



NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

National Public Safety Telecommunications Council Third Quarter Report 2010

This Quarterly Report documents the activities of the National Public Safety Telecommunications Council (NPSTC) for the Third Quarter 2010. 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 2010, NPSTC held Committee meetings in Orlando, Florida, on September 16 and 17. NPSTC's four committees, Interoperability, Outreach, Spectrum Management, and Technology, identify needs and requirements regarding public safety communications issues, as needed. NPSTC's recurring meetings and the frequent teleconferences of the Committee's Working Groups provide an opportunity to gather the individual viewpoints and opinions of the public safety community and conversely to update the public safety community on current telecommunications projects and issues.

Filings on Regulatory Issues

On behalf of its member organizations, NPSTC made the following filings to the Federal Communications Commission (FCC) in the Third Quarter 2010.

- NPSTC filed Ex Parte Comments on July 1, 2010, clarifying erroneous assumptions on video throughput requirements for public safety broadband. The Commission's white paper on capacity, aimed at justifying the Commission's recommendation not to reallocate the D block spectrum to public safety, claimed that 10 MHz of broadband spectrum in the 700 MHz provides "more than the required capacity for day to day communications..." The Commission cited data rates for video of 256 kb/s, quoting a NPSTC report issued 3 years ago, the *Public Safety 700 MHz Broadband Statement of Requirements (SoR)*, but the video throughput numbers in the SoR were a minimum requirement designed to help attract a commercial D Block bidder and never intended to indicate that 256 kb/s would be a sufficient data rate to support the video levels of quality needed by public safety in all situations. Additionally, the projected use of video and data by public safety is much greater today than it was 3 years ago.
- NPSTC submitted Ex Parte Comments on July 19, 2010, in response to the Commission's Public Notice granting 21 waiver requests to allow 700 MHz public safety broadband deployment, which also sought further comment on interoperability, out-of-band emissions, roaming, prioritization and other issues surrounding public safety broadband network interoperability.

- NPSTC submitted Comments on September 20, 2010, in response to the Commission’s Public Notice, issued to explore potential barriers to achieving nationwide interoperability for both broadband and narrowband communications and determine what, if any, actions the Commission should take in this area.
- NPSTC is awaiting action by the Commission on various NPSTC filings generated by the 4.9 GHz spectrum task force; the 470-512 MHz Working Group; in 700 MHz, on LPTV applications; a request from the state of Maryland on air to ground transmissions; 900 MHz two way paging; and interference issues related to in-building systems..

NPSTC Committee Action Items

At the September 2010 meeting, the Governing Board made the following decisions.

- The Governing Board approved the nominations of Tom Sorley and John Powell to serve as potential representatives on the FCC’s Emergency Response Interoperability Center (ERIC) Public Safety Advisory Committee representing NPSTC as a collaboration of public safety organizations.
- NPSTC agreed to draft a letter on behalf of the public safety community expressing its concerns about a proposed change to the intrinsically safe certification for radios and associated equipment, describing the implications of this change to existing and future systems. Factory Mutual, a certified lab for testing on intrinsically safe radios [e.g., radio and battery testing so a radio won’t spark in a gas-filled building] is proposing a new standard for certification of intrinsically safe (IS) radios that would take effect in January 2012. The standard is intended to harmonize existing IS standards across the U.S. and Europe, but the new standards may require redesign of intrinsically safe radios from the ground up in the U.S., potentially resulting in, lower power portables requiring more infrastructure, shorter battery capacity and premature obsolescence of existing batteries and accessories. There have been no safety problems resulting from the existing standard; the change is being made only in the interest of harmonization.
- At the request of the Spectrum Management Committee, the Governing Board approved the reactivation of the Narrowbanding Below 512 MHz Working Group. This was a formerly active Working Group that was suspended when its deliverables were completed, although the issue continued to be monitored by the Committee. As the date for narrowbanding below 512 MHz approaches, the FCC has sought NPSTC’s assistance to provide education and outreach to enhance public safety readiness and awareness. NPSTC will develop a web page with links to public safety and other sources to provide information and best practices about narrowbanding. David Warner from the Commonwealth of Virginia is chairing the Working Group.
- The Governing Board approved the comments developed by the Spectrum Management Committee in response to the Commission’s Public Notice seeking to identify “all potential barriers to achieving nationwide interoperability for both broadband and narrowband

communications, and determine what, if any, actions the Commission should take in this area,” with one addition. In response to a discussion about the need for education on P25 to state and local public safety, the following sentence was added to the comments: NPSTC is aware that additional education is needed in the public safety community on P25 competition and pledges to help further that process. The comments were filed September 20, 2010.

- The Governing Board agreed to make no official filing at this time regarding three narrowbanding waivers filed with the Commission by St. Louis, St. Charles, and Jefferson Counties, but agreed to recommend that the FCC use this opportunity to create a policy on when they will grant waivers and provide clear guidelines as soon as possible. Additionally the Governing Board asked the Spectrum Management Committee to develop educational materials on the complexity of the narrowbanding for the FCC to be approved by the Governing Board before delivery.
- At the request of Governing Board member, the National Association of State Emergency Medical Services Officials (NASEMSO), NPSTC will provide supporting comments on a NASEMSO proposal related to using the Universal Service Fund for rural health care. The FCC proposes to expand the use of the Universal Service Fund to include support of broadband communications for telemedicine. The Telecommunications Act defines eligible health care providers in six classes for that kind of funding. The FCC did not include EMS or ambulances in its proposal. NASEMSO’s position is that EMS, regardless of sponsorship, should be classified as health providers and therefore eligible for funding.
- At the request of the Emergency Medical Services Working Group, NPSTC will add a web page to support this working group, host an EMS white paper on broadband applications to the NPSTC website, and provide links to EMS associations.
- At the request of the Border Issues Working Group, the Governing Board approved a request that the FCC conduct a spectrum audit along the Canadian border to determine what channels are available for international interoperability, with a focus on U.S. identified spectrum for interoperability.

Presentations

Presentations at the September 2010 Governing Board meeting included updates from the following:

Office of Emergency Communications (OEC), Department Homeland Security (DHS), Dusty Rhoads, Management and Program Analyst, reported on the work OEC has achieved in meeting the goals of the 2-year old National Emergency Communications Plan (NECP). Seventy-three of 88 milestones are complete and there is significant progress in achieving Goal 1, with evaluations of 55 UASIs completed and only 5 more to go. As a result of these evaluations, gaps have been identified and technical assistance has been adjusted to address these gaps. The final stage of Goal 1 will be to collect capability data from the Urban Area Security Initiatives (UASIs) that will become part of the 2010 Statewide Communications Interoperability Program (SCIP) Implementation Report.

OEC prioritizes requests for Technical Assistance (TA), about 70 percent of which are for training, exercises, and Standard Operating Procedures (SOPs) support. OEC will release a TA guide that will include 13 new offerings. To address concerns about narrowbanding, OEC has developed a new online tool, undergoing refinement, which takes the FCC license information and plots it on a Google map. The challenge is that it only represents the FCC database and does not indicate what narrowbanding work has been accomplished. OEC is also creating a dispatch workshop for Continuity of Operations (COOP) and a new broadband systems support offering for jurisdictions exploring the integration of broadband capabilities.

Office for Interoperability and Compatibility (OIC) Update, Karen Ray, Branch Chief, DHS, provided an overview of OIC projects. Three multi-band radio (MBR) pilots have been completed in Blaine, Washington, with the Vancouver Transit Police, and at Murray State University. Findings and a draft report for each completed pilot is under review. MBR is also being piloted in the National Capitol Region and the next anticipated pilot will include agencies along the southwest border region. OIC is investigating the feasibility of a joint pilot effort with OEC in the Nogales, Arizona, region.

The P25 Compliance Assessment Program has added three new manufacturers, Motorola, Raytheon, and Kenwood to the original four, Daniels, Harris, EJ Johnson, and Tait that have completed testing. The Public Safety Voice over Internet Protocol (VoIP) conducted a multi-jurisdictional technology demonstration of the Bridging System Interface (BSI) Core Profile 1.1, meeting a milestone of the NECP. A report is posted on the SAFECOM website. The VoIP Working Group is seeking participants for its Radio Site Interface Subgroup. Participants should have a solid technical perspective as well as represent radio or console manufacturers. The Video Quality in Public Safety (VQiPS) Working Group, comprised of representatives from public safety, academia, and industry, has published Volume I of the VQiPS User Guide to introduce readers to various aspects of video quality, posted on SAFECOM's website. DHS is currently reviewing the Task-Based Tactical and Surveillance Video Quality Test Report, with public release expected shortly. It describes laboratory studies that investigate the level of quality required for tactical, live, and recorded surveillance public safety video application.

Public Safety Spectrum Trust Update (PSST), Harlin McEwen, PSST Executive Committee Chairman, discussed the status of the national public safety broadband network and reviewed the role, responsibilities, and organizations that comprise the PSST, which holds the Public Safety Broadband License (PSBL) issued to the PSST by the FCC. A total of 45 petitions have been filed requesting waivers for early build out of broadband networks in cities, states, and regions. In May, 21 waivers were granted to the early waiver petitioners, with the requirement that those entities sign a lease agreement with the PSST. On September 2, 2010, these petitioners were required to pay the PSST administrative fees of \$15,000 annually, approved by the FCC. On September 15, the PSHSB issued a Public Notice (PN) seeking comment on 23 additional petitions for waiver, followed by a second PN to add a 24th waiver request to the group. Comments on the pending 24 requests were due October 18.

At the same time, in Congress there have been various forms of legislation introduced on funding and the D Block allocation. On April 20, Representative Peter King and Yvette Clark introduced H.R. 5081 that would direct the FCC to allocate the 700 MHz D Block to public safety. The Lieberman-McCain Bill, Senate 3625, introduced in July is a fairly well-balanced bill that directs the FCC to give public safety the D Block and includes funding for buildout, operation, and maintenance of the public safety broadband network. Larry Summers, Director of the National Economic Council, part of the White House team, has stated that the White House supports the auction of additional spectrum, the initial proceeds of which would go to support public safety. The Rockefeller Bill, Senate 3756, directs the FCC to allocate the D Block for public safety use and provides for similar kinds of funding sourced by auctioning other spectrum, not the D Block.

Public Safety and Homeland Security Bureau (PSHSB), Federal Communications Commission (FCC), David Furth, Deputy Director, Brian Marengo, and Jeff Cohen, Mr. Furth reported on activities of the PSHSB surrounding the waiver requesters for early build out of broadband networks in cities, states, and regions, and the PN recently issued regarding the second round of waiver applicants. The PSHSB is asking different questions of these applicants, including more technical questions related to LTE and the governance issue. This is a nationwide network, not a series of regional networks, so there is a strong need for common rules, standards, and procedures to ensure it is a nationwide system. There is a very good group of waiver recipients working with the PSST currently. Introducing the second round of waiver recipients into the mix may shift the progress of the first group so the Bureau is asking these additional questions to ensure all the applicants are moving in the same direction.

Regarding the narrowbanding issue, Mr. Furth said the January 2013 date is approaching rapidly. The FCC, in response to NPSTC's petition, granted needed relief to the interim deadline to ensure the public safety licensees would still have access to 25 kHz equipment, but the response also reaffirmed the 2013 deadline. The next challenge is how to plan for the transition. Much work is needed and the Bureau welcomes NPSTC's help on outreach. The FCC needs to get a better picture of where the nation is currently and will be launching a new web page and talking with OEC and NPSTC to coordinate resources.

Mr. Cohen discussed the status of E-911 proceedings, slated for action. The Second Report and Order (R&O) would adopt rules on the geographic area over which wireless carriers would have to comply with wireless call location accuracy rules. A combined Further Notice of Proposed Rulemaking (FNPRM) and Notice of Inquiry (NOI) will ask questions that will build on the Order and ask whether the FCC should adopt different location accuracy requirements, combine two requirements into a single standard, and how to improve location accuracy in canyons, indoors, heavy forestation, etc. It will also include a vertical component regarding high-rise buildings.

Mr. Marengo reported on cross-border issues and the recent cross-border workshop sponsored by U.S. and Canadian agencies. Last year's initial meeting taught all concerned that public safety officials want to be able to communicate in three scenarios—they want to legally roam across the border with their mobile or portable; communicate through base station repeaters in the other country to communicate with their counterparts; and they want to be able to communicate with their own officials through base station repeaters in each other's countries. Mr. Marengo noted

that they are working with the State Department on a possible “exchange of letters” between the two countries regarding these scenarios that builds on existing treaties.

Canadian Interoperability Technology Interest Group (CITIG), Rick Finn, Superintendent, York Regional Police, reported much progress on interoperability in Canada on all fronts. There has been a great change in the last few years due to both the FCC and Industry Canada (IC) providing assistance to public safety. National accomplishments in Canada include Version 3 of the Canadian Communications Interoperability Strategy (CCIP), a separate initiative to improve communication among federal agencies, and a Canada/United Kingdom APCO partnership.

NPSTC Outreach to Public Safety

During the Third Quarter, the Executive Director and various NPSTC Committee volunteers participated in events and tasks related to public safety telecommunications, which provided opportunities to engage the public safety community.

Narrowbanding: NPSTC representatives met with FCC representatives on July 28, 2010, to discuss how NPSTC could assist in outreach efforts to public safety to provide information and guidance on the need to complete narrowbanding by 2013. Representatives of the FCC also want to develop a sense of the narrowbanding activity across the U.S.

Broadband: NPSTC representatives met with California Congressperson, Jane Harman, to discuss legislation on the development of broadband devices for public safety. Ms. Harman requested a review of the document prior to the introduction to Congress. There were several follow-up meetings and sharing by email, which provided the opportunity to gain Ms. Harman's support for the reassignment of the D Block to public safety.

Focus Groups – National Broadband Tabletop Exercise: The Public Safety Wireless Advisory Committee (PSWAC) Follow-up: Assessment of Future Spectrum and Technology (AFST) Working Group was created to update the 1996 PSWAC Report to determine spectrum needs and technology and operational requirements through the year 2020. This summer the Operational Task Group distributed a questionnaire to public safety with well over 300 responses. Currently the Working Group is hosting focus groups to develop metrics of spectrum usage in tabletop exercises.

Southern California/San Bernardino Area: Focused on a real-life wild land firefighting incident; with participation from fire, EMS, and law enforcement; coordinated by Dave Buchanan, AFST Working Group Chair.

Washington, D.C.: Focused on a toxic gas leak at a large public gathering; participation from Hazmat, MCI, terrorism, evacuation, LEA; coordinated by Dave Mulholland, National Park Police.

Houston, Texas: Focused on a chemical plant explosion from unknown cause; participation from Hazmat, MCI, Terrorism, Evacuation, LEA; Coordinated by Tom Sorley, Technology Committee Chair.

Orlando, Florida: Situation to involve a hurricane with collapsed apartment building and looting; participation from Fire Rescue, USAR, MCI, Law Enforcement Security; coordinated by Barry Luke AFST Support; date not confirmed.

Chicago, Illinois: Will focus on a hostage situations with fire in a high rise (tentative), LEA, EMS, Fire, Evacuation; initiated by Billy Carter; coordinated via Chicago Fire, LE, OEM; date not confirmed.

Conference Support

NPSTC representatives attended the International Association of Fire Chiefs (IAFC) and Association of Public-Safety Communications Officials – International (APCO) conferences during the Third Quarter.

IAFC Conference, August 24-28, 2010: NPSTC shared an exhibit booth with its member organization, the IAFC, providing outreach materials focusing on OIC/OEC efforts and public safety telecommunication topics. NPSTC representatives also engaged with Fire Chiefs and staff regarding narrowbanding, D Block, digital communications interference, and answered other relevant questions. More than 14,000 of the most prominent fire and emergency service leaders from across North America and around the globe come together for five days of learning, networking and collaboration at the IAFC Conference hosted by Fire-Rescue International (FRI) in Chicago, Illinois.

APCO Annual Conference, August 1-4, 2010: NPSTC's Executive Director and representatives from the Spectrum Management and Technology Committee met with the FCC's PSHSB to discuss outstanding Petitions and issues of concern to the public safety community. This well-attended event, held in Houston, Texas, was an excellent opportunity to meet with a number of public safety professionals and organizations that work with the community, including OEC, regarding the new version of the National Interoperability Field Operations Guide (NIFOG) and the narrowbanding best practice document in development. Work was completed on updates to channel naming and future activity planning. Meetings were held with the National Regional Planning Council (NRPC) Chair and Vice Chair to begin work on narrowbanding discussions.

Transportation Hazards and Security Summit and Workshop. AASHTO: NPSTC's Outreach Chair participated in this meeting in Irvine, California, from August 23-26. Sessions focused on implementation of FCC mandates including narrowbanding. Discussions were held with FCC personnel regarding the role of critical infrastructure and key resources in disaster response and planning.

Committee Reports

Outreach Committee

Editorial Review Working Group

The Working Group has reviewed and approved the quarterly newsletter, regulatory review, and updated Resource CD. Technical Briefs are published periodically by NPSTC and its member organizations and highlight awareness and provide knowledge on technology issues of importance to the first responder community.

npstc quarterly, Summer Edition: Articles include: *Momentum Builds for Public Safety D Block Allocation, How Much Spectrum Will Public Safety Need in 2020?, Regulatory Update, NIEM: How a Standardized Data Exchange Language Enhances Public Safety*

Resource Mini-CD: The CD has been updated with over 100 documents including current documents and reports. The links provide the most recently available version of each document that can be found on the NPSTC, SAFECOM, or other website where the document originated.

Press releases

- *ANSI Approves Channel Naming Standard – June 17, 2010*
- *House Panel Includes \$50M in Funding for Interoperability Grant Program – June 26, 2010*
- *Louisiana, Mississippi, Alabama, and Texas Build Network for Oil Spill – June 29, 2010*
- *NPSTC Files Ex Parte Comments Clarifying Video Throughput Requirements – July 1, 2010*
- *NPSTC Praises Senator Jay Rockefeller for Support of Public Safety Spectrum – July 21, 2010*
- *Don't Miss the 2nd Canada-U.S. Cross Border Interoperable Communications Workshop in Windsor, Ontario, August 1, 2010*

Tech Brief: Revised and reissued to heighten awareness, *Are you ready? Plan Now for Narrowbanding*, was distributed using Constant Contact, an electronic outreach tool used to inform the individuals regarding different topics and issues within the public safety community. This tech brief includes an FAQ, information on how to prepare, and guides readers to NPSTC's home page which includes additional information.

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.

FCC NYC Officials Debate Public Safety Network Plan	Paul Kirby	TRDaily	700 MHz	Cites NPSTC's BBTF on throughput	Jul-10
FCC nixes key 2011 narrowbanding deadlines	Donny Jackson	Urgent Comms	Narrowbanding	Cites NPSTC's Petition	Jul-10
NPSTC Blasts FCC's 700 MHz BB Capacity Paper	Paul Kirby	TRDaily	700 MHz	Cites NPSTC's ex parte on throughput	Jul-10
From the Field: 700 MHz Broadband Public Safety Demo Network	Dereck Orr	ECF	700 MHz	Cites NPSTC's BBTF	Jul-10
NPSTC Says FCC White Paper Has Incorrect Video Throughput Assumptions	Editor	Mission Critical	700 MHz	Cites NPSTC ex parte on throughput	Jul-10
FCC Eliminates Some Interim Narrowbanding Deadlines	Editor	Mission Critical	Narrowbanding	Cites NPSTC filing	Jul-10
Public safety contests FCC 700 MHz broadband capacity findings	Donny Jackson	Urgent Comms	700 MHz	Cites NPSTC ex parte on throughput	Jul-10
PSA Says FCC White Paper on D Block Based on Conjecture	Editor	Mission Critical	700 MHz	Cites NPSTC BBTF	Jul-10
Public safety prepares Capitol Hill push for D Block	Donny Jackson	Urgent Comms	700 MHz	Quotes APCO GB Rep	Jul-10

Public Safety, Industry Entities, Urge Light Touch on 700 MHz Band Rules	Paul Kirby	TRDaily	700 MHz	Quotes NPSTC filing	Jul-10
700 MHz Waiver Recipients Steaming Forward on Public Safety Networks	Howard Buskirk	Communications Daily	700 MHz	Quotes NPSTC comments	Jul-10
Legislation Could Force FCC to Abandon D Block Auction	Paul Kirby	TRDaily	700 MHz	Quotes APCO GB Rep	Jul-10
D Block efforts showing tangible dividends	Donny Jackson	Urgent Comms	700 MHz	Quotes IACP Rep/PSST Chair	Jul-10
Senators voice support for D Block reallocation	Donny Jackson	Urgent Comms	700 Mhz	Quotes APCO GB Rep	Jul-10
Cities, Governors Push D Block Reallocation	Paul Kirby	TRDaily	700 MHz	Cites NPSTC reaction to Cohen on NB	Jul-10
Obama Administration Says FCC Should Hold Off on D Block Auction	Paul Kirby	TRDaily	700 MHz	Quotes APCO GB Rep	Jul-10
New D Block Legislation Could Mean Review of Narrowband Spectrum	Sandi Wendelken	Mission Critical	700 MHz	Quote APCO GB Rep; cited NPSTC declining to comment and June meeting on NB	Jul-10
3 Senators Back D Block Reallocation for Public-Safety Broadband	Editor	Mission Critical	700 MHz	Cites NPSTC support of Rockefeller	Jul-10
Public Safety Nomenclature Standard Approved	Editor	Mission Critical	Interoperability	Cites ANS Channel Naming Standard	Jul-10
States Lash Out at Use of Narrowband Channels for Public Safety Broadband	Paul Kirby	TRDaily	700 MHz	Cites NB discussion at June GB meeting	Jul-10
Let's Get Started	Bob Shapiro and Ira Weisenfeld	Urgent Comms	LMR	Co written by Tech Ed WG Chair	Aug-10
From the Chair	Ralph Haller	npstc quarterly	Governing Board		Aug-10
NPSTC's Committees Meet in Old Town Alexandria, Virginia in June	Jackie Bayless	npstc quarterly	Governing Board		Aug-10
Momentum Builds for D Block Allocation to Public Safety	Jackie Bayless	npstc quarterly	700 MHz		Aug-10
How Much Spectrum Will Public Safety Need in 2020?	Jackie Bayless	npstc quarterly	PSWAC		Aug-10
NPSTC and APCO Make Common Channel Naming Official ANSI Standard	Jackie Bayless	npstc quarterly	Interoperability		Aug-10
Sidebar: Send Us Your Policies and Procedures for National Interoperability Channels	Jackie Bayless	npstc quarterly	Interoperability		Aug-10
Proposal for Standardized Pairing of VHF Interoperability Channels	John Powell	npstc quarterly	Interoperability		Aug-10
Don't Miss the Second Canada-U.S. Cross-Border Interoperable Communications Workshop	Jackie Bayless	npstc quarterly	Interoperability		Aug-10
Why We Need Cross-Border Agreements	Jackie Bayless	npstc quarterly	Interoperability		Aug-10
Lance Valcour Receives High Honors from Queen	Jackie Bayless	npstc quarterly	Governing Board		Aug-10
NPSTC Welcomes UTC its Newest Associate Member	Jackie Bayless	npstc quarterly	Governing Board		Aug-10
Regulatory Update	Bette Rinehart	npstc quarterly	FCC		Aug-10
NIEM: How a Standardized Data Exchange Language Solves Crimes	Jackie Bayless	npstc quarterly	Interoperability		Aug-10

COMLs Get a National Registry	Jackie Bayless	npstc quarterly	Interoperability		Aug-10
D Block reallocation, broadband network funding are conjoined issues	Glenn Bischoff	Urgent Comms	700 MHz	Quotes APCO GB Rep	Aug-10
The right issue at the right time	Glenn Bischoff	Urgent Comms	Governing Board	Quotes APCO GB Rep	Aug-10
PSST inks deals with 20 waiver jurisdictions	Glenn Bischoff	Urgent Comms	700 MHz	Quotes IACP GB Rep/PSST Chair	Aug-10
Participants Pleased with Commerce Meeting on Public Safety Broadband	Paul Kirby	TRDaily	700 MHz	Quotes IACP GB Rep/PSST Chair	Sep-10
Commission Approves 20 700 MHz Licenses	Paul Kirby	TRDaily	700 MHz	Quotes IACP GB Rep/PSST Chair	Sep-10
Stuck in the middle	Alan Tilles	Urgent Comms	Narrowbanding	Cites NPSTC petition	Sep-10
Beyond the hype	Jacob Jacobsmeyer	Urgent Comms	LTE	Cites NPSTC LTE support	Sep-10
700 MHz Band, Narrowbanding Among Topics at NPSTC Meeting	Paul Kirby	TRDaily	700, narrowbanding	Cites NPSTC Committee Meeting	Sep-10
Senate to conduct hearing on broadband network	Donny Jackson	Urgent Comms	700	Quotes APCO GB Rep	Sep-10
Supporters of D Block Reallocation Visit D.C. This Week	Sandi Wendelken	Mission Critical	700	Quotes APCO GB Rep	Sep-10

NPSTC Participant Listservs

The Vice Chair of the Outreach Committee regularly issues notice of importance and interest from the FCC, DHS, and others on NPSTC's various listservs.

Participant Development Working Group

The Working Group has a new Chair, who has met with all the Committee and Working Group Chairs to determine their needs for volunteers and who has been a valuable asset to the Committee.

Website Review Working Group

The Working Group regularly reviews the website for ease of use and correct information. The website had 200,000 hits in August. The website is a practical, outreach tool which offers pertinent information to the public safety telecommunications community. It reaches beyond program initiatives by having links to public safety organizations, government agencies, OIC/OEC, along with links to assist the community with tools to accomplish their telecommunication plans and networks. NPSTC has initiated a significant technical update of the website with the goal of improving usability and significantly reducing website maintenance costs. Statistical information is collected and reviewed as a record of public use and trends.

NIIX (National Interoperability Information Exchange) provides a centralized, secure warehouse to house communications to be shared with other members within a specific community. Registered NIIX members can access peer-created documents and share information with each other. Members can also use NIIX tools to collaborate in the creation and development of their documents. Today NIIX hosts 106 communities with well over 2,000 users, and features an international component as well, added for public safety professionals working with counterparts in Canada or Mexico on the coordination of cross-border issues or preparing for special events like the 2010 Olympics.

Spectrum Management Committee

700 MHz Working Group

The 700 MHz Working Group monitors issues in the 700 MHz band and has a number of filings awaiting decisions at the FCC. The Working Group hosted a discussion of the current status of the waiver recipients and requesters that would like to begin building broadband networks in their cities, regions, and states. At the September meeting, the Chair presented a map designating both the 21 waiver petitioners who received FCC conditional waiver grants on May 12 to move forward, and the 24 new waiver requests, which await the closing of the comment period on October 18 and follow-up Commission action. One of the questions the FCC has raised for comment is how to handle adjacent areas that apply for waivers, which has happened in several areas. About one-third of the applicants are states while the remaining two-thirds are local and regional. The Rockefeller Bill has a provision that would direct funding to the states only. The PSST has shared with Mr. Rockefeller's staff their concern about funding the states only as well as a concern about the provision that says states only can share infrastructure.

470-512 MHz Working Group

The Group developed a Petition for Rulemaking (PFR) seeking new technical standards in this band, asking the FCC to expand the area where land mobile use of TV channels 14-20 (called the T-band) is allowed. The PFR proposes that the FCC adopt the same DTV/land mobile protection standards in the T-band as it adopted at 700 MHz. The recommended changes would expand the area where base stations could be located from 50 miles from center city coordinates to approximately 80 miles without interfering with TV reception. The FCC has not yet acted.

Narrowbanding Below 512 MHz Working Group

As noted, the Governing Board approved the creation of this Working Group at the September meeting. The mission of the group is to: Assess the state of narrowbanding below 512 on a nationwide basis, and to provide a central repository for information to assist agencies in meeting the 2013 narrowbanding deadline.

Specialized Communications Applications Working Group

The Working Group has been in the process of developing recommendations and best practices for a range of specialized applications including air-to-ground voice and video and bomb robot control. Though a response to a request by the State of Maryland, and recognizing this is a national issue as well, a Petition for Rulemaking was filed with the FCC asking that certain channels be authorized for air-to-ground voice use. Key issues to consider include wide-area coordination across state boundaries and avoiding co-channel interference to ground-based operations. This Working Group is searching for a new Chair and additional volunteers.

Wireless Alerting Working Group

This Working Group is trying to obtain 900 MHz spectrum to build out public safety alerting systems. NPSTC filed a Petition requesting that the FCC conduct an audit of the 900 MHz two-way paging band and make a portion of the band available for public safety use. The Petition generated by the group has not been addressed by the FCC yet.

Special Monitoring Topics

FCC Public Notice on interoperability for narrowband and broadband: On August 20, the FCC's PSHSB released a PN to identify "all potential barriers to achieving nationwide interoperability for both broadband and narrowband communications, and determine what, if any, actions the Commission should take in this area." The Committee discussed the issue and created draft comments. A key issue is the market volume for public safety compared to that of the cell phone market. Another problem is public safety's fractured spectrum bands which impacts interoperability as much as the technology issues. The comments asked that the Commission reaffirm the use of LTE for 700 MHz broadband, as endorsed by all of public safety and industry. Also, a mechanism is needed to allow future releases of the LTE standard to be used without a rulemaking proceeding, as long as the future releases are backward compatible with previous LTE releases.

Following discussions, it was agreed to submit the comments for approval with one addition, the need to add the requirement for an educational component on P25 to the state and locals. There is a strong misperception that there is no competition in P25, but there is. NPSTC commented that P25 is an improvement over the proprietary trunked systems, but the optional elements of P25 that some purchasers choose to buy means that some jurisdictions are still not interoperable on every feature.

The following statement was added to the comments: NPSTC is aware that additional education is needed in the public safety community on P25 competition and pledges to help further that process. It was noted that OEC has created excellent MOUs and documents for public safety and might place generic templates for public safety's edification on the SAFECOM website but it would have to be very generic so it doesn't create the appearance of supporting any manufacturer.

Narrowbanding Waivers from St. Louis, St. Charles, and Jefferson Counties: NPSTC was approached by three counties in Missouri that have filed waivers to extend the narrowbanding deadline because of their plans to implement a new 800 system that will replace below 512 MHz usage. They asked for a 1-year extension to continue to operate at 25 kHz on the below 512 spectrum and then transition their system to 800 MHz at that time. The Committee discussed the issue, agreeing that although the Committee recognized the merit of the petitions, it did not feel NPSTC should comment; however, the Committee does recommend that the FCC use this opportunity to create a policy on when they will grant waivers.

The consensus was that NPSTC should recommend that, if the Commission will grant waivers, they should create a policy and provide clear guidelines as soon as possible. Jeannie Benfaida, FCC, said that public safety should contact the Bureau to discuss specific situations as all waivers are reviewed individually on the merits. She suggested NPSTC send a message to potential narrowband waiver requesters telling them to contact the Bureau to discuss the issue before filing a waiver. Perhaps short-term relief would be doable or reasonable.

NPSTC representatives are also concerned about the lack of coordination of the narrowbanding process, and suggested the FCC provide a plan for how an agency transitions in a county or region.

Alternatively, the FCC could encourage the RPCs to develop a plan for the transition. It is expected that this transition is going to be as complicated, or more complicated, than 800 rebanding in some cases. NPSTC's reconstituted Narrowbanding Working Group is advocating a more active approach on this issue rather than just education on the issue. The Chair would like the FCC to list contacts within states and localities when they set up their narrowbanding website to answer these specific questions.

EMS Funding Support: As noted earlier in this report, NASEMSO asked NPSTC to support a NASEMSO proposal related to using the Universal Service Fund for rural health care. The FCC issued an NPRM, the Rural Health Care Support Mechanism, to expand the use of the Universal Service Fund to include support of broadband communications for telemedicine. The Telecommunications Act defines eligible health care providers in six classes for that kind of funding. EMS has been defined in mixed ways through various sponsorships, as relating to the fire department, hospitals, or for profit or non profit entities. The FCC did not include EMS or ambulances in its proposal. NASEMSO's position is that EMS, regardless of sponsorship, should be classified as health providers and therefore eligible for funding. The Governing Board agreed to provide supporting comments to the FCC on behalf of NASEMSO.

Technology Committee

P25 CAP Update

It was reported at the September meeting, that the Project 25 Compliance Assessment Program (CAP) governing committee met to discuss the lag between existing equipment and standards compliance testing. For example, P25 trunked radio equipment has been on the market for 10 years. While informal interoperability testing has been conducted by manufacturers for several years, the formal CAP testing program was only recently implemented. The CAP governing committee will develop a plan and processes for future testing as well as alternatives to testing.

Technology Education Working Group

Recent additions to the Working Group's web page include a series of articles on LMR, originally published in *Urgent Communications* magazine, an outline of a proposed 700 MHz history, and a white paper on 4.9 GHz. The Working Group would like to gather information to educate on LTE as its next project.

In Building Working Group

The In-Tunnel White Paper is still in review form due to the press of other issues. The Working Group is seeking more volunteers who are interested in this topic to assist in completion of the white paper.

Broadband Working Group

The Chairs of the Working Group provided an overview of 700 MHz broadband efforts to date at the September meeting and a description of the goals and objectives they are now pursuing. In 2007, NPSTC developed the 700 MHz Public Safety Statement of Requirements (SoR), based on the expectation that the D Block auction winner would have to meet public safety requirements in building out a nationwide network. The expected technology was unknown at that time. In June 2009, NPSTC and many public safety organizations endorsed the choice of Long Term Evolution

(LTE). That month NPSTC assembled the Broadband Task Force (BBTF) at the request of the PSST, to delineate, at the highest level, what the requirements for the public safety nationwide network would be based on LTE technology. In September 2009, the BBTF Final Report was published and presented to the PSST.

Working in parallel with NPSTC, the PSST, and OIC, the Public Safety Communications Research (PSCR), a program of the National Telecommunications and Information Administration (NTIA) and the National Institute of Standards and Technology (NIST), is building a 700 MHz demonstration network in Boulder, Colorado, to test and demonstrate the public safety specific behaviors of the 700 MHz network and the applications that could run on it. The Public Safety Broadband Demonstration Network provides manufacturers with a site for early deployment of their systems, an opportunity to evaluate them in a multi-vendor environment and create integration opportunities for commercial service providers. The PSCR's mission is to provide research, development, and testing and evaluations to foster nationwide interoperability. The network is scheduled to deploy infrastructure with two vendors by the end of September.

NPSTC's Broadband Working Group will develop a functional definition of mission-critical voice requirements for broadband/LTE. The functional definition will include a list of expected capabilities, definitions for each capability, and sufficient supporting information for each capability such that follow-on efforts have sufficient information to define any work necessary to meet the required capability. These capabilities need not be limited only to only items that are solvable with LTE technology or using 700 MHz broadband spectrum, i.e., the functional list should not consider the solution, but should instead focus on articulating the need. This Working Group has been meeting regularly by teleconference.

Public Safety Wireless Advisory Committee (PSWAC) Follow On: AFST Working Group

The mission of the AFST Working Group is to update the 1996 PSWAC Report to determine spectrum needs and technology and operational requirements through the year 2020. This summer the Operational Task Group distributed a questionnaire to public safety receiving well over 300 responses. Currently the Working Group is hosting focus groups to develop metrics of spectrum usage in tabletop exercises. The Spectrum and Technology Task Group is in the process of researching and examining tentative spectrum needs models. They have assembled data on the public safety population, which is much improved over the PSWAC data. They have a tentative list of areas to model and will look at spectrum needs for voice overall and for the VHF band. They plan to model some hypothetical situations that would require broadband to develop some idea of needs and potential uses.

At the September meeting, the Working Group provided a comprehensive analysis of both the LMR operational requirement and broadband requirements gathered from the questionnaire, and discussed what had been learned through the first focus group. Held in Southern California, it modeled a real wildfire incident to learn what had worked and what applications public safety needs in the field. The number one application identified was GIS. Also identified as needed apps: Mapping for those from out of the area who don't know the streets, etc., incident command "white board," aerial surveillance, mobile data computers, automatic vehicle location, traffic management (cameras and roadway signs), and weather data. The focus group also wanted

vehicle data, video conferencing, vehicle video (for fire and law enforcement), firefighter helmet camera and data, and still photography. One thousand vehicles were involved in the wildfire incident from fire to law enforcement to public works, and all were identified as needing to be on this network. Other applications that were identified but not related to the wildfire tabletop included: EKG telemetry, snow plow GPS, flooding surveillance, patient video, NG 911, and CBRNE detectors on vehicles.

In the wildfire incident, there were over 30 miles of fire line, with vehicles over a wide area. In the other focus group scenarios, the majority of spectrum use will likely be in a very concentrated area. The Working Group is collecting information on where the users are geographically, i.e., spread out on a fire line or concentrated in one area, and also on when responders start using the spectrum and how long they use it. Based on these and other discussions, the Task Group can plug the needed apps into the spectrum model and prove that X amount of spectrum is needed for broadband. The AFST Report will be based on need, not want.

Interoperability Committee

Amateur Radio Working Group

Future efforts of this Working Group are to complete an amateur radio white paper, discussed in the past at NPSTC meetings, building on previous work, incorporating an “appropriate use” paper, and providing background on different amateur radio emergency communications groups. The white paper will address the issue of training, develop a multimedia aspect, and determine the audience for the white paper. Future projects include guidelines and credentialing.

Border Issues Working Group

The Chair of this Working Group attended the Canada-United States Cross Border Interoperable Communications Workshop, the second workshop sponsored by OEC and Industry Canada (IC), held in Windsor, Canada. Hundreds of suggestions were made at the meeting, whittled down to ten top priorities. Action items created at the meeting include:

- 700 MHz spectrum harmonization with U.S.
- 800 MHz interoperability channels (Region 55 & NPRC). Unknown if the waiver request will be granted by FCC to use legacy 800 MHz interoperable channels. Requested that IC look at making the new interoperable channels (post re-banding) available to Canadian practitioners
- Complete white paper describing RF modeling and technical parameters used for spectrum management
- Continue to work with the FCC on treaty issues that hinder interoperability along the border
- Conduct spectrum audit to determine what channels are available for international interoperability. Focus will be on U.S. identified spectrum for interoperability. If they are not available, investigate whether NPSTC can request that the FCC do a spectrum audit on all VHF and UHF spectrum in the U.S.

Based on the presentation, NPSTC agreed to request that the FCC perform a border spectrum audit, with a nationwide effort later. Additionally, it was agreed that NPSTC should not only look at the northern border but add monitoring of the issues in the Yukon/Alaska border. There are tough communications challenges on the border between British Columbia, Alaska, and the Yukon

Territory with hundreds of islands. The terrain in this area increases the difficulty and there are international issues. The Exxon Valdez incident pointed out the potential for disaster, as well as environmental impacts such as wildfires, earthquakes, explosions, and terrorism on the pipeline. If a disaster were to occur, it would likely be very far from population centers and of prolonged duration. The FCC has asked for a mechanism for stakeholders to discuss these kinds of issues. It was agreed that the Working Group would work with the FCC to facilitate a focus group periodically.

Channel Naming Working Group

On June 17, 2010, APCO and NPSTC announced the approval of the American National Standard (ANS) to ensure national consistency of interoperability on related radio channels. *APCO/NPSTC ANS 1.104.1-2010: Nomenclature for the Public Safety Interoperability Channels* was approved by the American National Standards Institute (ANSI) on June 9, providing a standardized naming format for each FCC and NTIA designated Interoperability Channel in the Public Safety and Federal government Radio Services.

At the September meeting, the Chair presented a proposal to add standard pairing of the VHF TAC channels. This is a minor addition to the American National Standards Institute (ANSI) standard and, because there is no change to the normative part of the standard, no formal comment period is required. Two pairs and their “reverse” have been identified in states and territories except in the Virgin Islands and Puerto Rico. Two pairs have sufficient separation to eliminate duplex requirement with the use of a quality receiver/transmitter. There has been a good response of support and no negative comments on the proposal. The Channel Naming Matrix was updated to Version 6 on August 2 and forwarded to APCO for update to ANSI standard.

Emergency Medical Services Working Group

The Working Group Chair reported that he has been asked by two of his associations to do a solicitation to move the EMS white paper on applications to the NPSTC website. He plans to solicit the four associations he represents and others to participate in this Working Group. An EMS web page will be added to NPSTC’s website to support the EMS Working Group.

ESF-2 Working Group

ESF-2 supports national disasters through Federal Emergency Management Agency (FEMA) and the Working Group would like to interact with them. The primary responsibility of the ESF is to coordinate resources during a disaster. As the Regional Emergency Communications Coordination Working Groups (RECCWGs) become more formalized, the Chair will contact their regional coordinators and OEC’s regional coordinators to develop a relationship on needs.

Software Defined Radio Working Group

The Software Defined Radio Forum, now the Wireless Innovation Forum (WinnF), has been extremely active lately with important documents to be released soon. WinnF now has an office in Europe due to the potential of work in Asia, where cell handsets are produced. The documents are refining scenarios and spectrum needs in support of an incident relying on emergent technologies that may be an important resource in broadband work.

Monitoring Topics

NECP Update

OEC's strategic plan, the NECP, is meeting milestones, with 55 UASIs completing Goal 1. Goal 2 addresses the same criteria as Goal 1 with additional information to be released later this year in the SCIP guidance. The criteria for Goal 3 are in development and will involve a catastrophic event in an exercise format. The process of peer review has improved tremendously and is yielding some excellent lessons learned. OEC can use these lessons learned to identify gaps nationwide.

Plain Language

At the September meeting, the Chair provided two draft documents for consideration: *20100915 Common Language Background and Overview* and *20100915 Common Language Policy*. The question has been posed as to whether this is one of those rare "top down" issues that should be driven from the state level with appropriate input from leadership organizations within each state (EM Directors, Fire and Police Chiefs, Sheriffs, SIECs]. The term 'plain language' has been usurped by the government to mean the effort to remove legal terms from government documents; therefore 'plain language' is now being referred to as 'common terminology.'

In discussion it was noted that the community has discussed changing the ten codes or signals to language for years. Either there should be signals or plain language. Early discussions in SAFECOM resulted in adoption of a resolution to support plain language. Failing to find consensus on this issue, it was agreed that the discussion to encourage the use of common terminology be moved back to the Committee level for further consideration.

Future NPSTC Activities

NPSTC will host a planning meeting for the Governing Board and Executive Committee on November 17 in Washington, D.C.