NPSTC

NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

# National Public Safety Telecommunications Council Meeting
# Washington, D.C. Office of the Chief Technology Officer (OCTO)
# May 14-15, 2013

The National Public Safety Telecommunications Council (NPSTC) held a meeting on May 14 and 15, 2013, at the Washington, D.C., Office of the Chief Technology Officer (OCTO).

## Call to Order and Roll Call, Marilyn Ward, Executive Director

Marilyn Ward, Executive Director, called the meeting to order on May 14, 2013, at 1:00pm. Ralph Haller, Chair, was unable to attend due to a family illness. Ms. Ward called the roll, establishing a quorum was present. She thanked the American Radio Relay League (ARRL) for providing the shipping of NPSTC's new audio/visual equipment for the meeting, and HCG for donating the equipment for our use.

Harlin McEwen, International Association of Chiefs of Police (IACP), reported that Sheriff Paul Fitzgerald, Governing Board alternate for the National Sheriffs Association (NSA) and First Responder Network Authority (FirstNet) Board member, experienced severe neurological issues last week and is currently in the hospital. NPSTC wishes Sheriff Fitzgerald a speedy recovery.

## Special Presentations

**Department of Homeland Security (DHS), Dr. David Boyd, Director, Office for Interoperability and Compatibility (OIC)**

Dr. Boyd reported on recent updates from OIC, reminding meeting attendees that OIC considers the activities of NPSTC, the Association of Public Safety Communications Officials – International (APCO), and the Public Safety Communications Research (PSCR) program critically important for the programs supporting the public safety communications community.

OIC's video quality work, supported by OIC's Cuong Lu, is pleased to announce the next Video Quality in Public Safety (VQiPS) Working Group conference in late July. OIC will host a capacity building webinar on May 16 focused on geographic information tools to be used in hazardous events.

Other electronic based programs include Finder, a tool for finding individuals in collapsed buildings through use of low-power microwave radar that detects heartbeats. The prototype detected an individual 20 feet down, through 20 inches of concrete, and at standoff of more than 50 feet from the rubble. The Project 25 Compliance Assessment Program (CAP) is still underway. On April 25, OIC published a notice in the Federal Register with the intent to move the program into a properly credentialed private sector company.

While OIC budgets will not be increased in the future and have been slashed in some cases, OIC considers the work of this group very important and will support it to the best of its ability.

**Department of Homeland Security, Chris Essid, Deputy Director, Office of Emergency Communications (OEC)**

Mr. Essid reiterated Dr. Boyd's comments on how important it is for OEC to work with the communications community. OEC provided technical assistance (TA) to Boston, and learned from the Boston Marathon bombings that planning and preparation proved valuable. Emergency communications worked well and interoperability was achieved between city, state, and federal responders. In 2010, OEC worked with Boston to assess communications which were used for the Marathon. OEC conducted TA for all Communications Unit Leader (COMLs) and Communications Unit Technicians (COMTs). DHS also provided field support through the regional support offices during the attack. The GETS [Government Emergency Telecommunications Service] system had a call completion route of 98 percent, routing 280 calls. OEC processed 152 requests for WPS [Wireless Priority Service] which had a completion rate of 93 percent.

OEC conducted last month's National Council of Statewide Interoperability Coordinators (NCSWIC) conference call, discussing funding for state priorities, and participated in FirstNet's conference call and webinar to discuss the National Emergency Communications Plan (NECP) and FirstNet. OEC will conduct future calls with SAFECOM and the NCSWIC on priorities.

OEC is working on update of NECP to include the development and implementation of new technologies, including the FirstNet. OEC has received much feedback from the states that these workshops are beneficial. Last month the Office delivered a report on NECP to Congress, noting that 90 percent of Goal Two jurisdictions were able to achieve response level communications. The findings from the assessment also help OEC target where assistance is needed. OEC is also assisting National Telecommunications and Information Administration (NTIA) in reviewing the grant program for participation in FirstNet. Additionally, OEC is worked with the Office of Cyber Security Communications to perform a cyber structure risk assessment. The work was completed and shared with FirstNet.

**First Responder Network Authority (FirstNet), Bill D'Agostino, General Manager**

Chief McEwen introduced Craig Farrill, interim manager as FirstNet began its work, and Bill D'Agostino, new General Manager of FirstNet. Mr. D'Agostino said he is very excited about the challenge facing the public safety telecommunications community. Work being done now is positioning FirstNet to build a world class, flexible network for public safety. Mr. D'Agostino said FirstNet appreciates the great work done by NPSTC on developing standards for the nationwide public safety broadband network (NPSBN). It is very important to stay connected to the first responders. FirstNet understands that the network needs to be a nationwide network to public safety standards that is compatible and interoperable and not a series of connected networks. Decisions will be made with a full vetting from public safety.

**Discussion:** Chris Lewis, Department of Interior (DOI), said the Department does not feel involved with the NPSBN, saying he would like more federal public safety involvement in the process. Mr. D'Agostino said the Board is aware that there are other key stakeholders who are not yet involved in the process, but as the building of the network moves forward, for example, during site development, those who are affected will be contacted.

Terry Hall, APCO, said one of the big challenges is building a network that is robust and attractive to public safety. To that point, FirstNet should encourage states to opt in to the NPSBN and discourage the state opt out position. Mr. D'Agostino agreed, saying that the state opt-out is a last alternative position in his mind.

Lance Valcour, Canadian Interoperability Technology Interest Group (CITIG), said he hopes the connection between the NPSBN and Canada's broadband network along the borders will be considered, both operationally and within the policy framework.

Tom Sorley, Chair, Technology Committee, said the FirstNet is in a difficult position trying to be many things to many stakeholders. One of the reasons NPSTC was formed was to pool resources. NPSTC has a long history of working together allowing member organizations to speak "with one voice," and its members have a long history of working together on these issues. He added the Public Safety Advisory Committee (PSAC), which includes NPSTC member associations, will be a valuable resource in achieving that unified voice to FirstNet.

**Federal Communications Commission (FCC**), **David Turetsky, Chief, Public Safety Homeland Security Bureau (PSHSB)**

Mr. Turetsky discussed recent important work at the FCC. The Bureau has been focused on the path to Next Generation (NG) 911, which will use Internet Protocol technology increasing accessibility, allowing greater resiliency in an emergency, and adding text and data to the information received. All this will occur in the context of the existing networks that will need to continue to operate. This is a system that must work. Legacy 911 is highly effective but it faces increasing challenges. There are 130 million wireless subscribers who own smart phones, which can provide valuable information to responders. It will take some time to get to full 911 texting, which is not yet available in many areas. This is a time sensitive issue for a number of reasons, e.g., for the hearing impaired, in a situation when a live call places caller in danger, when texting may get through when lines are busy, and the fact that many text messages can be received simultaneously allowing operators to prioritize emergencies.

Major carriers are moving to text-to-911 no later than May 2014. By June of this year, they will provide bounce back messages to callers attempting to text centers that are not yet text capable. Last week, the Commission voted to approve an Order to be released soon. None of these Orders require a 911 center to switch to text-to-911. Concerns about the changes include the potential for increased costs. On the other hand, Mr. Turetsky asked, can we afford not to move forward? The FCC recently provided advice to Congress on the process. 911 is managed by the state and locals. The Bureau suggested Congress incentivize a race to adopting NG 911. Call centers serve as a hub for 911, which will in turn interact with the NPSBN.

The Derecho storm severely caused failures and lack of 911 service at a number of centers. The FCC report found that failure was often caused by lack of planning, physical audits of circuits, and backup power sources. The FCC issued a Rulemaking on 911 failures, focusing on four key areas, which closed on May 13, 2013. Reply comments were due May 28. Hurricane Sandy provided some lessons learned on further work to be done. Unlike the Derecho, Sandy's arrival was expected and the 911 system fared pretty well. However, the public's ability to initiate 911 calls was severely impacted by the storm.

In March, the Commission issued a Notice of Proposed Rulemaking (NPRM) focused on service rules for 700 MHz, including equipment certification and existing narrowband users operating in 700 MHz broadband spectrum. Comments were due May 24; Reply Comments on June 17. In April, the Commission updated rules in the 700 MHz narrowband spectrum. Reply comments are due in August.

The Bureau is beginning a process to explore the transition of public safety users out of the T-Band. In March, they released a Public Notice seeking comment on a number of issues in the T-Band. Hard data is crucial to making decisions. Reply comments are due June 11.

Regarding international issues, in conjunction with the Department of State and the FCC's International Bureau, the Commission has developed an agreement with Canada, and signed an agreement with Mexico last year to update the 700 MHz band plan agreement. Mr. Turetsky said the Bureau appreciates NPSTC's contributions in this regard.

**Discussion:** Chief McEwen said NPSTC submitted an extensive report on the T-Band in addition to making comments to the Bureau. During the Boston bombing response, first responder us of the T-Band, the heart of public safety communications in that area, enhanced interoperability and rapid response of various jurisdictions through local training in that spectrum. Mr. Turetsky called the NPSTC T-Band report top rate.

Joe Ross, Co-Chair, T-Band Working Group, asked if there were any details regarding the 25 percent number of cell site outages during Hurricane Sandy. Mr. Turetsky said the numbers were disappointingly high, noting the 25 percent was a cumulative number. The numbers for New Jersey were twice as high, with some even higher than that.

Mr. Valcour thanked Mr. Turetsky on behalf of Canada for the satisfying progress on the borders in a number of areas. Mr. Hall noted the FCC's support of NG911 has been appreciated, particularly in allowing the move to NG911 to be voluntary.

## Award Presentation, Marilyn Ward

NPSTC presents a variety of awards to its highly valued volunteers who do the "heavy lifting" that allows NPSTC to support public safety communications in the manner it does.

**Letters of Recognition:** These letters of recognition acknowledge individuals and/or organizations that have supported NPSTC and the public safety community on critical objectives such as achieving interoperability.

**American Samoa Homeland Security Territorial Emergency Communications Committee** (**TECC)**. This committee has been instrumental in helping the Territory of American Samoa Government in setting up an Interoperable Emergency LMR system upgrade for all the "first responders" and daily use. TECC has also developed emergency plans in support of NPSTC goals and objectives.

**Terry Bavousett**, **Amarillo Emergency Communications Center**. Terry is recognized for excellence in his work as assistant manager. He was nominated by his staff who wrote, "Terry embodies everything that is good in our business and strives to rectify those aspects that are less than perfect." Terry's style of management and teamwork parallel NPSTC goals for collaborative leadership.

**Special Letters of Appreciation: Kathy Mayeda and Cindy Stanley**. NPSTC recognizes Kathy Mayeda and Cindy Stanley who work at the Public Safety Communications Research (PSCR) Program, National Institute of Standards and Testing/Office of Law Enforcement Standards (NIST/OLES). NPSTC appreciates the dedicated assistance provided to public safety professionals visiting your program for NPSTC Broadband Working Group activities.

**Participant Awards:** The NPSTC Participants Award was created to recognize individuals and/or organizations that have supported NPSTC and the public safety community on critical objectives such as achieving interoperability.

**Steve Devine.** Steve has led two different task groups related to requirements for mission critical voice over broadband. These groups were largely made up of public safety practitioners which meant that rarely could any single participant make all the calls. Steve has shown strong leadership by keeping the group members involved and informed which resulted in active participation and tangible results.

**Pam Montanari.** Pam has worked to support broadband and is currently engaged in the radio programming compatibility effort. She is reliable and supportive of NPSTC's work and the community.

**Bette Rinehart.** Bette has been a NPSTC supporter for years. She serves as a resource for the Regional Planning Committees and is always interested in participating on Working Groups.

**David Eierman.** David has been working with NPSTC for many years. His contributions range from engineering to supporting reports with technical background. David participates and contributes on most Working Groups.

**Paul Szoc.** Paul has been working with NPSTC for many years and has represented us on the critical Intrinsically Safe Radio project. This project has been visible and requires coordination with many groups. Paul has done an outstanding job.

**Lance Valcour.** Lance is an exceptional person who has single handedly brought Canada to the U.S. communications community. His work has supported NPSTC's goals, and he has brought us into the new century by leading us to NPSTC use of social media. In years to come, his legacy will be remembered through all the successful projects he has brought to the community on both sides of the border.

**Leadership Awards:** The NPSTC Leadership Award was created to recognize individuals and/or organizations that have demonstrated exceptional personal and professional conduct.

**OIC/David Boyd.** David Boyd has been a supporter of NPSTC for the 16 years we have been together. He worked to get us support from the Department of Justice (DoJ) when he was working there and then at DHS when he moved to OIC. OIC has continued to be a strong supporter of NPSTC and the community NPSTC supports. David has the respect of the community. He understands the federal process and the needs of local public safety. His work at OIC and the work of the staff at OIC has shown great leadership for public safety communications. Thank you to David and OIC for their continued support of NPSTC and the community.

**Jay English.** Jay comes from the public safety community and has worked diligently on Broadband Working Group activities. He is quick to step up to lead committees and a valuable asset to the work being done on the broadband requirements. Jay is involved in several Working Groups. By being on virtually all the groups he had a unique perspective and could promote and promulgate the standard approaches as they were being formulated on an ad hoc basis. This was a huge benefit since our timeline did not allow for the luxury of the group leads being able to get together and establish the approaches prior to starting the work.

**Trent Miller.** As the chairman of the NPSTC Priority and Quality of Service (QoS) Task Group, Trent Miller did an excellent job guiding the group to a consensus on some very controversial and complex issues. The outcome of the group was extremely valuable to the resulting process, culminating in the promulgation of the excellent Public Safety Broadband High-Level Launch Requirements document in December 2012.

**Terry Hall.** Terry has brought a breath of fresh air to the community during his tenure at APCO, and as the current president of APCO. He has worked tirelessly to form cohesive relationships and projects and is an excellent team builder. Terry is multifaceted in his work and brings abounding energy to the community and the will to "do the right thing for public safety" no matter how difficult that may be.

**SAFECOM Program.** The SAFECOM Program is being honored to acknowledge SAFECOM's ongoing support and leadership within the public safety communications community. SAFECOM has a wide representation of public safety and elected and appointed officials and brings a unique way of supporting the critical issues facing the community. NPSTC appreciates the work of Terry Hall, SAFECOM Chair, and Tim Lowenstein, Vice Chair and all of the members who work so diligently in support of interoperability.

**HERTZ Award:** The NPSTC Hertz Award was created to recognize the exceptional work of one or more individuals who have demonstrated extraordinary leadership. The Hertz award, named in honor of Heinrich Hertz whose name denotes the scientific unit of frequency--cycles per second--is not an annual award but one that is only awarded when exceptional performance warrants it. This year we have two recipients who have dedicated thousands of hours to support the efforts of public safety.

**Stu Overby.** Stu is the Vice Chair of the Spectrum Management Committee and supports our FCC filings and multiple other projects. This year, he worked on the Government Accountability Office (GAO) report and the T-Band Report in addition to his other work on the Spectrum Committee. Stu is always there for us and works tirelessly for the good of public safety. He is an excellent writer, composer translator of documents, from Spectrum Committee calls into final positions for the Governing Board. Stu is one of the hardest workers we have ever seen. Check your emails from him, they often are written at 3 am!

**Joe Ross.** Our second winner of this new award is Joe Ross. Joe lead the effort to develop the *Public Safety Wireless Advisory Committee (PSWAC) Follow On: Public Safety Assessment of Future Spectrum and Technology,* to determine spectrum needs through 2022, and recently co-chaired the T-Band Working Group with Stu to complete an extensive look at the impact of the T-Band giveback slated for 10 years from now. Both of these projects required an intensive compilation of data and work that ensured creditability for NPSTC.

**Atkinson Award:** The DJ Atkinson Technical Award, created in 2012 to honor DJ Atkinson's work, recognizes individuals and/or organizations that have demonstrated exceptional technical support to NPSTC and the public safety communications community.

**Andy Thiessen.** It is only fitting that Andy Thiessen be given the second annual award (after DJ himself). Andy works tirelessly to support public safety communications through his work at PSCR, and as NPSTC Vice Chair of the Technology Committee. Andy has led multiple efforts to gather user requirements for broadband over the past year. He has provided thoughtful leadership, technical knowledge, and diplomacy. Andy and his team were able to lead a very diverse group of strong individuals toward a common goal and deliver a product within a prescribed timeline. Working with both public safety and industry volunteers is never easy. Andy and his team successfully led this effort and is therefore extremely deserving of this recognition. We are so lucky and proud to have Andy in the NPSTC leadership and supporting the community at great expense to his personal time and appreciate his efforts for public safety.

**Chairman's Award:** The Chairman's Award was created to recognize one individual who has demonstrated extraordinary leadership.

**Chris Essid.** Chris started his public safety career as one of the original SWICs and came to his DHS position with a background in our community. He has worked to improve public safety communications and supported NPSTC throughout his journey at OEC. His activities in broadband have brought knowledge and background to the federal partners and, with his support, SAFECOM and NPSTC remain strong. Thank you Chris for your continued support of public safety communications and the work you do for NPSTC.

**DeMello Award:** The Richard DeMello Award is presented to one individual in public safety communications who has demonstrated the highest levels of personal and professional conduct and performance in the local, state, and national public safety communications arena. This person's contributions have been numerous and have played an important role in the work NPSTC does to make public safety telecommunications better.

**Doug Aiken.** Doug is totally aware that one individual is not going to improve public safety and that we all need to work together and share our knowledge and experience. This is true of Doug, at a fire scene or working on the many committees he serves on. One nominator said, "To this day I could never understand how Doug found the time to not only handle a full-time position that many times required 60 hours a week but also found the time to travel and represent public safety on many committees and organizations. In addition Doug dedicated his life to protect our country by serving in the Air Force Reserves for many years retiring as a Colonel."

On the federal level Doug has served as a vital team member for the Nationwide Broadband System development on Public Safety Spectrum Trust (PSST). He currently serves on the FirstNet PSAC as well as serving as Vice Chair for NPSTC. Doug serves on SAFECOM, National Fire Protection Association (NFPA), International Municipal Signal Association (IMSA), and is frequently in Washington DC representing public safety at the FCC. On the local and state level, Doug was instrumental in establishing the State of New Hampshire's E-911 System. He also worked to establish a Statewide Interoperability

Plan and is an active member of the Federation of Mutual Aid in New Hampshire. He serves on the Fire Standards and Training Committee and also managed a large Mutual Aid Communication System in the state.

**Acknowledgements:** NPSTC thanks the following organizations for supporting NPSTC awards: the Forestry Conservation Communications Association (FCCA), International Municipal Signal Association (IMSA), Motorola, Harris, ICOM, American Radio Relay League (ARRL), American Association of State Highway and Transportation Officials (AASHTO), and the Public Safety Communications Research Program (PSCR).

## Interoperability Committee, John Powell, Chair, and Pam Montanari, Vice Chair

### New Business, Jim Downes, Project 25 Steering Committee Chair

Mr. Downes discussed the Project 25 Steering Committee's offer of membership to NPSTC. Mr. Downes said the Steering Committee decided to expand the user membership in the group and invited a number of associations to become members. NPSTC was invited on May 10 to become a full voting member and to identify representatives to serve. Mr. Powell said he understood the intention was to include member organizations of NPSTC who might not be able to participate due to travel restrictions imposed by their organizations. Additionally NPSTC would represent a much broader group of public safety constituents.

**Discussion:** Ms. Ward asked for Governing Board comments on the issue. Kevin McGinnis, National Association of State Emergency Medical Services Officials (NASEMSO), said the P25 Compliance Assessment Program (CAP) Board has been working to reorganize P25 to make user participation more effective. The issue has been discussed broadly; the P25 CAP has looked for funding from DHS for travel and is awaiting final word. John McIntosh, FCCA, said FCCA has been on the Steering Committee and supports this proposal as well as the proposal made by Mr. McGinnis. Chief McEwen said the proposal sounds like a good idea to reinvigorate the P25 process, but the biggest problem is the lack of funding to support travel. Dr. Boyd said the final approval is currently mired in bureaucracy. Mr. Downes added there is a conference bridge for meetings if necessary. Phil Lazarus, AASHTO, said AASHTO also has a membership in the Steering Committee.

**Action Item:** Ms. Ward suggested tabling the matter until all Governing Board members review the letter. A vote will be taken via email.

### Common Channel Naming Working Group, John Powell

This Working Group was reactivated at the last meeting in anticipation of the 700 MHz Notice of Proposed Rulemaking (NPRM) issued by the FCC, including a proposal to establish air-to-ground channels. The Working Group has been reconstituted and has solicited renewal of memberships and new members. The group will initially address air-to-ground channels. Further changes will be dependent on outcome of the pending FCC 700 MHz narrowband cleanup proceeding. This will require initiating the American National Standards Institute (ANSI) process. Additions that have also been requested include:

- Names for band-edge itinerant channels

- Naming template for regional/state agencies to similarly name
- Reserving all unused names/numbers for future expansion, and offer a method to the states for doing that.

Mr. McIntosh asked if the VTAC channels named in the footnote will be addressed. Mr. Powell said the Working Group had discussed those channels, and noted this could be an opportunity to point the issue out to the Commission.

**Emerging Digital Radio Technologies (EDRT) Working Group, John Powell**
Mr. Powell reported that a detailed draft outline has been submitted to OIC, which identified technologies and included detailed write-ups for each. Establishing a baseline for the potential impact EDRT poses for interoperability will require case studies that detail the impact. With one major public safety exception and one commercial example, these case studies have not been forthcoming for various reasons. Mr. Powell suggested that the Committee urge an agency to report on any problems EDRT has caused, which may encourage others to report.

The Working Group has worked through the four frequency coordinators to identify licensees who have had problems and whether or not they have identified potential solutions. Mr. McIntosh said this has been a very serious issue for FCCA. Paul Szoc, IMSA, said he believes IMSA will participate. Dave Eierman, Motorola, volunteered to assist.

**Action Item**: Mr. Powell will contact the frequency coordinators to request their assistance.

**Border Issues Working Group, Barry Luke**
Mr. Luke provided an update on Border Working Group activities. At the IWCE meeting, the Border Working Group representatives met with Emilie Brown, Public Safety Canada (PSC) and participated in a planning and coordination meeting with CITIG. NPSTC participates with DHS and PSC on Canada/U.S. (CANUS) issues within several efforts including the "Beyond the Border" initiative. The next CANUS meeting is set for June 26-27 at Canadian Embassy. NPSTC will also participate in the CITIG Cross Border Workshops, finalize the outline for the Cross Border White Paper, and collect all historical documents, papers, and recommendations from prior cross border meetings. NPSTC has collected 70 documents going back to the 1990s.

On May 2, NPSTC participated in meetings in Sarnia, Ontario, and on May 9-10, in Lethbridge, Alberta. Mr. Valcour briefly discussed the meetings. He noted that Beyond the Border is focused on federal interaction while these meetings are focused on the local first responders. Future meetings will be held in Jean-sur-Richeleau, Quebec, June 6; St. Stephen, New Brunswick, June 18; Abbotsford, British Columbia, September 18; and Yukon Territory (to be scheduled).

In Montana, a DHS grant funded Blue Freq/VLAW31 base stations at border crossings for Customs/Border Patrol access. Montana has received an FCC License to operate on BLUE with a waiver to allow all public safety access (currently restricted to law enforcement). Montana has updated their online mutual aid permit process to allow Canadian provinces to apply.

In Canada, the Alberta and Saskatchewan provinces are working with Industry Canada to obtain licenses for BLUE. Canadian law will not allow BLUE to be programmed into the radio without a license. Provinces bordering Montana are being encouraged to apply for a mutual aid permit. PSC is collecting data on all cross border interoperability projects (including description and contact information) to share on their website.

Regarding discussion on the 1951 Treaty, the exchange of letters between Canada and the U.S. is awaiting action by Canada. It will address the definition of portable radios (vs. mobile) and authorize three scenarios: Simplex communications between borders; base station in Country B to support operations in Country A; and base station in Country B or A to support both countries for interoperablity.

**Emergency Medical Services (EMS) Working Group, Paul Patrick, Chair**
Mr. Patrick reported the EMS Working Group has added 50 new members recently. The mission and scope of the reinvigorated Working Group is to monitor public safety communications issues specifically linked to pre-hospital care and comment on any issue which may have an impact to the EMS community. Additionally Working Group members may bring issues to the attention of the Committee Chair for consideration.

The initials goals for the EMS Working Group are to review existing work on EMS-related issues with regard to broadband applications; determine where corrections or enhancements are needed to this documentation; and determine what additional documentation is needed to adequately convey mission critical broadband requirements that are unique to EMS.

On the first call, the following review materials were provided to the group*: NPSTC Public Safety Communications Roadmap, 2012-2022,* NPSTC Multi-Media Emergency Services Working Group case studies*,* and a FirstNet slide deck presentation by Kevin McGinnis and Craig Farrill.

**Meeting Adjourned**
The meeting will resume at 8:30 am on May 15, 2013.

**May 15, 2013**
**Welcome, Marilyn Ward**
Ms. Ward reconvened the meeting at 8:30 am on May 15, 2013. Following the roll call, the Spectrum Management Committee presented.

**Spectrum Management Committee, Dave Buchanan, Chair, and Stu Overby, Vice Chair**

**4.9 GHz Working Group, Dave Buchanan, via teleconference**
Mr. Buchanan reported on the current work effort of the 4.9 GHz Working Group. Task Groups have been created to address the following issues in 4.9 GHz:

- Frequency Coordination, Database, Data Registration (Change from Jurisdictional Licensing)
- Point-to-Point

- Air-to-Ground & Specialized Uses
- Band Plan and Channels
- Critical Infrastructure Use and Conditions, including a definition of what critical infrastructure should include.

The Working Group is asking the Task Groups to provide reports to them by the end of May, with the intention of writing a draft report by the end of July, and a completed report in August, to be presented at the APCO conference.

Mr. Valcour said Canada is planning to do a workshop on air-to-ground, asking for more detail on the issues involved. Mr. Buchanan said air-to-ground has particular problems. Traditionally helicopters have sent video to the ground but there has not been dedicated spectrum to do this for public safety. Public safety now uses a channel in the 2 GHz band shared among various groups for video. News broadcasters have spectrum for news videos at 2 GHz and 6 GHz, which is also a shared resource, with the result that it is hard to get a channel when something breaks. With new digital video, a high definition video can be put in 5 GHz. There is the same spectrum problem with bomb robots in that it is difficult to find a channel for the robot's video.

**700 MHz Narrowband Spectrum Rules Changes, Stu Overby**
Mr. Overby reported the FCC earlier released an NPRM on multiple issues related to the 700 MHz Narrowband Spectrum (PS Docket 13-87). Many of these issues have been pending for quite some time. Comments are due June 18; replies on July 18. Key Issues include the following:

- Delaying or eliminating the December 31, 2016, deadline to operate with 6.25 kHz or equivalent efficiency
- Air-Ground communications on secondary Trunking Channels
- Use of the Reserve Channels
- Nationwide Interoperability Travel and Calling Channels
- Secondary tactical voice operations on Data Interoperability Channels

**December 31, 2016 Deadline**: During their monthly meeting, the Spectrum Management Committee agreed that jurisdictions will need more time to achieve 6.25 kHz efficiency, allowing them to make full use of their existing systems. The Working Group believes the date should be delayed or eliminated. The Regional Planning Committees (RPCs) should be involved in decisions as appropriate. As brand new systems are purchased, the 6.25 kHz Phase Two requirement could go into effect.

**Discussion:** Chief McEwen said he did not like this approach, saying it can lead to many different systems across the country. He said NPSTC should be strongly opposed to the 6.25 Phase Two implementation because there is no need to make this change. Mr. Buchanan said there is no room in the spectrum in Southern California and added that many agencies are already moving to Phase Two.

Mr. Sorley said he agreed with Chief McEwen saying there is a great deal of confusion and many subscribers have no funds to move to Phase Two. Leaving the decision to the RPCs is not the answer.

Dr. Boyd said he also opposes this move to 6.25 kHz. It would require new guardband, leaving more dead space in the bands. Mr. Powell said Phase One and Phase Two systems will continue to be interoperable because the P25 Phase Two systems will default to Phase One if necessary.

**Action Item**: The Committee will evaluate the discussion and develop comments for the Governing Board.

**Air-Ground communications on Secondary Trunking Channels**: NPSTC will maintain its original position on this issue. Mr. Lazarus discussed the state of Maryland's petition on air-to-ground channel use. The state is implementing a statewide 700 MHz trunking system. All helicopters in Maryland are operated through the State Police. While they were implementing the system, the state needed to communicate with their helicopters, which use low band. As a result, they sought a waiver with the FCC, which they received.

**Use of the Reserve Channels**: The Los Angeles Regional Interoperable Communication System (LA RICS) filed a request to use those channels for deployable system if their jurisdiction has to move out of the T-Band. NPSTC initially opposed this use, but has had further discussions with them. LA RICS has indicated their flexibility in this regard and the appropriate language will need to be developed. The Committee will draft comments on this.

**Nationwide Interoperability Travel and Calling Channels:** As agencies move responders around. For example, in the case of a firefighting team out of state, the travel channel would be used initially between responders and the home agency.

**Secondary Tactical Voice Operations on Data Interoperability Channels:** There has been interest in making these underused channels available for tactical operations.

**700 MHz Narrowband Systems in 700 MHz Broadband**

When the FCC changed the band plan in 700 MHz, there were already some 700 narrowband systems deployed prior to 2007 changes to band plan and operating in what is now broadband spectrum. This issue is being addressed in the FCC's NPRM on 700 MHz broadband spectrum (Docket No. PS 12-94). Comments are due May 24, with replies due June 10.

NPSTC recommends the following position:

- Relocation expenses should be eligible expenses from the FirstNet's Broadband funding.
- The FCC, in coordination with the National Telecommunications and Information Administration (NTIA) and FirstNet, should define a relocation process and schedule.
- Vehicular repeaters that need to be relocated should be allowed to use a portion of the 700 MHz guard band spectrum.
- Comments should reference the vehicular repeater plan developed previously.

**Discussion**: Mr. Lewis said federal users are dealing with vehicular repeaters. There is a concern about the amount of separation required by vehicular repeaters. Chief McEwen said two big public safety 700 MHz systems were most affected by the change in the band plan: Virginia State Police and the State of

Ohio. He has worked with Mr. Eierman and Charley Bryson, RCC Consultants, to develop a proposal which has not yet been presented to the FCC due to changes in the band. They intend to send the proposal to the FCC. Chief McEwen said he will put a placeholder in the comments due May 24.

The cost of vehicular repeaters could be reduced with a standardized nationwide approach for spectrum location. Mr. Eierman said there are different separation issues in every band. The issue is interference between the mobile and the repeater in the car. It can be solved by crossbanding, but they still need separation and filters. Replacing all the filters is expensive. Making all the filters standard would help.

Chief McEwen reported Lance Johnson, NTIA, has been assigned to reach out to the 45 affected agencies and determine their status. He recommended NPSTC should go on record supporting these agencies. Should agencies that have already moved be reimbursed for their expenses. They had estimated the move would cost $75 million.

**T-Band Working Group Update**

NPSTC's T-Band Report was released March 15, 2013. NPSTC filed comments with the FCC on May 12th in response to the February 11th FCC Public Notice on the T-Band. The comments include the NPSTC T-Band Report as an attachment and emphasize concern about the Provision in Section 6103 of Public Law 112-96 (The "Spectrum Act" of 2012). NPSTC recommends the FCC lift the freeze imposed April 26, 2012, on licensing of new/expanded public safety and industrial/business T-Band systems.

The Spectrum Management Committee is examining comments filed to determine if NPSTC reply comments are needed (due to FCC June 11, 2013). Comments filed by New York supported NPSTC's report and also provided specific comments about their own experience in the T-Band.
Additionally, NPSTC Coordinated with the Land Mobile Communications Council (LMCC); their comments to the FCC support NPSTC T-Band Report and addresses the impact on Industrial/Business users. LMCC also recommends lifting the licensing freeze. On May 10, the Congressional Fire Services Institute (CFSI), National Advisory Council voted unanimously to support the NPSTC T-Band Report in response to a presentation by Doug Aiken.

**Potential Future Filings:**

AASHTO Filing on 5.9 GHz: NPSTC has been asked by AASHTO to support their position on a 5.9 GHz proposal which will affect Intelligent Transportation Systems (ITS). Chris Imlay, ARRL, also noted this band is used by the amateur radio community. Mr. Valcour said Canada sees an enormous potential to coordinate with transportation in this band as it affects EMS.

Receiver Performance: NPSTC reviewed a GAO report on receiver performance and provided input into the report on public safety's point of view. The FCC has since issued a Notice of Inquiry (NOI) seeking more information on the issue.

**Technology Committee, Tom Sorley, Chair, and Andy Thiessen, Vice Chair**

**Public Safety Interference Issue, Henry Goldberg and Laura Stefani, Goldberg, Godles, Wiener & Wright Law Firm**

Mr. Goldberg and Ms. Stefani, representing the Part 15 Coalition, discussed unlicensed public safety-related spectrum issues in the 902-928 MHz band. The Part 15 Coalition comprises railroads, utilities, oil and gas, and wireless Internet service providers. The 902-928 MHz unlicensed band provides enormous societal and economic benefits, fully justifying the FCC's confidence almost 20 years ago in providing protection from unacceptable interference.

Unlicensed use in the band includes:

- 100s of millions of smart grid devices, with life-spans up to 20 years.
- 10s of millions of oil and gas monitoring devices.
- 10 million emergency duress and alarm devices.
- 100s of millions of other industrial and consumer devices.
- Hundreds of new equipment authorization grants each year.

Utilities have installed hundreds of millions of unlicensed devices they use to manage the grid, including identifying and responding to gas leaks and other emergencies. Chemical, oil and gas, and pipeline companies rely upon devices used to monitor facilities and perform remote shut off in the event of any leaks or other disasters. Wireless broadband providers use the spectrum to provide Internet service to unserved and underserved communities across the country, including to police and fire departments. Inovonics, a manufacturer of duress and alarm systems, has ten million devices installed throughout the United States at facilities such as schools, theaters, banks, hospitals, and state/local/federal government buildings, including systems that provide location-based information to first responders responding to a duress call. EZPass, used in 16 states for toll services and traffic management services, provides for the flow of traffic via bridges and tunnels in major urban areas.

Within this band, the FCC's goal has been to achieve compatibility between unlicensed systems and those licensed in the band. The unlicensed community has only one safeguard. The licensee must demonstrate the ability to demonstrate through actual field tests that their systems do not cause unacceptable levels of interference to Part 15 devices. Progeny/NextNav, creators of GPS location systems, have performed Phase One testing in this band. Before they can begin commercial operations, they have to establish there is no interference.

Progeny/NextNav's technology is a work in progress; the FCC's Communications Security, Reliability & Interoperability Council (CSRIC) Report states that Progeny will need at least a 2nd generation system, since the present system does not meet public safety's needs. If the testing is inadequate, unlicensed users through the Part 15 Coalition will have no recourse.

Mr. Goldberg likened the situation to similar interference concerns between public safety and Nextel and the recent issues between GPS and LightSquared. Under the Commission's rules, Progeny has the burden of demonstrating that it will not cause unacceptable levels of interference. Looking at initial test results and occurrences of interference, it has not met that burden. Part 15 Coalition's recommendation: While the Progeny/NextNav system is being developed, the FCC should not allow the company to operate a system that causes unacceptable interference to Part 15.

**Discussion**: Mr. Sorley said Houston uses that spectrum for utility testing. Mr. Lewis asked if testing been done against primary users in federal 902-928 MHz. Mr. Imlay asked if the FCC defined unacceptable interference. Mr. Goldberg said the definition was vague.

Chief McEwen said the IACP has filed at the FCC in support of the need for improved in building location services to be able locate both members of the public and public safety personnel in need of assistance. He said that the filing supported the type of in building location services proposed by NextNav but also cautioned the FCC to review the system to address any interference the system may cause. He said at least five other NPSTC member organizations have also filed. All these organizations agree that there is a need for improved in building location services.

**NFPA 1221: Standard for the Installation, Maintenance, and use of Emergency Services Communications**, **John Facella, RCC Consultants**

Mr. Facella reported the National Fire Protection Association (NFPA) will introduce a new committee that will create a new set of minimum standards [NFPA 1802] for portable radios used in IDLH [Immediate Danger to Life and Health] conditions. The committee will focus on the human interface to radios including acoustics, displays, enunciation, and ergonomics. There is a rigorous process for input to the process.

NFPA 1221 2013 was issued last year. Via follow-up email, NPSTC Vice Chair, Douglas Aiken, made a request for NPSTC participant involvement with the NFPA 1221, "Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems," Chapter 9 Task Group, which is responsible for the following topics:

- The adoption of P25 Phase II requirements
- The adoption of TIA-603-D analog receiver performance requirements
- Allowing AHJ to choose TIA-3640 for hazardous atmospheres versus FM Global 3610:2010
- "Fixing" in-building amplification requirements: including but not limited to harmonizing 1221 requirements vs. anywhere else they appear, which codes are referenced; should signal levels, DAQ or BER be used; whose testing requirements apply 1221 definitions for "special structures" and "microwave."

Mr. Facella urged representatives of Public Safety Answering Points (PSAPs) to review the standard and the appendix. Work on the 2015 version is underway. They are forming task groups tackling areas that need improvement. One of those is nontraditional input means to PSAPS such as NG911, texting, etc. Another is a radio task group that will include work on receiver specs. NFPA 1221 is concerned only with the dispatch service and how well that chain of communications works. In-building communications will address overlapping standards within the NFPA standards. NFPA 1221 will include radios used in hazmat. NFPA 1221 does not mandate the use of Intrinsically Safe (IS) radios, but the organization can choose for their officers to have an IS radio.

Bob Speidel, National Telecommunications Industry Association (NTIA), asked if both standards address the IS issue. Mr. Facella said there is some duplication in standards and NFPA will avoid duplication among newer standards. He also reported that the Insurance Services Organizations (ISO), which rates

communities in terms of fire protection services, which affects insurance rates building owners pay, have revised their standards, which have not been revised since 1980. They have added points for the number of telecommunicators from PSAPS and risk avoidance practices.

**Broadband Working Group (BBWG), Andrew Thiessen**

Mr. Thiessen reported on latest work of the BBWG. The LTE Voice Task Team, led by Steve Devine, is leading the effort to define voice requirements for LTE. There are three issues to consider. What would PTT have to do to replace LMR? What is the expectation of mission critical voice? What are the off network requirements? The document is in final stages of development and should be published in the next few weeks. The Voice Task Team is additionally looking at unique public safety requirements for voice and for messaging.

Regarding LTE console issues, a task team is being formed to develop public safety requirements for a dispatch console/LTE interface. The discussion will need to incorporate wired devices as well as wireless. The task team has an industry co-chair and Pam Montanari is the public safety co-chair.

PSCR will host a Stakeholder Conference on June 4, 5, and 6 in Boulder, Colorado. This is an open meeting and details are on NPSTC's home page. Mr. Thiessen participated in a panel presentation on the Launch Statement of Requirement (SoR) at this month's APCO Broadband Summit. The panel discussed the globalization of public safety requirements. The public safety community needs to develop a strategy to globalize the Statement of Requirements (SoR) documents with Europe, Canada, and Australia. There is consensus on the need for 3GPP standards approval.

Mr. Valcour asked if there are Standard Operating Procedures for Canada/U.S. coordination on both sides of the border. Michael Sullivan, Vice Chair, CITIG, has been attending conferences. There is a direct relationship between FirstNet and other governments. Mr. Valcour said that it is good for governments to talk but the discussions need to include the first responder community.

Mr. Thiessen said he will be sending emails to solicit participation in the new task groups. The BBWG leadership will develop a process to acquire the proper industry/public safety participation.

**Radio Programming Compatibility Requirements (PCR) Working Group, Pam Montanari, Co-Chair**

Ms. Montanari provided an update on the work of the Radio PCR Working Group. The Working Group continues to address the incompatible software programming of LMR systems. They began their research at the high level, creating an export/import field of manufacturer information. They are now completing a spreadsheet with data, populating fields from the various manufacturers and standardizing the different terminology various manufacturers use. The Working Group would like to validate the information in the fields to see if one manufacturer's radio can be programmed from the spreadsheet. Mr. McIntosh said he is very impressed with this work.

**New Business, Tom Sorley**

Mr. Sorley said he has been approached to do requirements on alerting. There does not seem to be a collective set of requirements for public safety. The Technology Committee would like to define these requirements. Joe Hanna, Directions, said Commercial Mobile Alerts (CMAS) has been productive at the

federal level, but he has not seen public safety input on what they need. Mr. Thiessen asked for clarification, for example, is the context citizen to government or government to government. The BBWG had a task group on alerting, which created a number of use cases.

Mr. Sorley said the focus would be on the needs of the locals and could encompass both contexts. Ms. Ward asked if the standard development refers to technology or operations. Mr. Hanna said the operational requirements will drive the technology development. Peter Reed, FirstNet consultant, said the SoR that came to FirstNet heavily reflects CMAS. The operational component is a gap. Dr. Boyd noted that the Integrated Public Alert & Warning System (IPAWS) and CMAS are two different elements set by legislation to replace the Emergency Alerting System (EAS). The principal goal is for President to issue an alert to citizens. The Committee may want to take advantage of exactly what these two systems are intended to do. Mr. Valcour said the cross border workshops have an EAS system to send warnings across the border.

**Action Item**: Ms. Ward said the issue requires more discussion before voting to take on this task. After discussion, the Governing Board will need to do an electronic motion and vote.

**Social Media Working Group, Barry Luke**

Mr. Luke reported NPSTC has 943 members on Linked In and a presence on Facebook, Yahoo listservs, and Twitter. NPSTC's inaugural Tweet reached 14,110 separate accounts and generated almost 35,000 impressions in 72 hours. The *Why Can't Public Safety Just Use Cell Phones* reached 13,543 accounts and 15, 783 impressions.

The NPSTC Support Office (SO) reviewed the social media policy after the first 30 days of use. The SO has experienced an occasional issue with Linked In postings. The SO has requested Board approval of changes to the social media policy. Some postings require escalation to the Executive Director for approval and/or require consultation with the Chair or Vice Chair. The SO will provide monthly reports. Additionally, the SO deleted "policy modification language" from the social media policy. The SO will increase the frequency of social media output and continue to monitor usage metrics.

**Action Item**: The Governing Board will participate in an electronic vote on the above changes.

**Next Meetings**

The schedule for the next meeting has not been finalized. It will likely occur in September. Notices will be issued as plans are made.

**Adjournment**

Ms. Ward adjourned the meeting.