cities may impact this response as they could be heavy users of these services. Respondents reported that cell phones are the wireless device they use the most currently, however, future use was evenly distributed between rugged and non-rugged PDAs and Notebooks, cell phones, AVL, and MDTs. A significant amount of "don't know" or "no opinion" responses throughout the survey means that outreach and clarification of the issues must be addressed. Complete results of the survey are available on the NPSTC website.

Regional Planning Committee (RPC) Committee

The RPC Committee currently oversees the activities of the following Working Groups: 800 MHz Rebanding Support, National Planning Oversight Committee (NPOC), and Software Tools and Training.

On June 11, 2007, NPSTC hosted RPC training for 30 representatives of the 55 Planning Regions. During this session, the RPCs also held roundtable discussions on issues of importance to their community, including the status of the software tool, CAPRAD. Three consensus resolutions arose from their discussion.

- The RPCs unanimously expressed support for a CAPRAD Oversight Team to represent the collective RPC point of view to NIJ and other entities. The Oversight Team would focus on operational oversight and recommendations, and NPSTC's Governing Board would provide policy oversight.
- The RPCs unanimously voted to ask the Governing Board to urge NIJ to remove the disposition of CAPRAD from the solicitation process (*Criminal Justice Technology, Centers of Excellence, Grants.gov Funding Opportunity No. 2007–NIJ–1630SL# 000799*).
- The RPCs affirmed that CAPRAD is a valuable and needed tool. The consensus was that the RPCs would like the tool and support to remain in place at Denver University, and would welcome additional funding to support training and assistance and to add enhancements to the tool.

Software Tools & Training Working Group

The Software Tools and Training Working Group will continue to offer the very well-received training, first offered at the November Governing Board meeting in 2006. In addition to CAPRAD training, NPSTC offered and will continue to offer sessions on TIA TSB-88 Based Frequency Coordination for RPCs and Managing Narrowband, Wideband, and Broadband Technologies. The wideband/broadband coordination training is not offered in any other venue and will assist all public safety users when developing their regional plans for the new 700 MHz frequencies to avoid interference on channels.

In addition to the training, NPSTC's website will soon have a template for the 700 MHz plans that provides plug-and-play text for common issues that other regions have already addressed. It includes the NCC material and sections from well-written plans. Currently being edited, the template should be to the Governing Board for approval in the near future and then available on the website.

A software tool developed by the New York State-Statewide Wireless Network (NYS-SWN) has been offered free of charge to the RPCs, probably as a downloadable tool on the Internet. NYS-SWN has developed Matlab tools for performing ARD evaluations. Area Reliability Degradation (ARD) is the metric chosen for reliability reduction due to co and adjacent channel use. The Working Group will research this tool and the appropriateness of including it in CAPRAD at some point. The initial MOU among the frequency coordinators stated that CAPRAD would not contain engineering tools and that the software should be reviewed by the four coordinators. The frequency coordinators will need to further examine this idea and the tool itself for compatibility with the tools the frequency coordinators use.

Spectrum Management Committee

The Spectrum Management Committee currently oversees the activities of the following Working Groups: Broadband/Wideband, Border Issues, 700 MHz Advocacy, Spectrum Below 512, and Wireless Alerting.

700 MHz Advocacy Working Group

The 700 MHz Working Group has monitored the issues raised by the FCC in 700 MHz. NPSTC's direction to the FCC included the following key issues:

- Create a nationwide public safety broadband network and a licensee.
- Enable a nationwide public safety broadband network funded by private sector in the public safety data block and adjacent E block spectrum.
- Establish the framework for successful negotiation with adjacent E block auction winner.
- Provide for regional options, included broadband and wideband deployment.
- Combine narrowband into a contiguous block with mechanism to fund the transition, a revised BOP.
- Shift bandplan slightly to accommodate use in U.S./Canadian border zone.

Process To Consolidate Narrowband Blocks in 700 MHz

The FCC asked for additional information on a process to consolidate the 700 MHz narrowband blocks. In response, a draft process was developed by NPSTC representatives with input from Access Spectrum, Pegasus, Motorola, and M/A-COM that addresses key principles and the mechanism to reimburse agencies for the cost of reprogramming 700 MHz equipment to be consistent with the new 700 MHz band plan. Pegasus and Access Spectrum will pay the reprogramming costs. There is also a mechanism built in to the process to cover any appeals on reimbursement costs.

The three principles on which the draft process is based are: 1) Public safety should not bear the cost of retuning; 2) Public safety should not be forced to delay any of its narrowband deployment; and 3) The process should be streamlined and straightforward. Public safety does not want another process like the 800 MHz rebanding. The tasks to be completed before retuning begins include the following: Revise the CAPRAD program, update applicable regional plans/public safety licenses and applicable state license frequency plans and, develop/test radio code-plug programming software. Presuming the R&O is issued in July 2007, under the draft process, public safety entities with equipment actually operating by July 31, 2008, would qualify for retuning compensation. By December 31, 2007, a census of public safety systems that qualify for retuning compensation would be completed.

Affected agencies would provide a statement of work by December 31, 2007, that would include the number and model of mobiles/portables now and planned for, number of sites with frequencies for each now and planned, cost estimate for retuning to the new plan, preferred party to do the retuning, and preferred method of payment. Entities funding the retuning have three choices—engage to move forward as the agency recommends; engage in discussions with the agency on alternatives; or, only if needed, appeal to a public safety-appointed entity (NPSTC

or designee) for assistance and resolution. Funding entities and applicable vendors would need to agree to abide by the NPSTC/designee decision. The retuning should be completed by February 17, 2009, which would coincide with TV clearing and the full availability of the 700 MHz band to public safety.

Border Issues Working Group

At the June Governing Board meeting, Jim Downes, OEC, DHS, provided an update on the U.S./Mexico border, focusing on the U.S. Mexico High Level Consultative Commission (HLCC) as it relates to long-term solutions for cross-border communications, The first significant step was recognizing the need to improve communications between first responders on both sides of the border to combat border violence and improve public safety. The Security Communications Task Group (SCTG) was formed to address this issue. To address the immediate need for cross-border communications, a short-term solution of temporary radio stations using 380-399.9 MHz is being used on the border. The long-term solution establishes six permanent microwave links at existing Customs and Border Patrol (CBP) sites—one in California, two in Arizona, and three in Texas. New links will be established and bandwidth of 40 MHz provided to support multiple video streams. CBP is seeking funds to provide the microwave equipment to establish the U.S. links with Mexico. The state and local agencies will be responsible for their connectivity to the microwave links. The solution is scheduled to implement by July 2008.

The next steps will encompass finalizing the long-term cross-border communications report and finalizing the exact frequency pair. The SCTG is planning to hold a joint users meeting in July to finalize the recommendations, and needs state or local input from New Mexico and Texas, who have not sent representatives yet. DHS will establish a cross-border communications users group to focus on operational requirements and issues including developing a channel plan, SOPs, development and maintenance of commonly accessed fields database, routine system testing, and conflict resolution.

Broadband Working Group

During the quarter, the Broadband Working Group was extremely busy responding to the complicated and numerous challenges surrounding 700 MHz and the potential broadband public safety network. In addition, the following presentations were made at the June Governing Board meeting.

4.9 GHz Pinellas County Testbed—Pam Montanari updated the Working Group on what has occurred in the Pinellas County, Florida, 4.9 GHz testbed since she last reported to the Governing Board in February. The bill providing funding was delayed in Congress, halting the project temporarily, but work is beginning again, and funding will be secured so the project can be continued without interruption. The project, funded through the U.S. Army's Picatinney Arsenal, needs to support a virtual EOC that ties back to Picatinney. The second phase will design and implement a mobile command post, and will tie in wireless and fiber optic system interface testing, establish a conceptual 5.9 GHz test bed, exercise the system by conducting various local stakeholders demonstrations, and conduct light test demonstrations.

APIC—The APCO Project 25 Interface Committee (APIC) Activities will be working on developing consensus on protocols for 4.9 GHz. There are two separate processes to do so, one in the task group and the other in the P-34 User Needs Committee.

Broadband Technologies, Future Roadmap—Ken Budka, Alcatel-Lucent; Clark Elmore, Motorola; Frank McGhee, Ericsson; and Mac McDonald, Qualcomm, provided an overview of future directions in broadband technologies and applications. All four companies noted their commitment to broadband. Ericsson and Motorola support 4G technologies such as LTE for broadband at 700 MHz and Alcatel-Lucent and Qualcomm support EVDO. The presentations are available on the NPSTC website on the meetings page.

Other Business

Although the 800 MHz rebanding effort is not a formal Working Group, the Spectrum Management Committee monitors these activities.

800 MHz Rebanding

During the quarter, over 200 Frequency Reconfiguration Agreements (FRAs) have been completed in Parts 1 and 2 of Waves 1 through 3 although Wave 4 is highly dependent on resolving the band plans. Colorado has started its implementation with 6,000 subscribers reconfigured on the first touch. As agencies complete their FRAs, the public safety assistance arm of the TA will be contacting individual agencies. Agencies are being urged to start on the process once it has completed its FRA. There is no need to wait for Sprint Nextel to initiate contact about the cut over or infrastructure.

The FCC's ruling on minimum cost issues makes it clear that completing the reconfiguration in a reasonable manner is the primary goal of the FCC not minimization of cost. In the past, there have been extended mediations over the slight budgetary differences between agencies and Sprint Nextel.

FCC's Amendment of Part 90 Rules, WT Docket 07-100

During the June Governing Board meeting, the Spectrum Management Committee facilitated an in-depth discussion of this proposed amendment, reported on earlier in the FCC report. One element of the amendment examines the question of whether a government entity that owns a golf course should be eligible to use industrial/business channels. The FCC also proposes that entities that provide public services such as tolls roads and transportation could have access to the public safety frequencies. Another issue the amendment proposes concern changes in 4.9 GHz. Under the current rules, permanent (in place for more than 1 year) point-to-point fixed links are secondary because the FCC did not want the 4.9 GHz band to become a fixed microwave band. M/A COM filed a Request for Clarification, asking the FCC to explicitly state that permanent fixed point-to-point operations that are part of a 4.9 GHz public safety network are primary. Docket 07-100 asks for comments on M/A COM's request, asking whether allowing permanent fixed point-to-point would restrict the availability of the spectrum or deployment of on-site, incident command-type operations, and whether it would permit more flexible use of the band.

In Part 22, there is an obligation of services to protect AM radio operations. The FCC is proposing that antenna structures be applicable to Part 90 operations. There is another proposal addressing the current practice of allowing paging operations in VHF, questioning whether that should continue, due to interference from paging channels to public safety's mutual aid channels. Another addresses trunking. In the past, the FCC has allowed trunking not to be monitored on a temporary basis, but it appears the FCC will eliminate that category and require each trunking operation to have constant monitoring. Also in the amendment is discussion of a cross-banding repeater definition problem, and, finally, the amendment contains a proposal of the Land Mobile Communications Council (LMCC) to clarify when a license has expired and when it can be coordinated.

NPSTC member organizations would oppose banning paging on VHF. It was also noted that the rewrite of Part 90 includes a section that would separate the rules regarding commercial and non-commercial, which would be a concern, because frequencies that are adjacent to each other would be ruled by different entities within the FCC. NPSTC Governing Board member organization, American Association of State Highway and Transportation Officials (AASHTO) had earlier developed consensus on a number of these issues, which was reported to the Governing Board. Regarding the use of VHF for public safety paging operations, AAHSTO will state that it is opposed to this suggestion because too many agencies use paging for call out of fire agencies. Regarding the FCC's question as to whether they should revise the rules to provide explicit instructions for operations of mobile repeaters, AASHTO finds the 2 1/2 wattage limit should stay in place. AAHSTO has no issue with the clarification of the definition of cross-band repeaters.

Regarding assigning frequencies on expired licenses, the Public Safety Communications Council (PSCC), the four frequency coordinators, have also examined this issue. AASHSTO and PSCC support LMCC and will also wait for at least 1 year before they reassign a license that has expired. The LMCC's position is that they will wait until the license is removed from the database. Mr. Haller agreed saying that the PSCC has some internal policies that may go beyond what's stated in the docket to make it easier for someone with an expired license to get it back. AASHTO is against toll operators and similar entities being able to acquire public safety licenses, suggesting that a letter of authorization could be issued to a private operator but that the public safety license be retained.

NPSTC will support AASHTO's position on the issues surrounding the FCC's Amendment of Part 90 Rules, WT Docket 07-100. Regarding the issues surrounding 4.9 GHz, NPSTC will communicate to the Commission that clarification is needed from the FCC regarding situations where a mobile device is clearly involved.

Technology Committee

The Technology Committee oversees the activities of the following Working Groups: Amateur Radio, In-Building Coverage, Public Safety Interface to Emergency Alert Systems, Broadband Standards, and Technology Education.

During the quarter, each Working Group and the Committee itself revisited their charters to ensure the mission still is on course and to eliminate any duplication of effort. The Working Group Chairs were also asked to determine closeout dates, if applicable, for their Working Groups as tasks are completed. The newly created Technology Education Working Group will develop target topics for needed education and create a work plan from those topics, and email NPSTC participants to solicit questions on Project 25 (P25) for the development of a Frequently Asked Questions document at the request of the P25 Technology Interest Group (PTIG).

Amateur Radio Working Group

During the quarter, the Amateur Radio Working Group continued its refresh of the charter, mission, and vision for the Working Group and added seven planks to enhance understanding of the interaction of public safety and the amateur radio community. By 2008, the Working Group will prepare best practices by reviewing successes and failures around the country, and will also work to identify common sources of interference. The Working Group will produce a white paper and an educational presentation.

Wireless Alerting Working Group

As reported under the Spectrum Management Committee, wireless alerting has become a spectrum issue and will be moved to that Committee.

In-Building Working Group

During the quarter, the In-Building Working Group, originally developed to work on interference issues, expanded its focus. The final draft of an in-building white paper is on the NPSTC website. The Working Group continues its liaison with the In-Building Wireless Alliance (IBWA), which has developed a draft Public Safety Operational Scorecard and has asked for NPSTC's input.

Public Safety Interface to Emergency Alert Systems Working Group

During the Second Quarter, the Emergency Alert Systems Working Group appointed a new Chair, Jim Weichman, Systems Manager, City of Richmond, who presented on two-way paging technologies for emergency group alerting in the City of Richmond at the June Governing Board meeting.

Future NPSTC Activities

The NPSTC Governing Board will hold its next quarterly meetings on September 10-12, Washington, D.C., and on November 14-16, Atlanta, Georgia.