



NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

National Public Safety Telecommunications Council Third Quarter Report 2008

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, 2008. NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

Governing Board

During the Third Quarter, 2008, NPSTC held its quarterly Governing Board and Committee meetings on September 15-17, in Seattle, Washington. Ralph Haller, Chair, NPSTC, welcomed NPSTC's Governing Board and Participants and special guests that included Tom Black, Public Safety Canada; Cuong Luu and Karyna Drake, Office of Interoperability and Compatibility (OIC), Department of Homeland Security (DHS); Charles Hoffman, Disaster Emergency Communications Division, Federal Emergency Management Agency (FEMA); Brian Carney, Regional Emergency Communications Coordination (RECC) Working Group, FEMA; and, reporting on the teleconference bridge on September 17, Jeff Cohen, Senior Legal Counsel to the Bureau Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission (FCC).

Since the Governing Board met in June, two Governing Board representatives were recognized for their achievements on behalf of public safety telecommunications. Chief Harlin McEwen, representing the International Association of Chiefs of Police (IACP), received the IJIS Institute Robert P. Shumate National Public Safety and Justice Contributor to Excellence Award, an award presented to the person who has made the most valuable contribution to justice and public safety information sharing during the past year. Chief McEwen was also honored by the International Association of Fire Chiefs (IAFC) Presidential Award, presented in recognition of his dedication to public safety communications and his leadership while working on the public safety broadband initiative. Charles Werner, Governing Board alternate for the IAFC, received an award from *Fire Chief* magazine as annual "Fire Chief of the Year," an award honoring his dedication and leadership in fire and emergency services.

The Governing Board was pleased to welcome 13 first-time attendees to the September meeting and 24 attendees participating on the conference bridge over the 3 days.

FCC Filings and Regulatory Issues

On behalf of its member organizations, NPSTC made the following filings in the Third Quarter.

[NPSTC Submitted Reply Comments in the Second Further Notice of Proposed Rulemaking on July 7, 2008:](#) NPSTC submitted reply comments in response to the Commission's *Second Further*

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 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 Technology Directors | National Emergency Number Association | National Sheriffs' Association

Notice of Proposed Rulemaking regarding the 700 MHz D Block, the Public/Private Partnership, and the Public Safety Broadband Licensee.

NPSTC Submitted an Ex Parte Letter on Paging on July 14, 2008: Private two-way digital paging has emerged as an important technology in strengthening emergency preparedness. The Commission's extensive work examining Hurricane Katrina and other catastrophic events indicate that effort should be directed to expanding two-way paging opportunities for public safety. The letter submitted urges the Commission to examine the availability of channels in the 901-902/930-931/940-941 MHz band where the Commission has granted geographic licenses in the narrowband Personal Communication Service (PCS) auctions and determine whether capacity can be made available to public safety agencies. This information will afford the Commission, public safety agencies, and current licensees opportunity to broaden use of this spectrum by assisting emergency response.

NPSTC Filed a Comments to a Request for Waiver – Woodbridge Township on August 18, 2008: Comments were filed addressing the applications and waiver request of Woodbridge Township, New Jersey. The township applied to use channels that are designated in the broadcast service but are not currently licensed. The filing reiterates NPSTC's position that the Commission, in considering waiver applications must comprehend the 700 MHz band does not by itself totally satisfy local, county, tribal, and state public safety communications needs.

NPSTC Prepared a Response to Spectrum Acquisitions Inc. (SAI) on September 23, 2008: NPSTC reviewed proposals presented by Spectrum Acquisitions, Inc. in response to the FCC's Second Further Notice of Proposed Rulemaking. After being reviewed and discussed by the Spectrum Management Committee, the Governing Board voted not to endorse their proposal.

NPSTC's Regulatory Advisor also assisted in researching, developing, and preparing the following documents and reports.

- Reviewed FCC Notice of Proposed Rulemaking addressing wireless microphones in the 700 MHz band; reviewed proposal to ban use subsequent to DTV transition in February 2009 and no longer certify equipment.
- Began review of FCC Notice of Proposed Rulemaking addressing NT 911 Act; prepared note summarizing NT 911 Act rulemaking.
- Reviewed US Mobility response to NPSTC's paging position.
- Prepared Comments addressing FCC Wireless Microphone Proceeding.
- Prepared Comments addressing FCC Public Notice Relating to Section 337(c) of the Communications Act of 1934, as amended.

Presentations

The following presentations were made during the September Governing Board and Committee meetings:

- Charles Hoffman, Chief, Federal Emergency Management Agency (FEMA) Disaster Emergency Communications Division, on FEMA's DEC.
- Brian Carney, FEMA Regional Emergency Communications Coordination Working Group (RECCWG), on the RECCWGs.
- Tom Black, Senior Policy Analyst, Public Safety Canada, on interoperability issues in Canada.

- Jim Corry, Vice President, Government Solutions, Mobile Satellite Ventures, on SMART Zones.
- Peter Tenhula, Shared Spectrum Company (SSC), and Nancy Jesuale, NetCity Inc. on the National Institute of Justice (NIJ) Public Safety Cognitive Radio Project.
- Fred Frantz, SDR Forum, on the SDR Cost Model Workbook Hierarchy.
- Dan Sullivan/Paul Kiley, Harris Corporation Unity XG, on multiband and SDR platforms for public safety.
- Steve Nichols, Thales Communications, Inc, on SDR platforms for public safety.
- Karyna Drake, Program Manager, OIC, on DHS's Science and Technology (S&T) Directorate award to demonstrate a multi-band radio.
- Jeff Cohen, Senior Legal Counsel to the Bureau Chief, Public Safety and Homeland Security Bureau, FCC, on current activities at the Public Safety and Homeland Security Bureau (PSHSB) and the FCC.
- John Logan, NPSTC Regulatory Advisor, on FCC activities.
- Chief Harlin McEwen, IACP, and Chair of the Public Safety Spectrum Trust (PSST), on the 700 MHz NPRM.
- Bette Rinehart, Motorola, on FCC activities related to the 700 and 800 MHz bands.
- Richard Reynolds, National Association of State Technology Directors (NASTD), on the National Regional Planning Council (NRPC).
- Ad Hoc Report on State Spending of Public Safety Interoperable Communications (PSIC) Funds from the States of California, Colorado, Delaware, Montana, South Dakota, Tennessee, Texas, and Wyoming

Also at the September Governing Board meeting, NPSTC provided personal training for NIIX users and coordinators.

Committee Action Items

At the September Governing Board meeting, NPSTC's member organizations approved the following items recommended by the Chairs of the NPSTC Committees.

- At the request of the Regional and Broadband (R&B) Liaison Committee, approved the mission statement and objectives for the National Planning Assistance and Coordination (NPAC) Working Group with a change in the wording from 'goal' to 'mission.' Approved as amended.
- At the request of the R&B Liaison Committee, approved the NPAC Dispute Resolution Process document.
- At the request of the R&B Liaison Committee, approved the mission and charter for the Itinerant Channel Naming Working Group to address the sets of nationwide low power itinerant channels at the edge of the 700 MHz narrowband allotment and work with the National Regional Planning Council (NRPC) to develop a methodology.
- At the request of the R&B Liaison Committee, approved the mission and charter for the 700 MHz Relocation Working Group, which is to ensure that the FCC's Second Report & Order of August 2007 requirement to relocate public safety operations in 700 MHz

spectrum is accomplished; create opportunities for RPCs to obtain support as they work through relocation; and provide a process for dispute resolution.

- At the request of the Spectrum Management Committee, approved that Committee's role as lead in managing resources and assigning tasks to the various Committees in the response to the 3rd NPRM, with the Spectrum Committee addressing the technical spectrum issues involved and the R&B Committee working with the RPCs to provide regional input.
- At the request of the Spectrum Management Committee, approved the Spectrum Committee's research of possibilities for spectrum sharing based on a FedEx proposal to public safety in Tennessee. FedEx has a 800 MHz system that they no longer use often and they would like to refarm that spectrum to public safety for the purpose of public safety disaster management, probably to be used in the travel channels.
- At the request of the Spectrum Management Committee, approved 700 MHz Working Group recommendation not to endorse a plan proposed by Spectrum Acquisitions, Inc. in response to the FCC's Second Further Notice of Proposed Rulemaking.
- At the request of the Spectrum Management Committee, approved developing comments for the October 3 filing on 700 MHz certification of microphones and to alert broadcast auxiliary equipment vendors.
- At the request of the Spectrum Management Committee, approved the mission and projects of Airborne Video Working Group.

Meetings and Conferences

During the Third Quarter, the Executive Committee and the Executive Director met in person and via teleconference to discuss program planning and future meetings. NPSTC holds monthly EC meetings and most of the Committees meet in teleconference monthly as well.

NPSTC Governing Board Annual Planning Meeting. September 17, 2008. In September, following the Governing Board meeting, NPSTC held its Annual Planning meeting. Among the activities undertaken at the meeting, NPSTC's goals and objectives were compared to the NPSTC Charter to ensure strategic goals support the charter items. There was consensus that they are in agreement. The Governing Board reviewed and revised the process and timeline by which comments are made to the FCC, and extensively discussed the meaning of "consensus" as it applies to NPSTC's voting procedures.

In 2008, the Governing Board determined that its priority was outreach. In review of the tasks accomplished to date, the Governing Board agreed that outreach goals have been well met and agreed to continue this priority. In 2009, priorities will include:

- Border issues
- SDR
- Spectrum assessments
- Outreach – media kits, etc.
- 700 MHz broadband
- Narrowbanding
- 470-512 rules changes

FCC Meetings. July 23-25, 2008. Several Governing Board members, NPSTC's Executive Director, NPSTC's Chair, and NPSTC's Regulatory Advisor met with FCC commissioners and staff over a 3-day period to discuss 700 MHz and paging issues. NPSTC representatives were

able to clarify some conflicting information about the public safety broadband network the FCC had received. NPSTC representatives also wanted to meet with the other Bureaus to discuss the potential availability of 900 MHz channels for public safety paging. NPSTC asked the FCC to perform an audit of licenses to review what is available for nationwide use.

NPSTC representatives met on July 23 with the FCC Chairman's Office, Public Safety and Homeland Security Bureau (PSHSB) Chief and staff, and Commissioner Adelstein; on July 24 with Commissioner McDowell and the Wireless Bureau Staff; and on July 25 with Commissioner Tate and Commissioner Copps.

Maritime Radio Communications Teleconference. August 29, 2008. NPSTC's Governing Board Member representing the National Association of State Emergency Medical Services Officials (NASEMSO) and the Chair of NPSTC's Interoperability Committee attended a Maritime Radio Communications Working Group meeting. The Working Group requested NPSTC guidance, information on best practices, and other advice. NPSTC participated in a follow-on teleconference to discuss possibilities of continued collaborative efforts. A Canadian tri-province partnership Memorandum Of Understanding (MOU) will include work toward a common maritime approach to radio communications and within that the opportunity to achieve interoperability between first responder users of the system. This multi-jurisdictional potential is seen as a "once in a lifetime" opportunity for radio communication timing alignment.

International Association of Fire Chiefs (IAFC) Annual Conference and Exposition. August 14-16, 2008, Denver, Colorado. NPSTC's Governing Board member representing IAFC provided booth support for NPSTC to discuss NPSTC with conference attendees and distribute outreach materials. Among materials provided to the attendees was the LPTV Brochure, Interim Report on Digital Radios, *IAFC Investigates Fireground Noise and Digital Radio Transmissions* Tech Brief, Narrowbanding Report, NPSTC newsletter, and NPSTC Technical Resource CD. NPSTC representatives also conducted a panel entitled, "What You Need to Know about Communications," which included approximately 100 attendees. Topics discussed covered the nationwide public safety broadband network, digital noise, OEC and the National Emergency Communications Plan (NECP), Office of Interoperability and Compatibility (OIC), NPSTC's In-Building and LPTV initiatives, FCC VHF/UHF narrowbanding requirements, and fire communications research.

Association of Public-Safety Communications Officials – International (APCO) 74th Annual Conference and Exposition. August 3-7, 2008, St. Louis, Missouri. NPSTC participated in APCO's Annual Conference, supporting a booth to provide outreach materials and answer questions and hosting a panel, entitled, "NPSTC – Current Events and Activities in Public Safety Communications." The panel enjoyed a full audience who asked a broad range of questions. A number of Governing Board and Committee Chairs volunteered at the NPSTC booth, where materials similar to the IAFC conference were handed out.

Several attendees complimented NPSTC's work and the positive impact the community receives through the information NPSTC provides. One conference attendee expressed how helpful NPSTC's website and newsletters were and gave a "heartfelt thanks" for all NPSTC's efforts. The conference also provided the opportunity to meet with representatives of OIC to review common projects and methods in providing outreach for OIC and OEC. Finally, the NPSTC Chair and Executive Director had an opportunity to meet with the APCO Board of Directors to discuss areas of collaboration and improving communication.

Publications

In the Third Quarter, NPSTC changed the look of its publications and the names of its quarterly newsletter and monthly electronic bulletin. Formerly *npstc spectrum*, now *npstc quarterly*, the newsletter was originally named to reflect both the need for public safety spectrum and the broad spectrum of issues that the NPSTC organizations support. It was decided to change the title to

avoid any confusion about NPSTC's focus, which encompasses technology, interoperability, spectrum, policy, and outreach and education to the public safety community. At the same time, NPSTC changed the title of its online bulletin, *What you need to know today*, to *npstc monthly*.

NPSTC also added a new publication, *NPSTC Technology Brief*, published periodically by NPSTC member organizations to highlight awareness and provide knowledge on technology issues of importance to the first responder community. The first *Technology Brief*, covered the International Association of Fire Chiefs (IAFC) report on the use of digital radio technology. The report, *Interim Report and Recommendations: Fireground Noise and Digital Radio Transmissions*, describes the results of federal testing that found some current digital systems have unintelligible audio in loud noise environments, and covers the testing protocol, findings, and analysis as well as providing important best practices recommendations for the fire community.

Technical Resource CD: NPSTC compiled and published a NPSTC Technical Resource CD that includes the NPSTC Channel Naming Report, NPSTC Channel Naming Report Short Name Supplemental Addendum, NPSTC 700 MHz Statement of Requirements (SoR), LPTV brochure and supporting materials, In-Building White Paper, NPSTC's 2007 Annual Report, 2007/2008 npstc spectrum newsletters, the National Emergency Communications Plan, and Communications Unit Leader (COML) documents, as well as other OIC/OEC documents. The CD was developed with a programmed link to the most current documents on the NPSTC website, making it an active resource for the user.

Press Releases

NPSTC issued press releases on the following topics.

- *NPSTC Urges FCC To Clear Wireless Microphones from 700 MHz Public Safety Band. July 1, 2008.*
- *OEC Releases National Emergency Communications Plan. August 1, 2008.*
- *NPSTC Governing Board Alternate Named Fire Chief of the Year. August 18, 2008*
- *NPSTC's Harlin McEwen Honored by Two Public Safety Organizations. August 18, 2008.*
- *New Communications Unit Leader (COML) Class Schedule for Hawaii and California. September 10, 2008.*
- *NPSTC Forms Northern Border Task Force. September 22, 2008.*

Article Repository

NPSTC maintains an article repository that includes a searchable database by topic on NPSTC newsletter articles and articles in other publications that refer to NPSTC or are written by NPSTC Participants.

Data: What Do We Do with It?	Sean O'Hara	APCO PS Comms	Technology	Article by NPSTC WG Vice Chair	Jul-08
Dispatch 700 MHz Narrowband Activity	Sandi Wendelken	Mission Critical	700 MHz	Article of NPSTC 700 MHz filings	Jul-08
FCC Clarifies Narrowbanding Requirement	Ralph Haller	Mission Critical	Narrowbanding	Article by NPSTC Chair	Jul-08
APCO 2008, Kansas City, Missouri	Jackie Siegel	E-bulletin	Governing Board		Jul-08
COML Training Offered at APCO	Jackie Siegel	E-bulletin	Interoperability		Jul-08
Spectrum for Public Safety Paging	Jackie Siegel	E-bulletin	Spectrum		Jul-08
Avoid Interference in 700 MHz from Unlicensed Devices	Jackie Siegel	E-bulletin	700 MHz		Jul-08

Simplify Cross Border Coordination Under Above 30 MHz Coordination Agreement	Jackie Siegel	E-bulletin	Interoperability		Jul-08
Correction to Narrowbanding Article	Jackie Siegel	E-bulletin	Narrowbanding		Jul-08
Working To Improve Federal Spectrum Management	Jackie Siegel	E-bulletin	Spectrum		Jul-08
NIFOG Downloads from NPSTC Website	Jackie Siegel	E-bulletin	Spectrum		Jul-08
OEC and FEMA Grant to Fund and Improve IC	Jackie Siegel	E-bulletin	Interoperability		Jul-08
SAFECOM's Practitioner Driven Approach Guides Improvements in PS Interoperability	Jackie Siegel	E-bulletin	Interoperability		Jul-08
Get the Jump on Interference	Marilyn Ward	APCO PS Comms	700 MHz	Article by NPSTC Ex Dir	Aug-08
NPSTC Provides Update on Regulatory Initiatives	Mary Rose Roberts	Urgent Comms	Regulatory	Article on NPSTC	Aug-08
700 MHz Shift: Are Regional Networks Best?	Sandi Wendelken	Mission Critical	700 MHz	Article quoting NPSTC GB and Participant Members	Aug-08
Year of Personal Conflicts Spurred APCO-PSST Feud	Howard Buskirk	Communications Daily	700 MHz	Article on APCO-PSST issues referencing NPSTC	Aug-08
APCO Requests PSBL Changes in 700 MHz Comments	Editor	Mission Critical	700 MHz	Article on PSBL referencing NPSTC	Aug-08
McEwen Receives Public Safety Awards	Editor	Mission Critical	Governing Board	GB Member receives pub safety awards	Aug-08
McEwen Receives Public Safety Honors	Editor	Urgent Comms	Governing Board	GB Member receives pub safety awards	Aug-08
Police One Exclusive: D Block Debacle	Doug Wylie	Police One	700 MHz	NPSTC Chair quoted on PSST updates	Aug-08
Public Safety Trust Opens the Door to Regional 700 MHz Licenses	Editor	Telecom AM	700 MHz	GB Member quoted on PSST	Aug-08
PSST Considers Regional Approach to D Block; Alters Agreement with Cyren Call	Donny Jackson	Urgent Comms	700 MHz	GB Member quoted on PSST	Aug-08
NPSTC's Participants Work the Booth at APCO	Jackie Siegel	E-bulletin	Governing Board		Aug-08
Chief Harlin McEwen Receives Public Safety Awards	Jackie Siegel	E-bulletin	Governing Board		Aug-08
NPSTC Panel Draws Crowd at APCO Conference	Jackie Siegel	E-bulletin	Governing Board		Aug-08
Chief Charles Werner Named Fire Chief of the Year	Jackie Siegel	E-bulletin	Governing Board		Aug-08
And the Winner Is!!	Jackie Siegel	E-bulletin	Governing Board		Aug-08
Welcome to NPSTC's New TIA Representative	Jackie Siegel	E-bulletin	Governing Board		Aug-08
NPSTC Endorses Plain Language	Jackie Siegel	E-bulletin	Interoperability		Aug-08
FCC Meeting to Cover Low-Power Mics and NET 911	Jackie Siegel	E-bulletin	Technology		Aug-08
Public Safety Clearinghouse Launched by FCC	Jackie Siegel	E-bulletin	Regulatory		Aug-08
Werner Heads DHS Committee	Editor	Mission Critical	Governing Board	GB Alt Named to Chair SAFECOM EC	Aug-08
Hang on to your Radios	John Powell	Urgent Comms	Technology	Committee Chair on trunking	Aug-08

Stuck in the Mud	Kevin McGinnis	Urgent Comms	Technology	GB Member on need to upgrade comms for EMS	Aug-08
Stutter Steps	Charles Werner	Urgent Comms	Technology	GB alternate on need for broadband	Aug-08
Coming Together	Tom Sorley	Urgent Comms	Technology	Committee Chair on future convergence	Aug-08
Beeps, Bops, and Boops	Vinnie Stile	Urgent Comms	Technology	Chair Emeritus on radio technology then and now	Aug-08
Change is in the Air	Glen Nash	Urgent Comms	Technology	Former Technology Committee Chair on spectrum and use of broadband	Aug-08
Werner Wins IAFC Award	Editor	Mission Critical	Governing Board	GB alternate wins award	Sep-08
PSST To Form Committee To Address APCO NENA Concerns	Editor	Mission Critical	700 MHz	GB reps for APCO and IAFC quoted	Sep-08
We've Changed Our Banners	Jackie Siegel	npstc quarterly	Governing Board		Sep-08
Executive Directors Report	Marilyn Ward	npstc quarterly	Governing Board		Sep-08
Outreach in Action: Photo Essay	Jackie Siegel	npstc quarterly	Governing Board		Sep-08
Moving from Ten Codes to Plain Language	Jackie Siegel	npstc quarterly	Interoperability		Sep-08
700 Regional Planning Update	Bette Rinehart	npstc quarterly	Interoperability		Sep-08
NPSTC Partner Advancing Communications Interoperability to the North	Lance Valcour	npstc quarterly	Interoperability		Sep-08
Regulatory Update	John Logan	npstc quarterly	Regulatory		Sep-08
NPSTC Technology Education WG Works to Make Important Information More Available	Stephen Devine	npstc quarterly	Technology		Sep-08
Canadian Border: The Next Step in 800 MHz Reconfiguration	Brett Haan	npstc quarterly	800 MHz		Sep-08
NASF-Communicating with Local, State, and Federal Partners To Preserve America's Trees	Lloyd Mitchell	npstc quarterly	Interoperability		Sep-08
NIIX: Not Just for Statewide Planning	Jackie Siegel	npstc quarterly	Governing Board		Sep-08
Leveraging Common Goals: Similarities Drive Public Safety and DoD Communications Technology Developments	Sean O'Hara	Urgent Comms	Technology	Article written by WG member	Sep-08
Industry Insights	Editor	Mission Critical	Technology	NPSTC Chair quoted	Sep-08
Inside Washington	Ralph Haller	Mission Critical	Regulatory	Article by NPSTC Chair	Sep-08
News Briefs: NPSTC Urges Microphone Restriction at 700 MHz	Editor	Mission Critical	Technology	Article on NPSTC filing	Sep-08
State of the Industry: 800 MHz Rebanding, Narrowbanding, Challenges	Editor	Mission Critical	800 MHz	NPSTC Chair, APCO and IACP reps, WG BB Chair quoted	Sep-08
NPSTC Is Valuable Radio Resource	Editor	Dispatch Magazine	NPSTC	NPSTC website cited as great source	Sep-08

Website

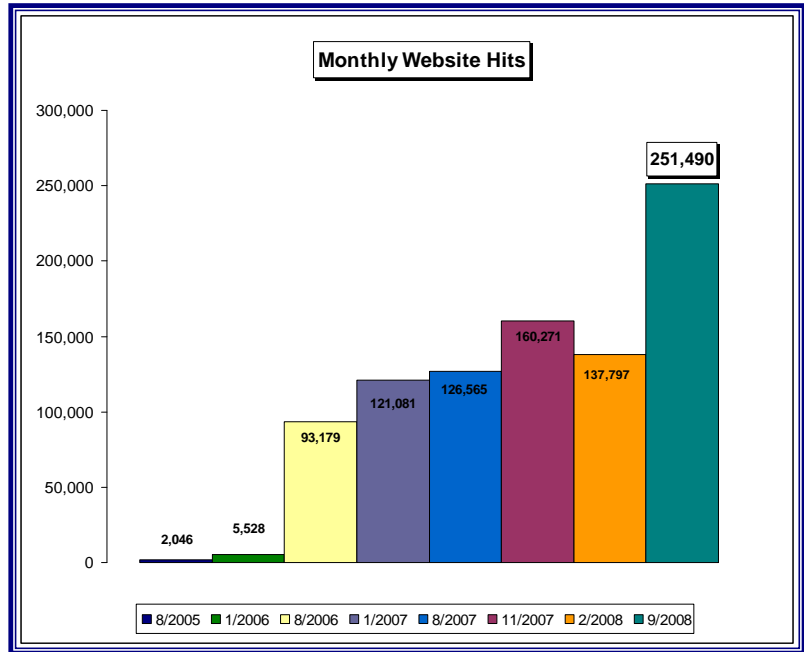
In the Third Quarter, the website and listserv continued to experience steady growth. NPSTC has developed a new meeting page to provide one location for all NPSTC meeting information. In addition to the often-accessed hot buttons that lead website visitors to the pages housing information on COML, In-building, the 700 MHz Statement of Requirements (SoR), Channel Naming, and Low Power TV (LPTV), NPSTC’s website hosts a myriad of documents and information, most recently adding OIC’s *Computer-Aided Dispatch Interoperability Project: Documentation of Regional Effort*, a video on the *Computer-Aided Dispatch (CAD) Business Case*, and *Communications-Specific Tabletop Exercise Methodology*.

Technology Education Document Repository

NPSTC’s Technology Education Working Group has created a number of technology educational resources. In Phase one of the NPSTC Library, a webpage for the repository has been developed, with categories and sub-categories. Phase two will include transferring all the archived documents into the library and making it accessible via the NPSTC website.

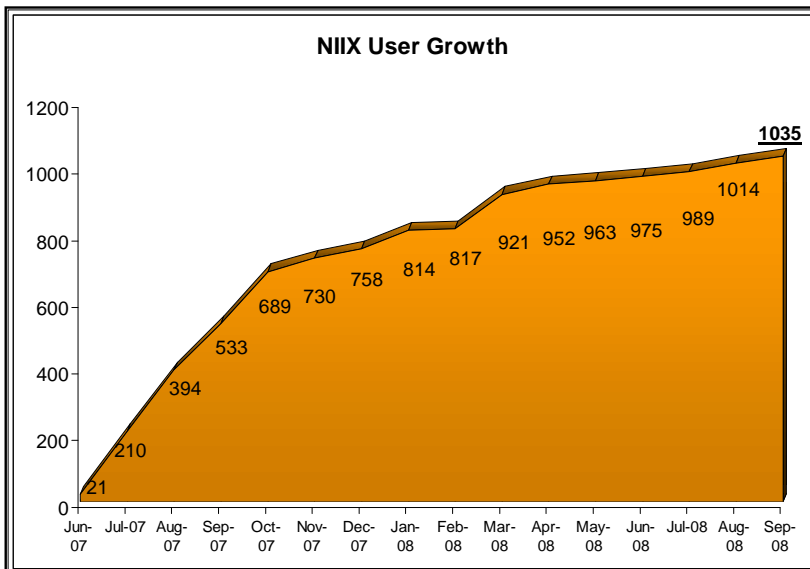
NIIX

During the Third Quarter, the National Interoperability Information eXchange (NIIX) Outreach Plan was incorporated into the NPSTC Outreach Plan. An Action Plan will be developed to indicate how the goals will be achieved which will become a fluid document within the plan. A training session occurred for a new NIIX



Coordinator. New communities were established for the Federal Emergency Management Association (FEMA), Charlottesville /Albermarle, OIC and OEC, and National Governors’ Association.

A one-page brochure was developed to introduce the NIIX as a free online tool available to the public safety community and not just for statewide planning. The brochure offers a list of Communities reflecting the diverse groups using this exchange tool, along with the benefits for those users or Community Coordinators.



Interoperability Committee

Statewide Interoperability Executive Committee (SIEC) Working Group

The Working Group is validating the 56 different state groups that are undertaking state interoperability coordination, to ascertain that they are receiving information, and to learn if they are focused on 700 MHz, or following the National Coordination Committee (NCC's) model of coordination across the bands.

EMS Working Group

The Working Group is in the process of writing, editing, and reviewing a white paper on potential technologies with implications for bandwidth that might be used in the medical field in the future. Also during the quarter, NASEMSO has issued a Guide to Information/Communications Technology for EMS Officials. The document was written at a high level for users not familiar with communications information, but the five-page document has additional embedded files that provide more specific, technical information. The organization COMCARE, which formerly offered a discussion forum for the discussions of emergency medical associations, no longer provides that forum. The EMS Working Group intends to serve as a similar forum in the future.

ESF2 Working Group

Following reports on FEMA's DEC and RECC programs, the Working Group will coordinate its activities with those programs. The Working Group will revise its mission to reflect the additional charge to the group.

Project MESA Working Group

During the Third Quarter, the Working Group reported renewed activity in Project MESA, a joint North American/European effort to identify standards for broadband that is non-band specific, managed by the Telecommunications Industry Association (TIA) in the U.S. and European Telecommunications Standards Institute (ETSI) in Europe. NPSTC is monitoring the effort currently, but not directly involved due to the cost of travel.

Interoperability Channel Naming Working Group

The Working Group is waiting for feedback from the FCC on its request for redesignation of some of the 700 MHz calling channels as potential travel channels.

Software Defined Radio Working Group

At the September Governing Board meeting, the Working Group hosted a number of presentations and a comprehensive discussion of software defined radio (SDR).

Discussing the National Institute of Justice (NIJ) Public Safety Cognitive Radio Project, were Peter Tenhula, Shared Spectrum Company (SSC), and Nancy Jesuale, NetCity Inc., who briefed on cognitive radio technology and the NIJ CommTech Project. The prototype hardware units have been field tested and are on the market. The units work through policy-based command and control software, utilizing dynamic spectrum access (DSA), accessing holes where spectrum is available, through algorithm and spectrum rule development. The radio has been selected for the NTIA/FCC Spectrum Sharing Testbed.

Fred Frantz, SDR Forum, discussed a Cost Model Workbook Hierarchy, a detailed spread sheet, made up of all the different cost components organized within a hierarchical structure. When SDR Forum's Public Safety Special Interest Group (PS-SIG) reviewed the critical issues required to move cognitive radio (CR) into the marketplace, the issue of cost to public safety topped the list. The workbook is a comprehensive tool for public safety to examine cost tradeoffs in purchasing SDR and CR systems. It takes a life cycle approach, which includes costs such as equipment and installation, training, governance, operations and maintenance, system testing, system management, and other contingencies. Within each category, specific cost breakdowns are displayed. For example, within the equipment category, costs breakdowns include centers, sites, terminals, data backbone/backhaul, in-building coverage, and even sales tax on equipment. SDR Forum is not set up to maintain this kind of product and is seeking feedback as to whether NPSTC would want to review the tool and place it on the NPSTC website to provide value to the field. SDR Forum is in its own process of review and approval, which should be complete by the November Governing Board meeting.

Dan Sullivan, Harris Corporation Unity XG, briefed on multiband and SDR platforms for public safety. Harris has developed a SDR multiband radio to meet the needs of overlapping missions and jurisdictions in the public safety market that operates in 136-174 MHz, 380-520 MHz, and 762-870 MHz. It is fully compliant with APCO P25 and designed for P25 Phase 2 with SW-only upgrade.

Steve Nichols, Thales Communications, Inc., briefed on the Liberty™ Multi-Band Land Mobile Radio, which provides full coverage in all public safety bands: 136-174 MHz, 380-520 MHz, and 763-869 MHz. Thales has a grant from OIC to support its multiband radio pilot project, which seeks to test multi-agency everyday use in a shared environment using multiple frequency bands, mutual aid in a single environment, pre-planned deployment to a regional incident, and multiband radio use in a cache situation. The comprehensive final report will include an operational requirements document for the use and deployment of multiband portable radios, guidelines for the use of the radio's features in the four operational scenarios investigated, and a comparison of multiband radio usage with other current methods of achieving interoperability, including measurements of the effort required to set up and operate the equipment.

Outreach Committee

During the Third Quarter, NPSTC participated on panels and in booth outreach at four conferences, the International Wireless Communications Expo (IWCE), the National Emergency Number Association (NENA), APCO, and IAFC. A number of NPSTC Participants provided their valuable expertise at the NPSTC booth at APCO's conference in Kansas City, Missouri. This year 125 articles have been written by or about NPSTC members. NPSTC has had almost 1,400,000 website hits in 2008 to date. NPSTC will also be issuing a new electronic NPSTC Regulatory Update and the first NPSTC Tech Brief, on digital interference on the fireground was issued in July.

.Regional and Broadband Liaison Committee

700 MHz Narrowband Relocation Working Group, Don Root, Chair

The Working Group is on hold due to the auction that has not yet occurred and unknown future of the broadband network nationwide.

700 MHz Itinerant Channel Naming Working Group

The Working Group has had discussions and is planning to set up teleconferences to discuss the issues.

National Planning Assistance and Coordination (NPAC) Working Group

The Working Group has developed its mission statement and objectives below and circulated it among the District Chairs for their sign off.

Mission: The goal of this Working Group is to assist regional planners in the ongoing operations of their regions. The focus will be on prompt notification to regional planners of issues affecting their operations, reviewing and updating the NCC regional planning documents, and providing an interregional dispute resolution process.

Objectives: To periodically review the NCC documents, updating and disseminating them as necessary and appropriate, and to provide the interregional dispute resolution process that is called for in many 700 MHz regional plans.

The Working Group has also developed a Dispute Resolution Process and reviewed the documents of NPAC organization, and has worked to update the NCC Regional Planning Guidelines, and other NCC-developed materials related to 700 MHz Regional Planning.

Spectrum Management Committee

At the September Governing Board meeting, the Spectrum Management Committee discussed an FCC Docket item concerning the protection of AM broadcast stations from nearby towers. Currently, rules require an agency that wanted to place a tower within a certain distance of an AM broadcast station to provide computer modeling testing to determine if there would be an effect on the broadcast station. The Land Mobile Communications Council (LMCC) submitted comments suggesting the Commission simplify the process, which were rejected because of inadequate notice. A further notice will be forthcoming and LMCC will again file comments. NPSTC will track the progress of this issue and docket and may file supporting comments.

470-512 MHz Working Group

The Working Group intends to draft a petition to the FCC to formalize what is accomplished currently through waivers to expand the area of Land Mobile Radio (LMR) base operations, allowing base stations to operate outside the 50-mile limit radius, and continues its research to support that effort. The work refers to the revision of Part 90, Subpart L, TV/LMR spacing rules for digital television. The TV/LMR rules were written for analog television.

When the DTV spacing rules were rewritten and the resort of analog versus digital was done, much shorter spacing rules were used. If the original 50 dB spacing tables were used for LMR with the shorter spacing, power levels would have to be reduced from levels used now. Because the DTV rules have been rewritten, the LMR rules must now be changed accordingly, moving from 50 dB to 40 dB. In discussion of this issue, it was also noted that a possible second transition to clear channels 2-6 for public safety could become an issue for NPSTC's future consideration after the initial DTV transition.

700 MHz Advocacy Working Group

During the Third Quarter, the Working Group continued to focus on two main issues—the 700 MHz NPRM and the Order regarding low power broadcast auxiliary operations, such as wireless microphones, at 700 MHz. The Working Group sent a letter to the FCC requesting that action be

taken to address wireless mics and similar devices. The FCC released a joint Order and NPRM effective August 21 that immediately freezes filing of new low power broadcast auxiliary license applications in Part 74 for operation in 698-806 MHz after February 17, 2009; freezes grants of equipment authorization of low power auxiliary station devices that would operate in 700 MHz; and withholds action on pending low power broadcast auxiliary license or equipment authorization applications at 700 MHz, pending the outcome of the proceeding. The NPRM is consistent with what NPSTC requested.

The FCC also seeks comment on the Public Interest Spectrum Coalition (PISC) proposal, including establishing a wireless mic band at 2 GHz. The Working Group recommended that NPSTC not provide comments on the PISC proposal.

The Working Group also reviewed a 700/800 MHz proposal from Spectrum Acquisitions, Inc. (SAI), which is seeking public safety endorsement of their proposal. SAI proposed a sequence of joint 700 MHz and 800 MHz actions. The 800 MHz rebanding would still need to be completed because the SAI plan shows National Public Safety Planning Advisory Committee (NPSPAC) systems at 806 MHz. To ensure the acquisition of additional 800 MHz spectrum before giving up 700 MHz, a new 800 MHz Rulemaking would need to be decided before any 700 MHz changes could occur. The plan appears to require that 50 or so narrowband systems implemented at 700 be moved to 800. If 700 narrowband is not moved, only 3+3 MHz would be left for public safety broadband, spectrum that must also support guardband. SAI claims that its plan can achieve FCC policy goals more quickly and less expensively, but action at 700 is essentially stalled while 800 rulemaking takes place; it does not relieve the need to complete 800 rebanding and responsibility would be reassigned; it either adds cost /time to move narrowband 700 systems to 800 or it reduces public safety broadband spectrum to 3+3 MHz.

It was recommended that NPSTC track this item, but not respond at the present time.

800 MHz Reconfiguration Working Group

The Working Group reported that all of the regions in the first three waves of rebanding are in some stage of implementation. The TA expects to have frequency assignments to the Business/Industrial users on the Canadian border by the end of this month, enabling them to move out of the band, and public safety to move down from the NPSPAC channels. The next step is to move the public safety agencies currently operating in the channels where NPSPAC allocation will be. The TA expects to get frequency assignments out by the end of the year.

Nextel was to vacate all channels in the interleaved section of the band in June, but appealed, asking that they be allowed to move out of the interleaved frequencies in stages based upon the availability of frequencies in 866-869 MHz. The FCC is reviewing Nextel's request and it appears it will be granted with the result that the first 20 channels in interleaved spectrum will be vacated and made available for new public safety licenses. The FCC will likely send out a notice in October announcing the creation of a vacated spectrum database prior to issuing a Public Notice explaining application procedures for the newly available channels.

Border Issues Working Group

During the Third Quarter, the Working Group created two task forces, the Northern Border Task Force and the Southern Border Task Force. Each Task Force will focus on 1) Operability, i.e., improving cross-border coordination and spectrum access; and 2) Interoperability, i.e., steps to enhance cross-border communications among public safety agencies when needed. Each Task Force will develop a presentation/white paper for Governing Board approval and NPSTC use that will include:

- Summary of current issues with cross-border coordination process and spectrum access.
- Recommendations to improve coordination/spectrum access, in both the near- and long-term.
- Recommendations to help enable cross-border interoperability, in both the near- and long-term.
- An external Action Plan—what NPSTC believes various government agencies would need to do to implement recommendations.
- An internal Action Plan—what NPSTC needs to do, who has responsibility, and the target deadline for each action.
- Points of influence to maximize the chance of success.
- Outreach plan to gain support within the public safety community.

The Working Group provided a preliminary summary of current issues on the northern border at the September Governing Board meeting. Limited information is transmitted between the FCC and Industry Canada (IC) for coordination; the Working Group is examining how it can facilitate the process. IC does not have pools or blocks in each band; public safety, government, and business/industrial are intermixed channel by channel. IC has a more conservative VHF/UHF interference protection policy than the FCC. Some of the information applicants need to apply the interference policy is not available.

Airborne Video Working Group, Don Root, Chair

During the quarter, the Airborne Video Working Group developed its mission, which is to address strategies and spectrum availability for public safety airborne-to-ground video operations. In many of the urban areas, spectrum for video from helicopters or light aircraft platforms is shared with the broadcasters. When there are incidents such as the recent train crash in Los Angeles, with many broadcast helicopters doing video downlinking and trucks on the ground, each taking up one of the 10 or 12 pairs in the 2.4 GHz band and the channels in the 6 GHz band, it does not leave much spectrum for public safety incident command to review video away from the incident.

First action items include defining the issue, including any partial solutions in use and shortfalls to public safety requirements; determine solution options; and develop recommendations.

Wireless Alerting Working Group

During the Third Quarter, the Working Group Chair, NPSTC's Regulatory Advisor, and others from NPSTC met with the FCC to discuss this underused spectrum and the benefits for public safety, encouraging the FCC to audit the band for utilization by the commercial carriers. It was a positive meeting. The Working Group has developed a draft band plan asking for eight nationwide control channels. With additional spectrum for capacity, public safety could build out those channels and develop interoperability policies across the nation. The spectrum could be managed by the RPCs or through individual licensing. USA Mobility, one of the two nationwide paging providers, does not agree with NPSTC's position and has submitted letters to the FCC stating that public safety should use commercial alerting rather than build out private systems.

The mission of the Wireless Alerting Working Group, officially approved at the last meeting, is to develop educational materials on the alerting and notification issues; assess spectrum bands of interest; meet with the FCC to discuss potential spectrum availability; and seek support for recommended solutions.

Technology Committee

The Technology Committee has been tasked with developing a white paper that provides an objective comparison of the TETRA and P25 standards. The target audience for this effort will be the practitioner community so the effort will be led by the Technology Education Working Group.

To do the comparison effectively, it cannot be adversarial and it must be as clean an “apples-to-apples” comparison as possible. The Working Group seeks participants from public safety and manufacturers. No experts are needed; the most important contribution is what public safety would like to see compared.

It was suggested that the effort begin with a table of contents on topics to be addressed in a white paper, followed by the development of some scenarios where the two technologies might be deployed. Each standard works differently and the comparison must be sensitive to context. For example, the P25 team would select a scenario as would the TETRA team. Then each team would provide information on the deployment of their technology and develop an action item list for the other. The ‘virtual’ communities for coverage solutions to swap might include a rural and urban community for each team to highlight their solutions and then in the other’s chosen virtual community. The Working Group is soliciting 25 FAQs on the two standards from participants at two levels, the decision maker level and another at a more technical level.

Following discussion at the September Governing Board meeting, it was decided that initially the Working Group will move forward in a limited manner in an effort to present a better understanding of the technologies in a primer or simple chart describing the technologies. Based on the first brush efforts, the Governing Board will decide whether to move forward with the effort and to what depth.

Amateur Radio Working Group

The Amateur Radio Working Group will present its white paper on the beneficial interface between the amateur radio community and public safety at the November Governing Board meeting.

In-Building Coverage Working Group

The Working Group is in the final stages of completing its Best Practices for In-Tunnel Communications, requested as an addendum to the original In-Building Best Practices White Paper. The paper will comprise chapters on the following issues:

- Basic system components for in-tunnel coverage.
- Types of tunnel systems.
- Understanding the spectrum environment.
- System design considerations and tradeoffs.
- Signal distribution methods and tradeoffs.
- Coverage testing and the limitations of testing in tunnels.
- Maintenance.

Technology Education

The Working Group has completed the five initial products, which will ultimately be placed on the technical education website. The first deliverables cover the following topics:

- A timeline and history of 700 MHz proceedings over the last 10 years.
- A white paper on 4.9 GHz-5.9 GHz potential network testbed and Intelligent Transportation System (ITS) integration issues in Pinellas County, Florida.
- A slide presentation on Next Generation 911 issues, impact to public safety, and implementation concerns/opportunities.
- An educational product for the non-technical user on LMR 101.
- An online tutorial on the FCC’s Electronic Comment Filing System (ECFS).

Broadband Working Group

During the Third Quarter, the Working Group focused its efforts on researching issues surrounding the FCC's 3rd NPRM issued September 25, 2008. The next focus of the Working Group will be the development of device requirements for 700 MHz broadband. Regarding 4.9 GHz activities, the APCO Project 25 Interface Committee (APIC) Broadband Task Group intends to host a user meeting to look at device requirements and move the analysis process forward to include possible changes in the original P34 standards, which were written before the 700 MHz broadband was a possibility. The P34 User Needs Committee will convene a meeting of users to review the requirements document and make any changes they deem necessary.

Future NPSTC Activities

The next Governing Board Meeting will be held at the BWI Airport Marriott on November 18-19, 2008.