

**National Public Safety Telecommunications Council (NPSTC)  
Full NPSTC Meeting by Teleconference  
September 15, 2015**

**Welcome and Opening, Paul Patrick, NPSTC 2nd Vice Chair.** Paul Patrick, 2<sup>nd</sup> Vice Chair, National Public Safety Telecommunications Council (NPSTC), called the meeting to order at 12:05 pm ET. Participants were asked to send a record of their attendance to [attend@npstc.org](mailto:attend@npstc.org). He thanked the following Governing Board representatives and alternates for their service to NPSTC and welcomed new representatives to the Governing Board.

- Bill Brownlow, American Association of State Highway and Transportation Officials (AASHTO) has retired; Paul Gilbert will replace him.
- Brent Lee, Association of Public Safety Communications Officials – International (APCO), is stepping down as alternate; Martha Carter will replace him.
- Paul Leary, Forestry Conservation Communications Association (FCCA), is stepping down; Lloyd Mitchell will be new primary.
- New representatives for the National Association of State Foresters (NASF) will be named soon.
- Terry LaValley, National Association of State Technology Directors (NASTD), is stepping down; Jacqueline Miller will replace him.
- George Molnar, National Council of Statewide Interoperability Coordinators (NCSWIC), is stepping down; a new alternate will be named soon.

**Federal Partners Update**

**Department of Homeland Security (DHS), Office for Interoperability and Compatibility, Cuong Luu, Program Manager.** Mr. Luu provided updates on OIC pilot projects with Chicago and Houston. In Chicago, OIC and their center of excellence at Purdue University, are working on emergency management communications, testing video over LTE. The final lessons learned report should be published on the [FirstResponder.gov](http://FirstResponder.gov) website in October 2015. OIC will host a panel on video and applications at the International Association of Chiefs of Police (IACP) in late September. In Houston, OIC is working on a pilot allowing video to be sent via broadcast television spectrum. The final report is also expected in late fall. Mr. Luu thanked Tom Sorley for his assistance with the Houston pilot.

**Public Safety Communications Research (PSCR), Derek Orr, Division Chief.** Mr. Orr provided a report on recent activities at the PSCR program. He said there was an exciting event in the lab last week when the principal investigator was able to implement local control in an LTE network, using an open standards interface. PSCR would like to put this proof of concept demo on video.

He also noted the completion of a roadmap for PSCR spending the first \$100 million of \$300 million in public safety research and development funds, available on October 1, that the National Institute of Standards and Technology will get from AWS (advanced wireless services)-3 auction proceeds. The first

roadmap calls for research on location-based services for public safety entities. A 2-day summit is scheduled for October 21-22 to brainstorm ideas for location-based services projects. PSCR also expects to use some of its grant money to promote prizes and competition to drive innovation.

PSCR's ongoing analytic working group expects to continue its work until early December. This group is open to those interested and has been meeting for 6 weeks. Meetings are held on the phone and the web.

### **FirstNet Nationwide Public Safety Broadband Network (NPSBN) Development**

**Public Safety Advisory Committee (PSAC), Harlin McEwen, Chairman.** Chief McEwen reported the PSAC will hold a webinar on September 22, 2015, with their next face-to-face meeting in Houston in December. The FirstNet Board will meet on December 8, 2015, and on the morning of December 9. Also on December 9, 2015, the PSAC will hold an open meeting from 1 to 5pm CT. The PSAC has three task teams working on Public Safety Grade, Priority and Preemption, and User Equipment/Devices. Much of the work of the task teams is based on work completed by NPSTC's Working Groups. Chief McEwen added that Mr. Mitchell will also replace Paul Leary as a member of the PSAC. Mr. Sorley noted that APCO partnered with NPSTC on site hardening issues in the Public Safety Grade report.

**FirstNet, Kevin McGinnis, FirstNet Public Safety Board Member.** Chief McGinnis said FirstNet's leadership is strong with the addition of new FirstNet Board members and a doubled leadership staff. Mike Poth has become CEO and TJ Kennedy continues as FirstNet President. Work continues to focus on two major thrusts: The RFP which will lead to partnerships to deploy network implementation and consultations with the states. FirstNet has completed 50 consultations, with several more to be completed in September. They will be meeting in Reston, VA, on October 1 and 2, 2015, and holding a State Points of Contact meeting scheduled for October 7 and 8, in Westminster, CO. Board Chair Sue Swenson was recently inducted into the Wireless Hall of Fame.

**Technology and Broadband Discussion, Tom Sorley, Committee Chair; Andy Thiessen, Vice Chair**  
**Current Working Group Status, Tom Sorley.** The Priority and Quality of Service (PQoS) Working Group, has completed and published its report and submitted it to the PSAC. The Local Control Working Group's report is mostly complete and the Broadband Deployable Systems Working Group is ongoing. Broadband Deployables plan to meet face-to-face to review use cases and map them to operational requirements. They will meet for 3 days in Boulder, CO, in September to review and edit a list of over 100 use cases assembled from sources such as LA-RICS [Los Angeles Regional Interoperable Communications System], JerseyNet, and the United Kingdom's LTE project.

NPSTC's broadband work occurs in coordination with other organizations as noted below:

- Applications: APCO
- ANSI Standard on Site Hardening: APCO
- Review of Commercial Cellular, Voice Over LTE, and Push to Talk (PTT): APCO
- Cyber Security: APCO, National Institute of Standards (NIST), FirstNet
- Mobile Communications Unit, Identity Credential and Access Management: PSAC
- Location Based Services, Analytics Research, Land Mobile Radio (LMR) to Long-term Evolution (LTE) transition: PSCR

- Next-Generation 9-1-1 /FirstNet: APCO, National Emergency Number Association (NENA)

**New Initiatives Discussion, Tom Sorley.** As the Working Groups mentioned above complete their tasks, the Broadband and Technology Committee is investigating future directions. From brainstorming discussions, the following broadband topics bear further research:

- Broadband Emerging Technologies
- LMR to LTE Migration Requirements
- 3rd Generation Partnership Project (3GPP) Mission Critical Voice Standards
- Devices/User Equipment
- Sensors and Analytics
- Broadband Messaging and Telephony
- Public Safety Video
- FirstNet Rural Implementation Issues
- FirstNet Status Web Page

Future efforts falling under the general Technology Committee purview include focusing more work on drones and Unmanned Aerial Vehicles (UAVs) and developing a Working Group to consolidate law enforcement, fire, and Emergency Medical Services (EMS) issues and monitor evolving standards and rules on government, commercial and hobby use. John Wright, APCO, said the creation of these new Working Groups is a good idea that he supports.

**Motion and Vote:** Aaron Kennard, National Sheriffs Association (NSA), moved to approve the creation of three new Working Groups: Broadband Emerging Technologies Working Group, LMR to LTE Migration Working Group, and a Drone/UAV Working Group. Chief McEwen seconded. Approved.

**Motion and Vote:** Mr. Wright moved to close out the PQoS Working Group following the completion of its tasks. Paul Szoc, International Municipal Signal Association (IMSA) seconded. Approved.

Mr. Sorley asked the Executive Director to convey NPSTC's official thanks to the Chair, Vice Chairs, and Working Group members for their excellent work.

**Interoperability Discussion, John Lenihan, Interoperability Committee Chair; Don Root, Vice Chair**  
Chief Lenihan reported the FCC has issued a Notice of Proposed Rulemaking (NRPM) for comment on providing railroad police access to public safety channels. The Radio Interoperability Best Practices is continuing to develop best practices. The Common Channel Naming Working Group awaits an American National Standards Institute (ANSI) standard designation through APCO's efforts.

**Emergency Medical Services, Paul Patrick, Chair.** Mr. Patrick provided an update on the EMS's Telemedicine report. The Working Group continues to compile comments from almost 700 respondents, assessing the results by those from urban, suburban, and rural respondents as well as by the respondent categories of EMS, hospital, and physician. The final report is anticipated to be submitted to the Governing Board for approval in the fourth quarter of 2015. During the quarter, the Working Group heard a presentation by Dr. David Persee, Houston Fire Department (HFD) on video consultation

between HFD paramedics and physicians. The group is also coordinating with the Video Technology Advisory Group (VTAG) on the coordination of EMS and video issues.

**700 MHz Deployable Trunked Systems Task Force, David Buchanan, Chair.** Mr. Buchanan reported on this project shared by NPSTC and the National Regional Planning Council (NRPC), which developed a joint task force created at the request of the FCC, as part of the Commission's Report and Order on 700 MHz. The goal was to provide a process for outside resources to easily access deployable trunked radio systems. The final report is complete and ready for review and approval. Mr. Buchanan provided the highlights of the report:

- Six channels are authorized for nationwide interoperable trunked radio systems.
- RPCs must modify their Regional Plan by October 30 to incorporate channels (no requirement to do so; T-Band areas have unique priorities)
- Management of System ID via assignment of a Manufacturing ID and selection of a common Wide Area Communications Network (WACN) ID to be coordinated by the NRPC.
- Management of Subscriber IDs via set of recommended best practices to allow intra-WACN roaming and use of dedicated range of subscriber IDs.
- Program will be administered via NRPC using Computer Assisted Pre-coordination and Resource Database System (CAPRAD) to request, assign, and track assigned System IDs.
- Talk Group Zones, Talk Group Names, and Talk Group IDs identified to promote interoperability.

There are several final issues to be determined including the assignment of Network Access Code (NAC), \$293 and revision of the Talkgroup Zone and Naming Convention. Chief McEwen asked how the issues of the 700 MHz deployable trunked channels and the T-Band are connected. As part of the 700 MHz Order, the FCC included the provision that relocating T-Band incumbents would be given priority to the 700 MHz reserve channels for a period of at least 5 years from an as-yet-to-be-determined date. As an example, LARICS asked that all the reserve channels be allocated to them for general use, meaning those channels could not be used for deployable trunked operations in Region 5; however, in this case, they have developed a compromise plan.

Patti Broderick, Orange County, FL, Sheriffs Department, asked if the 700 MHz procedures planned are similar to the 800 MHz policies and procedures and, additionally asking if there was a dispatch component included in the 700 MHz process. Mr. Buchanan said the elements in the proposed plan are the technical elements that have to be present to make this work but will not likely affect day-to-day use in the dispatch center. Chris Lougee, Telecommunications Industry Association (TIA), said these systems will all be P25 compliant including a P25 console.

**Motion and Vote:** Chief Szoc moved to approve *700 MHz Deployable Trunked Solutions, A Report by NPSTC and the NRPC* with the above recommended edits. Rick Comerford, International Association of Emergency Managers (IAEM), seconded the motion. Approved.

**Motion and Vote:** Chief McGinnis moved to authorize NPSTC's Executive Director to send a letter to the Telecommunications Industry Association (TIA) supporting the NRPC request to be issued appropriate IDs to manage the process; and to authorize the NSPTC Chair or Executive Director to submit a final

report to the FCC for their information, following NRPC approval. Mr. Comerford seconded the motion. Approved.

### **Federal Partners Update Continued**

**Federal Communications Commission (FCC), David Furth, Bureau Chief, and Roberto Mussenden, Attorney–Advisor, Policy and Licensing Division, Public Safety Homeland Security Bureau (PSHSB).** Mr. Furth provided updates on the work of the PSHSB. The most recent item of importance to public safety is the NPRM opening public safety channels to railroad police in response to an earlier NPSTC request. The NPRM will be published in the next week or two in the Federal Register. Mr. Furth thanked NPSTC for being a catalyst in the process.

Issues surrounding the 4.9 GHz band, also generated by a NPSTC request, are another major priority. The Bureau is working on a Further Notice of Proposed Rulemaking (FNPRM), including specific band plan proposals that it will circulate before the end of the year. Mr. Furth said he is looking forward to APCO's upcoming filing on this issue as well.

Regarding 700 MHz narrowband, NPSTC is moving forward to implement the work of last year and regional planning to add the reserve channels is moving forward. Bureau staff are preparing an item to address a Petition for Reconsideration (PFR) filed by TIA asking the FCC to reconsider a provision in a Report and Order (R&O) it released last year concerning its 700 MHz band narrowband rules. In its petition, TIA asked the FCC to amend the Order to reflect that at the time a manufacturer submits a device for type approval it may not yet be feasible or possible to have completed yet all the requirements for Project 25 Compliance Assessment Program (P25 CAP) certification.

The FCC approved vehicular repeaters on 173 MHz band channels also used for telemetry channels, subject to coordination procedures to be developed by the LMCC.

The FCC is working closely with FirstNet on the relocation of the 15 – 700 MHz narrowband incumbent licensees that are operating in FirstNet's broadband spectrum. The licenses implemented their systems prior to FCC bandplan changes in 2007 that created the broadband spectrum. FirstNet is authorizing a grant program to assist that action.

Also, in the next few months, the PSHSB plans to present a draft order concerning 800 MHz NPSPAC emission mask issues.

The primary focus regarding 800 MHz rebanding is on Mexico. Rebanding is substantially complete in the remainder of the U.S. with the exception of Washington State and Mexico. There is a need to move some Mexican incumbents, and the Commission is working with Sprint and now, AT&T, which acquired old 800 MHz spectrum in Mexico.

Also in the 800 MHz band, the Commission sought comment on the creation of 800 MHz interstitial channels. NPSTC filed its support of the Land Mobile Communications Council (LMCC) comments that will be included in the rulemaking record.

Mexico plans to use the Asia Pacific Plan for the 700 MHz band, which is different from that used by the U.S. and Canada. The Bureau will need to protect U.S. spectrum from interference.

The Commission is working with the National Telecommunications Information Administration (NTIA) on streamlining procedures regarding interoperability between federal and non-federal systems. There are some procedures where federal and state entities have agreements, but there is an effort to make this more universal.

Stu Overby, Spectrum Management Committee, Vice Chair, asked about the status of WT Docket No.12-40, regarding commercial cellular system power levels in the 800 MHz band. NPSTC had raised concerns of potential interference to public safety in comments to the rulemaking and filings in response to related waiver requests. NPSTC comments also asked that the FCC condition any waiver grants to require that commercial cellular carriers compensate public safety for any costs incurred in investigating interference, should it occur. Mr. Furth said the PSHSB is coordinating with the Wireless Telecommunications Bureau (WTB) on this as it affects several interests. Mr. Luke congratulated the Commission on the coordination with NTIA. Chief McEwen noted there are only 15 700 MHz incumbent agencies remaining to be transitioned out of the 700 MHz broadband spectrum.

**Spectrum Management Discussion, David Buchanan, Chair; Stu Overby, Vice Chair**

**4.9 National Plan Update, David Buchanan.** NPSTC participated in the development of an APCO 4.9 GHz report on increasing usage of the band. The APCO report will be issued soon. The FCC has indicated that action is likely before the end of 2015 to issue a Further Notice of Proposed Rulemaking (FNPRM).

Mr. Overby reported on NPSTC filings completed this year to date, providing some background on the reasons it was important for public safety to file comments.

Date Filed in 2015	Topic	Type of Filing
Sept. 9	LightSquared	Ex parte re test plan to FCC
Sept. 9	800 MHz band Interstitials	Comments on LMCC protocol
July 29	LightSquared/GPS	Letter to FCC
July 27	FirstNet Draft RFP	Comments to FirstNet
July 13	Interference Dispute Resolution	Comments to FCC
July 6	Rules on Public Safety Airborne Use	Ex Parte to FCC

July 1	AT&T Waiver Request - Kansas	Comments to FCC
July 1	RF Interference from Lighting	Letter/Report to FCC
June 19	Waiver Request-Ultra Wideband	Comments to FCC
June 4	FirstNet Third Notice re PS Definition	Comments to FirstNet
June 8	800 MHz band Interstitials	Ex Parte to FCC
May 28	TIA Recon re P25 CAP at 700 MHz	Ex Parte to FCC
May 11	800 MHz Interstitials	Comments to FCC
April 30	AT&T Waiver Request, Missouri	Comments to FCC
April 28	FirstNet Second Notice re Opt-Out	Comments to FirstNet
February 23	TIA Recon re P25 CAP at 700 MHz	Reply Comments to FCC
February 20	Cellular Service Rules on Power	Reply Comments to FCC
February 17	Public Safety Interoperability	Letter to GAO
February 13	700 MHz Deployable Channels	Letter w/NRPC to FCC
January 5	Frequency Coordinator Certification	Comments to FCC

### **New Business**

Ms. Ward announced the times and dates of NPSTC's future meetings.

- Teleconference: 1 – 3 pm, ET, Tuesday, November 10, 2015
- Teleconference: 1 – 3 pm, ET, Thursday, January 21, 2016
- In-Person Meeting, IWCE: 8:30 am – 5:00 pm, PT, Friday, March 21, 2016

**Adjourn**

Mr. Patrick adjourned the meeting at 2:55 pm ET.