March 2015   **NPSTC Governing Board Brief**

The NPSTC Support Office provides reports to the Department of Homeland Security's Office for Interoperability and Compatibility (OIC) and the Office of Emergency Communications (OEC) highlighting the recent achievements of NPSTC's Committees and Working Groups. This brief is intended to keep the NPSTC Governing Board members up to date on NPSTC's ongoing efforts to improve public safety communications and interoperability.

Interoperability Committee The Interoperability Committee met on March 24 to discuss updates to the Working Groups under its domain including the Border Issues, Radio Interoperability Best Practices, Common Channel Naming, 700 MHz Deployable Trunked Channels, and Emergency Medical Service (EMS) Working Groups. The Committee also discussed the need to continue stressing P25 compliance and educating public safety and critical infrastructure entities on the limitations of non-P25 systems. There was an extended discussion on a federal initiative to create a nationwide UHF and VHF channel pair for interoperability at all levels. The 700 MHz Trunked Channels Task Force, a collaboration between NPSTC and the National Regional Planning Councils (NRPC), has been moved from the Spectrum Committee to the Interoperability Committee as it progresses from frequency identification to operational development.

Radio Interoperability Best Practices Working Group: Radio programming at the scene of a large scale incident is a challenge. NPSTC is developing a set of best practices for radio programming, to include programming guidelines, verification, testing, and training. **UPDATE**: This group met on March 12 and 26. The volunteers managing each of the individual Best Practice statements also met on March 3 to discuss progress and define project completion goals. The Best Practices Working Group is continuing to work on a draft report that will accompany the individual Best Practice statements when they are published. Work continues on the first 2 of the 12 originally defined statements. An altered meeting schedule has been developed to allow simultaneous concentrated efforts by small groups on the report and the remaining 10 Best Practice Statements have been assigned to individual members of the group for initial build-out for presentation to the whole group.

Border Issues Working Group: This group meets on a recurring basis to review cross border public safety communications issues, and monitor and recommend positions on frequency coordination and interoperability with Mexico and Canada. **UPDATE**: The Working Group met on March 3. The final version of the Canadian Interoperability Technology Interest Group (CITIG)-NPSTC Cross Border Communications Report white paper was approved by the NPSTC Governing Board and released for publication. The report was presented at the IWCE Conference and at the SAFECOM meeting during the month of March. The group has identified a target audience which is involved in border affairs and is currently in the process of distributing the report to those governing bodies, organizations and entities. The report is also available for download on the NPSTC website. The report is also scheduled to be presented at the Canada – U.S. (CANUS) Bi-National Communications Interoperability Working Group (CIWG) meeting in May.

Channel Naming Working Group: The Channel Naming Working Group is modifying the existing standard to include new 700 MHz air-to-ground channels. Three projects are underway: Identification of standardized channel names for 700 MHz interoperable air to ground frequencies; identification of channel names for additional 700 MHz interoperability frequencies; and creation of a best practices guide for naming state designated interoperability channels. **UPDATE:** The Common Channel Naming Working Group met on March 5 and 26. They have completed

Phase one of the current project and presented an overview to the NPSTC Governing Board on March 20. The Working Group will submit a formal report to the NPSTC Governing Board in May which will then be routed to the APCO ANSI Standards update process.

Emergency Medical Services (EMS) Working Group: The EMS Working Group meets monthly to review issues impacting public safety communications in the Emergency Medical Services arena. Narrowband voice and broadband data issues are discussed and the group recently completed an EMS Broadband Applications list for the FirstNet Public Safety Advisory Committee (PSAC). **UPDATE**: The EMS Working Group met on March 5 to continue work on the current Video in EMS project. The meeting included a presentation on EMS video in prehospital and disaster situations presented by Texas A&M University's Disaster City project coordinator. The "NPSTC EMS Telemedicine Questionnaire - Assessing the Impact of Prehospital Video" was developed and published on March 26 to gather input from public safety and EMS stakeholders as part of the group's research in this project. This questionnaire has already received more than 150 responses and will close on April 24.

Spectrum Management Committee: The Spectrum Management Committee met on March 13 to review items currently pending with the FCC. The Committee also heard updates from each of its Working Groups. There was discussion and a call for volunteers for the NPSTC Interference Protection Working Group, a new group approved during the NPSTC Governing Board meeting, which will operate under the Spectrum Committee. Initial projects for the group include addressing the LED Lighting Interference Questionnaire results and the FCC Notice of Proposed Rulemaking regarding full power, interstitial 12.5 kHz "offset" channels in the 809-817/854-862 MHz band. During March, the Spectrum Management Committee also focused on the FCC's proposal to close 16 of its Field Offices and on a Second Public Notice issued by FirstNet seeking comments regarding various aspects of the planned public safety broadband network.

700 MHz Deployable Channel Selection Task Group: The FCC encouraged the National Regional Planning Council (NRPC) and NPSTC to identify specific Reserve Channels to support deployable trunked systems on a nationwide basis that can be incorporated into regional plans within 3 months from the publication of the 700 MHz Report and Order in the Federal Register which occurred on December 2, 2014. NPSTC has established a joint Work Group with NRPC to identify eight deployable channels. Other challenges will be to standardize a system ID for deployables and guidance to minimize interference for close spaced incidents. **UPDATE**: This Task Group met on March 12 and 26. The FCC has posted a Public Notice regarding the final channel assignments and Comments are due on April 3, 2015. NPSTC will monitor the Comments that are filed to determine if an additional filing will be required during the Reply Comments period. This Task Group has been moved to the Interoperability Committee as it transitions from frequency identification to operational requirements/guidelines.

RF Interference from Energy-Efficient Lighting: NPSTC was approached by several individuals who had experienced interference with energy-efficient lighting. NPSTC issued the question to the public safety community through the NPSTC Participant's Listserv which resulted in a flurry of responses and also indicated issues with other sources of interference. The FCC has issued some citations. **UPDATE**: On February 13, NPSTC closed an Internet-based questionnaire regarding high energy lighting interference. Approximately 76 public safety agency representatives had responded with approximately 25 providing details on the interference they had experienced. The Spectrum Management Committee has developed a draft report which will be finalized during the month of April in coordination with the Interoperability Committee.

FCC 800 MHz Interstitial NPRM Task Group: On February 9, 2015, the FCC released a Notice of Proposed Rulemaking (NPRM) which proposes to add interstitial channels in a portion of the 800 MHz spectrum. These interstitials would be placed between current 25 kHz channels, with geographic spacing to protect licensees on the current channels from interference. Comments are due May 11, 2015, with Reply Comments due May 26, 2015. **UPDATE:** A Spectrum Management Committee Task Group has been meeting to review the FCC notice and to catalog key issues that may impact public safety operations. The Task Group members expressed initial concerns and recommendations on several non-technical issues and set a path for some technical studies needed on the interference protection issue. The work of this Task Group is being folded into a new Interference Protection Working Group. It was decided to coordinate initial concerns and recommendations with the Land Mobile

Communications Council (LMCC), whose membership includes designated public safety and industrial/business frequency coordinators.

FCC Proposal to Eliminate Field Offices: NPSTC learned of an FCC proposal to eliminate over two-thirds of its field offices as part of its proposed FY2016 budget. Personnel in the field offices investigate interference, including interference to public safety communications. The Spectrum Management Committee drafted some points of concern regarding the proposed field office closures. NPSTC, along with representatives from the broadcast and commercial carrier industries, will be participating in discussions with FCC personnel to express concerns about the proposal.

FirstNet Second Public Notice: On March 9, 2015, the Board of FirstNet approved a Second Public Notice, subsequently published in the Federal Register. Comments on the Second Public Notice are due April 28, 2015. The Spectrum Management Committee reviewed the complex 60-page Second Public Notice, summarized the issues on which comments are being sought, and prepared some initial bullet point recommendations for NPSTC comments. The summary and initial recommendations will be discussed by the NPSTC Executive Committee and the outcome of that discussion will provide guidance on which the Spectrum Management Committee will draft comments for Governing Board approval and submission to FirstNet.

<u>Technology and Broadband Committee</u>: The Technology and Broadband Committee did not meet independently during March, due to scheduling conflicts with the NPSTC Governing Board meeting at IWCE. During that meeting, they presented updates on a number of activities including the status of the following Working Groups, Local Control, Deployable Systems, Radio Programming Compatibility Requirements Working Group, Video Technology Advisory Group, and Priority & Quality of Service.

Priority & Quality of Service (P&QoS) Working Group: The P&QoS is refreshing the 2012 NPSTC Report regarding Priority & QoS issues in public safety LTE and is also examining the impact of technological improvements that have occurred in the past 2 years. The P&QoS consists of nearly 50 volunteers from the first responder and industry community. **UPDATE:** The P&QoS Working Group met during March on the 11 and 25 to finalize work on a presentation for the FirstNet PSAC on priority and preemption issues. Calls were also held on March 5 and 13 to gather input and to review the final slide deck. This presentation was approved at the NPSTC Governing Board meeting held on March 20 at IWCE and is scheduled for presentation to PSAC on April 1. The Working Group has now returned to their original project plan and is updating the 2012 Priority & Quality of Service report.

Local Control Working Group: This Local Control Working Group is refreshing the 2012 NPSTC Local Control Report on public safety issues with LTE deployments. The group consists of over 50 volunteers from the first responder and industry community. **UPDATE:** The Local Control Working Group returned to its normal schedule and met on March 4 and 24 to hear updates from participants who were developing chapter submissions to be incorporated into the master document. The Working Group established a plan for completion of the elements needed to complete the report moving forward.

LTE Deployable Assets Working Group: This LTE Deployable Asset is a joint effort of DHS and Canada's Centre for Security Science to study public safety LTE deployable assets that will operate along jurisdictional boundaries. **UPDATE:** The group met on met on March 10 and 24. Use Case examples created in the previous months were briefly reviewed, along with a preliminary draft of the Operational Requirements Spreadsheet which has been created to accompany the final report. The work flow process for the Operational Requirements Spreadsheet was discussed, including the need for distribution/assignment to individual participants for input. The Working Group leaders are currently working with industry representatives to schedule some presentations to allow public safety personnel to have a better foundation on deployable system capabilities.

LTE Global Standards: The Open Mobile Alliance (OMA) hosted a meeting in Montreal in 2014 to discuss the standards process for voice operations. TETRA Critical Communications Association (TCCA), TCCE, and PSCR were present and agreed that all standards development should be done within 3GPP. OMA will finalize their work and

submit it to 3GPP. There was a 3GPP meeting held in Scotland to organize the process where participants created a new working group, SA6, within 3GPP, which will be the home for public safety applications. 3GPP Release 13 is still focused on mission critical voice PTT and Release 14 will focus on mission critical data, looking at specific services such as mission critical video. Any unfinished work from Release 13 will carry over into Release 14; both intended to be complete by 2016. **UPDATE**: A 3GPP meeting was held in March in Shanghai, China. The new SA6 working group continues to get organized and establish a set of requirements and issues to be addressed at their next meeting. A 3GPP meeting is scheduled to occur in April in San Jose, California.

Radio Programming Compatible Requirements (Radio PCR) Working Group: The Radio PCR Working Group is focused on the impact to public safety agencies caused by the mandatory use of dissimilar radio programming software systems in the P25 environment. The group includes several public safety radio system vendors and public safety stakeholders. The Radio PCR Programming and Management (PAM) Tool has been created to normalize the disparate naming conventions used by each manufacturer. This tool provides information to help agencies program P25 radios from different vendors and will also help with the programming of multi-vendor P25 radios at the scene of a large-scale incident. **UPDATE:** The group met on March 5 to receive an update on revisions to the new version of the PAM tool and to discuss answers to questions posed by DHS S&T. The Group Chairs and selected members met on March 25 to review a draft report addressing a series of questions posed by DHS S&T. Discussion continues regarding available options to automate the PAM tool to better assist the first responder community. Comments/revisions from that discussion have been included in the draft and it is scheduled to be delivered by April 3. The group continues to work on enhancements for the new version's scheduled distribution, including work on upgrades which will allow customer entered data to be easily migrated into subsequent versions of the PAM tool.

VTAG Working Group: The Video Technology Advisory Group meets quarterly and is current reviewing video policy recommendations from the DHS Video Quality in Public Safety (VQiPS) group. A 3GPP proposal to create mission critical video requirements is being monitored.

NG9-1-1/FirstNet Task Group: This Task Group is co-chaired by APCO and the National Emergency Number Association (NENA) and is creating a two-page outreach document which provides a high level overview of the interaction between the new NG9-1-1 network and the FirstNet public safety broadband network. **UPDATE**: A draft document has been created which is being reviewed by the co-chairs and will be distributed to the full Task Group in April.