



NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL



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## National Public Safety Telecommunications Council Fourth Quarter Report, 2007

This Quarterly Report documents the activities of the National Public Safety Telecommunications Council (NPSTC), its Governing Board, Committees, and Working Groups for the Fourth 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 Fourth Quarter, 2007, NPSTC held its quarterly Governing Board and Committee meetings on November 12-14, 2007, in Atlanta, Georgia. Vice Chair, Chief Doug Aiken presiding welcomed special guests Jeff Cohen, Senior Legal Counsel to the Bureau Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission (FCC); Marko Bourne, Director of Policy and Program Analysis, Federal Emergency Management Agency (FEMA), Department of Homeland Security (DHS); and Jason Barbour, National Emergency Number Association (NENA).

### Fourth Quarter Highlights

Notable highlights during the quarter include the following activities:

**700 MHz Statement of Requirements:** NPSTC played a vital role in the development of a Statement of Requirements (SoR) for the public safety nationwide 700 MHz broadband network. This was a critically important undertaking that will help ensure that the needs of the public safety community are met. At the same time, the document lays out what public safety contributors expect for potential bidders for the D Block who will be future partners of the Public Safety Broadband Licensee (PSBL). Following a number of meetings and teleconferences, NPSTC's Broadband Working Group held a 2-day meeting in Boulder, Colorado, at the National Telecommunications and Information Agency (NTIA), Institute for Telecommunications Sciences (ITS), where public safety and commercial representatives collaborated with the Working Group to develop the SoR.

On October 26, NPSTC distributed the final draft to over 285,000 public safety email addresses which resulted in almost 7,000 downloads of the SoR. The media also broadcast the release of SoR in numerous electronic bulletins. The Public Safety Spectrum Trust (PSST), designated as the PSBL by the FCC, will use the SoR as an important reference in negotiations for the Network Sharing Agreement (NSA) between the PSST and the D Block winner.

**NPSTC Membership Changes:** NPSTC's Governing Board has added two new voting members, although one will not be officially recognized until the February 2008 Governing Board meeting. In November, the Governing Board unanimously approved the membership of the National Sheriffs' Association. The Governing Board also received a request from the

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American Association of State Highway and Transportation Officials | American Radio Relay League | Association of Fish and Wildlife Agencies | Association of Public Safety Communications Officials | Forestry Conservation Communications Association | International Association of Chiefs of Police | International Associate 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 | National Sheriffs' Association

National Emergency Number Association (NENA) to become a member at this time, which the Board has approved exploring and membership should be officially completed and installed by February.

During the quarter, the Governing Board voted to remove the American Red Cross as a voting member of NPSTC due to their inactivity. Red Cross representatives have not attended meetings and do not participate in voting on issues requiring a vote of the member organizations.

At the November Governing Board meeting, the Governing Board approved a new category of Governing Board membership, the non-voting associate member, and approved the Canadian Interoperability Technology Interest Group (CITIG), as a non-voting associate member.

## **Presentations**

The following presentations were made at the Governing Board and Committee meetings at the November 2007 meeting:

- Jeff Cohen, Senior Legal Counsel to the Bureau Chief, Public Safety and Homeland Security Bureau, FCC, provided an update on current activities at the Public Safety and Homeland Security Bureau (PSHSB) and the FCC.
- Marko Bourne, Director of Policy and Program Analysis, Federal Emergency Management Agency (FEMA), Department of Homeland Security (DHS), presented on positive changes at FEMA.
- Chief Harlin McEwen, International Association of Chiefs of Police (IACP), provided an overview of the events that led to the creation of a national 700 MHz broadband network and of a national broadband license for public safety, the Public Safety Spectrum Trust (PSST), and next steps as the PSST awaits the results of the FCC auction.
- Don Root, Assistant Manager, Wireless Services Division, San Diego County Sheriff's Department, reported on how communications fared during the Fall 2007 southern California wildfires.
- John Powell, Chair, Interoperability Committee, reported on a presentation made to the FCC on maintaining communications following a major disaster. NPSTC was invited to provide public safety input to the Commission on communications sustainability for a report the FCC is preparing for Congress.
- Mr. Powell provided an overview of the relationship between the Project 25 Steering Committee, manufacturers, the Telecommunications Industry Association (TIA), and the general user community, as well as an update on the Phase 1, Frequency Division Multiple Access (FDMA), and the Phase 2 Time Division Multiple Access (TDMA) track.
- Bette Rinehart, Motorola, provided an update on FCC activities related to the 700 and 800 MHz bands.
- John Logan, NPSTC Support Office, provided an update on regulatory actions at the FCC.
- Sean O'Hara, NPSTC Support Office, reported on the effect of the FCC's Report and Order on the 700 MHz band plan
- Margaret Daly, NPSTC Support Office, presented on advanced spectrum management techniques in 700 MHz to introduce the Regional Planning

Committees (RPCs) to techniques and requirements for handling detailed coordination and coexistence of diverse 700 MHz technologies.

## Action Items

At the November Governing Board meeting, NPSTC's member organizations took action on the following items:

- At the request of the Interoperability Committee, approved the recommendation to accept the charter, mission, and goals of the EMS Working Group.
- At the request of the Interoperability Committee, closed the SIEC Working Group Task Group developed to review border plan options, and transferred the task to the Border Working Group, Spectrum Committee.
- At the request of the RPC Committee, approved the mission, goals, job descriptions, and templates to be used to fulfill the action items and meetings for the U.S. District Chairs.
- At the recommendation of the Spectrum Management Committee, approved development of notification templates agencies can use to notify secondary Low Power Television (LPTV) stations of the need to move, and to notify the Society of Broadcast Engineers (SBE) of the need to prevent broadcast auxiliary operations.
- At the recommendation of the Spectrum Management Committee, approved alerting broadcast auxiliary equipment vendors of the need to stop marketing equipment on 63, 64, 68, and 69.
- At the recommendation of the Spectrum Management Committee, approved a recommendation to NTIA that translators moving from analog to digital in the 700 MHz band be given funding priority.
- At the recommendation of the Spectrum Management Committee, approved contacting the FCC Lab and asking that they no longer certify wireless microphones capable of operation in 60-69 TV channels.
- At the recommendation of the Spectrum Management Committee, approved development of a document to update the National Coordination Committee (NCC) Guidelines.
- At the recommendation of the Spectrum Management Committee, approved developing recommendations on the VHF/UHF issues on the border to provide to the FCC and to the State Department.
- At the recommendation of the Spectrum Management Committee, approved developing general public safety recommendations and for January State Department meeting.
- At the recommendation of the Spectrum Management Committee, approved the draft letter to the FCC requesting an audit of the 900 MHz narrowband PCS (two-way paging) spectrum and initial discussions with appropriate FCC staff.
- At the recommendation of the Spectrum Management Committee, approved beginning the process for setting requirements and opening dialogue with the FCC regarding Part 24 paging spectrum that is underused.
- At the recommendation of the Spectrum Management Committee, approved a new 470-512 MHz Working Group.

- At the request of the Technology Committee, closed item tasking the Broadband Working Group to develop the SoR. The Broadband Working Group will continue to support the SoR and will be developing a subscriber equipment section, as well as simulation testing and evaluation in broadband, including 4.9 GHz.

## **FCC Filings and Regulatory Issues**

On behalf of its member organizations, NPSTC filed the following document during the Fourth Quarter.

Frontline Proposal: NPSTC reviewed a Frontline proposal to insulate the D Block licensee from risks associated with the public safety broadband segment and prepared an ex parte letter opposing the Frontline proposal, which was sent to the FCC on October 31, 2007.

## **Executive Committee**

During the Fourth Quarter, the Executive Committee was focused on teleconferences, meetings, and detailed analysis and research on 700 MHz issues. At the request of the PSST, NPSTC tasked the Broadband Standards Working Group, Technology Committee, to develop public safety's version of a 700 MHz Statement of Requirements (SoR) to guide the potential bidders for the D Block spectrum on public safety needs in a broadband network. Negotiations with Project MESA and Project 34 leaders resulted in a formal letter defining each other's commitment to work together on the overall issue of broadband data standards with the agreement to develop the SoR through the NPSTC process.

The Executive Director participated in various other discussions including facilitating NPSTC input to FEMA's National Response Framework, and participating in meetings on upcoming border discussions concerning Mexico. She also coordinated issues to develop the National Planning Oversight Committee with the RPCs District Chairs, and participated in a meeting with the SAFECOM's Executive Committee.

During the quarter, several members of the NPSTC Governing Board participated in discussions with the OEC, Office of Interoperable Communications (OIC), and other stakeholders regarding the Incident Command System (ICS) and Communications Leader (COML) training and certifications, including developing a plan to deliver COML training to the community.

## **Outreach**

### **Meetings**

During the Fourth Quarter, the Executive Committee and the Executive Director met in person and via teleconference to discuss program planning and future meetings. NPSTC representatives attended a number of major conferences with several successful panels and information distribution to thousands of conference attendees.

Forestry Conservation Communications Association (FCCA) Annual Meeting, Orlando, Florida, October 1-3: The Executive Director presented NPSTC slides, distributed handouts, and networked with the meeting attendees, also meeting the new FCCA Governing Board alternate.

IACP Meeting, New Orleans, Louisiana, October 13-17: The Executive Director presented NPSTC slides and reports, conducted several sidebar meetings, and attended a technology awards luncheon. The Executive Director met with the Grant Manager of the Office of Community Oriented Policing Services' (COPS) to discuss the availability of the NPSTC tool, the National Interoperability Information eXchange (NIIX), for placement of COPS grants materials.

Public Safety, New Technologies and Future of Emergency Response, Denver, Colorado, November 28, 2007: Charles Werner, new alternate voting member for the International Association of Fire Chiefs (IAFC), participated in this workshop where he spoke on NPSTC and distributed outreach materials.

Critical Incident Technology Conference in San Francisco, California, on November 6-8, 2007: The Executive Director distributed outreach materials including newsletters, NPSTC's Annual Report, and the Common Channel Naming Report CDs.

All Hazards Forum in Baltimore, Maryland, on November 7-8, 2007: NPSTC supported a panel, prepared a presentation, and distributed 100 newsletters and 150 Common Channel Naming Report CDs. NPSTC representatives discussed the common language initiatives that the State of Virginia has implemented as well as NPSTC's initiatives with the Common Channel Naming Report, cross-border communications with Mexico, the SoR for 700 MHz, and NIIX.

DeMello Award: NPSTC's Governing Board presented the 2007 Richard DeMello Award to John Powell, Chair, Interoperability Committee, at the 98th Anniversary Annual Awards Banquet of the Radio Club of America in New York City, New York, on November 16, 2007.

RPC Training Session: NPSTC provided RPC training at the November Governing Board meeting. Topics included basic understanding of 700 MHz and 4.9 GHz Rules, RPC roles in 700 MHz and 4.9 GHz, and NIIX.

Florida Chapter of APCO: NPSTC made a presentation on NIIX to the Florida Chapter of APCO offering use of the database for the chapter to share documents on planning and training. The Florida Chapter will be setting up several communities within NIIX.

CITIG: The Executive Director did a web presentation to the newly formed CITIG comprised of Canadian public safety members. The slides reflect the history of NPSTC and dynamics with NPSTC and the commercial community.

## **Publications**

During the Fourth Quarter, NPSTC issued several press releases on behalf of its member organizations, soliciting input on the 700 MHz SoR; welcoming CITIG, Canada's NPSTC-like organization, as new associate member to NPSTC; and announcing the 2007 DeMello Award winner.

NPSTC published its quarterly newsletter, *npstc spectrum*, in December, and the monthly *What You Need To Know Today*, an online news brief with clickable links to upcoming events, important filings, and timely news in public safety telecommunications; provided an article from the Executive Director to *APCO's Bulletin*, an article to *IMSA Journal* to be distributed at the International Wireless Communications Expo (IWCE) at the end of February 2008, and an article for IAFC's *Firehouse Magazine*. NPSTC also provided an article on the Common Channel Naming Report to *OEC Bulletin* as well as an article on the communications response in the San Diego wildfires, based on the reports of Don Root, Chair, SIEC Working Group.

## **Website**

In the Fourth Quarter, NPSTC's website incorporated a new web form for meeting registration that combines the meeting registration, hotel reservation, and any travel assistance, as needed. Previously, NPSTC Governing Board members would have to complete two online forms. The website was updated to include a "Hot Topic" announcement on the front page and a "Call to Action" section for e-mailing members of opportunities to participate in Working Group activities. With the first "Call to Action," soliciting public safety on the SoR, NPSTC reached out to over

285,000 first responders. NPSTC again reached out to the community to solicit comments on the In-Building Best Practices White Paper.

NPSTC's Listservs have grown to include over 800 recipients; website hits for November 2007 were well over 160,000 and reached 114,000 by December 20.

### **Other Outreach Activities**

Cross-Border Dialogue: NPSTC provided contact information to the Security Communications Task Group (SCTG) Chair, a DHS and U.S. State Department initiative working with the U.S.-Mexico High Level Consultative Commission on Telecommunications (HLCC) to coordinate cross-border public safety communications.

Governing Board Outreach Working Group: At the suggestion of the Governing Board, NPSTC has created an Outreach Working Group, reporting directly to the Governing Board, to facilitate outreach and education efforts to the public safety community.

NPSTC Orientation: At its November meeting, NPSTC held its first formal orientation dinner, slide presentation, and interactive discussion to provide guidance on NPSTC's policies, procedures, and history for new members. This particular orientation included the primary voter and two other members of the Association of Public-Safety Communication Officials-International (APCO), the new primary voter for the Association of Fish & Wildlife Agencies (AFWA), the alternate voter for National Association of Emergency Medical Services Officials (NASEMSO), and the primary voter from the National Association of State Foresters (NASF). The new alternate voter for IAFC joined via web-conference, which allowed the representative to view the slides and participate in the conversation at the same time as the group present. This will become a regular offering at the quarterly Governing Board meeting. NPSTC is a complex organization with an extensive history. The orientation was very well received.

Volunteer Coordinator: NPSTC has also created a new position and associated mission and goals to support the role of Volunteer Coordinator, created to provide more interaction between the NPSTC Participants and Governing Board members and to facilitate the process of NPSTC Participants becoming involved in the various Working Groups.

Recognition Process: NPSTC has formalized a new process to recognize the service and awards NPSTC will make to the member organizations' primary and alternate voters. At the request of a NPSTC Governing Board member or NPSTC Participant, the NPSTC Chair will present a letter and a certificate expressing appreciation for those members and participants who have volunteered time to NPSTC. The letter will be addressed to the individual's supervisor, either an employer or a political entity, and will indicate NPSTC's gratitude for that individual's time dedicated and the valued service to the public safety telecommunications community. This recognition process is a valuable form of outreach that educates supervisors and the public safety community of the valuable service NPSTC Participants provide.

### **Interoperability Committee**

During the Fourth Quarter, the Interoperability Chair, John Powell, and the State Interoperability Executive Committee (SIEC) Working Group Chair, Don Root, responded with a presentation and valuable input when the FCC requested NPSTC's input for a report to Congress. Under the *Implementing Recommendations of the 9/11 Commission Act of 2007*, the FCC is required to conduct a vulnerability assessment of the nation's critical communications and information systems infrastructure and to evaluate the technical feasibility of creating a backup emergency communications system that complements existing communications resources.

Paul Marrangoni, overseeing the effort at the FCC wrote: "We are looking for NPSTC's view of current and future public safety communication systems and the best way to provide emergency backup for these systems. Please provide any information that you think would be helpful in completing our report to Congress."

NPSTC also addressed related issues in a recent FCC filing regarding the Hurricane Katrina/Rita inquiry and will submit a Petition for Rulemaking (PFR) to the FCC promoting development of a deployable state-of-the-art infrastructure proposal developed by the local/state user community within NPSTC. In addition to providing a consolidated national public safety view to the FCC on all of these issues, the presentation afforded the opportunity to highlight critical concerns and needs of the state and local public safety community and other changes in 700 MHz rules that will be included in the PFR.

### **Radio Channel Naming Working Group**

During the last quarter, the Channel Naming Task Group forwarded the *Common Channel Naming Report* to SAFECOM, with the recommendation that it be adopted as part of the grant guidance. Changes will be required by the FCC's Report and Order on 700 MHz, in which previously bifurcated spectrum has been consolidated. Before these changes, when public safety spectrum was bifurcated, it made sense to have duplicate sets of interoperability channels, but within the new band structure, the Working Group examined the issue of whether it makes sense to have two sets of channels. FCC staff has suggested that the Task Group should initiate a Notice of Proposed Rulemaking (NPRM) if a new recommendation is made. In place of one of the interoperability channel sets, public safety could have a system access channel; dedicated analog channels to respond to the needs of the fire community, particularly in high noise environments that affect the operation of the vocoder; and/or a trunked system "on wheels" with three sets of channels, cellular reuse, determined system codes, pre-programmed subscriber sets, and a pre-defined talk group list. This could be used as an overlay, augmentation, or replacement system.

In the Fourth Quarter, the Working Group suggested that the reserve channels should be devoted to deploying mobile infrastructure to an incident to ensure that subscriber equipment can communicate. Regarding the itinerant channel debate, NPSTC has suggested higher power on band-edge itinerant channels and a temporary fix for the digital noise issue. NPSTC believes the power levels in these channels is not strong enough and must be raised. It is expected that this could be rolled into a series of rulemakings that will address implementation of the 700 MHz rule changes.

There was also discussion of a suggested resolution for radios that do not have an eight-character display, which the common radio channel naming system requires. Some radios need to implement a zone ID, leaving only five characters to program channel names on these particular radios. The Task Group has developed a five-character shortcut that would delete the band designator and the indicator for repeat or direct mode, and will recommend that CAL90, TAC91, TAC92, and TAC93, and TAC94 be the approved alternatives for radios lacking an eight-character display.

The Working Group is still awaiting updated revisions to 700 MHz from the National Telecommunications and Information Administration (NTIA) and from the Federal Partnership for Interoperable Communications (FPIC). In the meantime, a footnote will be added to the Channel Naming Report on the website indicating that the Report be revised when the other issues are resolved.

### **Software Defined Radio Working Group**

During the Fourth Quarter, the Software Defined Radio Forum (SDRF) formally approved the cognitive use case of the London bombing scenario and is working to identify considerations and recommendations for how SDR technologies, including cognitive radio (CR) and dynamic spectrum access technologies, can help achieve the public/private partnership goals as the 700 MHz public/private network is built. As challenges to the public/private partnership are identified, it is clear that there are fundamental divergent requirements between commercial use and public safety use. The challenge is to build an economically viable network that meets public safety requirements. Specific challenges include the need for high reliability versus high resource utilization, and coverage and security. SDR/CR can support multiple operating modes and dynamic resource allocation through multiple waveforms, resource allocation, and software modification.

### **Project MESA Working Group**

Project MESA representatives were involved in coordinating with the Broadband Working Group's development of the 700 MHz SoR. The Technical Specifications Group developed a functional matrix against the requirements of the SoR, which has been accepted. Project MESA is currently working on a high-level architecture to be completed in January.

### **Statewide Interoperability Executive Committee (SIEC) Working Group**

During the Fourth Quarter, the National Interoperability Information Exchange (NIIX), a centralized clearinghouse for interoperable communications-related information, had 780 registered users and 44 communities, 25 states and 19 regional communities. NIIX users range from Urban Area Security Initiatives (UASIs), RPCs, Regional Communications Coalitions and SIECs who use the centralized secure warehouse to share, review, edit, and finalize various documents. NIIX is not limited to statewide planning, but is available to serve state and local public safety users who need a collaborative tool.

### **EMS Working Group**

At the November Governing Board meeting, the EMS Working Group developed the following mission: To serve as a forum for the discussion of communications needs in EMS, particularly the integration of new communications technology to enhance access to the information required for appropriate emergency patient care and transportation.

The Working Group will hold an expert panel to make recommendations on the integration of communications technology in EMS, and draft a white paper for comment by the EMS community with the goal of determining desired technologies and their bandwidth, cost, and other implications. The Working Group also intends to assist NASEMSO in pursuing a patient tracking standard as a data communications activity. The action will be pursued through SAFECOM's Disaster Management program, and then the Organization for the Advancement of Structured Information Standards (OASIS) or other Standards Development Organizations (SDOs).

### **Regional Planning Committee (RPC) Committee**

At the November Governing Board meeting, the RPC Committee Chair briefly reviewed the formation of the new National Regional Planning Council (NRPC), which was created at the RPC meeting in Austin, Texas, hosted by the National Institute of Justice (NIJ) at the Texas Sheriffs' Association, during the last quarter. The Chair suggested that it would be prudent to

align the leadership and the work of the two RPC organizations, and proposed that the Chair of the NRPC assume the role of Chair for the NPSTC RPC Committee. There was discussion about the need to have two separate committees doing the work of the RPCs; however, because the Chair of the NRPC was not present, any decisions were tabled until the February 2008 Governing Board meeting.

During the Fourth Quarter, NPSTC developed a new National Planning Oversight Committee (NPOC) mission and goals to assist the NPOC with documentation and a review process. The documentation included a new NPOC appeals flow chart. NPSTC created task descriptions for the U.S. District Chairs to the RPC Committee and defined their roles more clearly, providing the U.S. District Chairs with an action item list that is delineated by deliverables that should help to organize their initiatives in assisting the 55 RPC Chairs with various regional issues and resolutions.

NPSTC also reviewed and edited the 700 MHz planning templates, developed to provide RPCs with a draft template and examples of other plans in one helpful document.

## **Spectrum Management Committee**

### **700 MHz Advocacy Working Group**

During the Fourth Quarter, this Working Group undertook a number of important initiatives.

Narrowband Reconfiguration Update: As noted elsewhere, the FCC's decision on August 10, 2007, reconfigured the narrowband blocks making them contiguous. Earlier NPSTC developed a recommendation for a process to assist agencies that had already started to implement systems in 700 MHz and provide funds to pay for reconfiguring to the new band plan. The FCC set a more aggressive schedule for the reconfiguration than NPSTC had recommended. Following discussion between NPSTC and the FCC, an agreement was made to accept waivers for those who were in the process of implementation. By November 2007, 47 agencies had filed requests for waivers for the deadline to shift the new band plan. The D Block auction winner is to pay retuning costs, however the FCC gave the PSST responsibility to develop a process and implement the retuning of all the deployed equipment.

TV Transition Issues: There are remaining TV incumbency issues in the 700 MHz band. An FCC search for remaining licenses in the band found licenses still existing for Full Power TV, Low Power Television (LPTV), translators, and broadcast auxiliary, both permanent and ad hoc including wireless microphones. The band plan changes have created a 5 MHz distance between public safety narrowband and channels 62 and 67, which alleviates interference issues; however, those channels are in the blocks slated for the broadband network. The FCC search also found licenses for a number of broadcast auxiliary services, and fixed links such as microwave boosters, which does not include thousands of wireless mikes used by sporting events, churches, schools, etc.

Full Power TV will exit the band by February 17, 2009, while the LPTV and broadcast auxiliary categories of usage will require action and notification to these licensees. Public safety agencies planning to deploy in 700 MHz should notify secondary LPTV stations on relevant channels within interference range of the need to move to other channels. The SBE should also be alerted of the need to notify and prevent broadcast auxiliary operation on relevant 700 MHz channels. NPSTC could develop notification templates that public safety can use and alert equipment vendors of the need to stop marketing equipment for channels 63, 64, 68, and 69. NPSTC could also develop a vendor list and a template letter to educate them in coordination with the FCC.

700 MHz Border Agreements: There are discrepancies between the new 700 MHz band and the Canadian plan, which is under discussion by the regulatory agencies in both countries, and which will most likely require a new Memorandum of Understanding (MOU).

775-776/805-806 MHz: The Working Group will analyze this section of the 700 MHz band that will become the new guard band spectrum. Interference analysis is underway for the lower band. Another issue to be determined is whether designating this spectrum for public safety would require Congressional action in addition to a ruling by the FCC.

NCC Guidelines Update: The Working Group noted the need to revise the NCC Guidelines to match the new 700 MHz band plan and standardize references to CAPRAD. The changes related to common channel naming need to be included, TV transition dates are out of date, and the wideband section needs to be revised to match the new rules as does the funding section. Contact information and websites at the FCC will also require updating and review.

### **Border Issues Working Group**

The Working Group is focused on the NPRM to address the 800 MHz band plan on the borders. Comments are due December 3 and reply comments shortly thereafter. NPSTC also will ensure that VHF/UHF coordination issues do not get lost in the discussions about 700 and 800 MHz on the Canadian border.

### **Wireless Alerting Working Group**

The Working Group will identify unused Narrowband Personal Communication Service (NPCS) spectrum. In September, the Governing Board approved the Working Group's request to develop a letter to the FCC requesting additional channels in 900 MHz for public safety. The letter notes that allocating two-way paging channels in the 900 MHz band to public safety was a primary recommendation of the Commission's Independent Panel addressing Hurricane Katrina, and makes the additional points that two-way paging systems possess inherent redundancy over voice/cellular systems, and that significant efficiency is gained by group pages to thousands of units at the same time. The proposed letter specifically recommends that the FCC do three things: Audit the band and determine whether licensees have met their obligations; identify abandoned NPCS spectrum; and allow public safety direct access to the band.

## **Technology Committee**

### **Broadband Working Group**

700 MHz SoR: As noted in the Fourth Quarter highlights, the Broadband Working Group was extremely active during the Third and Fourth Quarters focused on the development of the 700 MHz SoR, a task accomplished by many contributors from the telecommunications community, including both public safety and industry representatives. A list of contributors is available on the NPSTC website. The pace of development and public safety comment occurred within extremely compressed timeframes. The Broadband Working Group met to establish an initial table of contents on September 25, followed by weekly conference calls to develop content, which occurred weekly through October 19. A face-to-face meeting was held in Boulder, Colorado, on October 23 and 24, followed by teleconferences for public safety feedback. The first draft was issued on November 13, 2007. Next steps include a follow-on request for public safety feedback by January 15, 2008; comment review; and publication of updated versions following the guidance of the Governing Board.

The pro/con broadband technology analysis and development of 700 MHz broadband simulation capability will be postponed until the winner of the auction is announced. The

simulation capability development is underway but will also await rollout until following the auction.

**4.9 GHz Update:** The Working Group is also continuing its focus on 4.9 GHz activities and the ongoing technology selection process between the two protocols; Motorola has proposed 802.11-2007 and MA-COM has proposed 802.16e. The P34 User Needs Committee has published an ancillary SoR to map requirements into air link requirements and mapped the protocols against the SoR. Simulations are almost ready to compare the protocols in an outdoor and indoor situation. Cost concerns will be included.

The Working Group will host conference calls to score the two technologies from Motorola and MA-COM, and will host a 2-day meeting funded by NIST OLES in Washington, D.C., to prioritize and weight the public safety requirements. Unless one technology scores heavily over the other, a decision may be made to deploy both technologies.

### **Amateur Radio Working Group**

The Working Group is developing a best practices white paper on the coordination of public safety and the amateur radio community. The Working Group is also developing a presentation for public safety on how the amateur radio and public safety communities can work together in disaster situations. A draft is complete and feedback is welcome.

### **In-Building Working Group**

During the last quarter, the Governing Board had endorsed the concept of national model codes for wireless coverage in buildings. The National Fire Protection Agency (NFPA) and International Code Council (ICC) are both addressing these model codes and there is an effort to coordinate their work. The Working Group has discussed producing a letter from NPSTC endorsing the concept of these national codes to be drafted for the February Governing Board meeting.

The focus of the Working Group has been on the development of the draft white paper on best practices for in-building coverage. This 70-page document includes an executive summary, suggestions for in-building and in-tunnel coverage, a discussion of codes, interference, Bi-directional Antennas (BDAs), and technical appendices. The Working Group Chair received correspondence from Deputy Chief Billy Goldfeder, Loveland-Symmes Fire Department, Ohio, who said he distributed information about the ICC and NFPA model codes, referencing the NPSTC In-Building Communications Best Practices paper to over 25,000 public safety users.

### **Technology Education Working Group**

During the Fourth Quarter, the Working Group prepared its charter, mission, and goals. Several target education "customers" include the RPCs and the members of the Governing Board's organizations. The Working Group will address topics related to FCC matters; using the 700 MHz, 4.9 GHz, 5.2 GHz, and 5.8 GHz bands for public safety communications; trunked, conventional, multi-site, and simulcast issues; and standards such as P25 and International Association of Electrical and Electronics Engineers (IEEE). Delivering the content will be accomplished through a variety of mechanisms including webinars, colloquiums, meetings, and publications.

The Working Group will look at the programs of supporting organizations for opportunities to cross-pollinate, find gaps, and integrate training programs, and also intends to research tools such as Continuing Education Units (CEUs) to add credibility to training programs.

## **Future NPSTC Activities**

The first Governing Board meeting of 2008 will be held in Mesa, Arizona, on February 11-13; followed by meetings in Crystal City, Virginia, on June 16-18; in Seattle, Washington, on September 15-17; and in Baltimore, Maryland, on November 18-20.