





## May 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 May 26 to review updates from the Working Groups under its domain including the Border Issues, Radio Interoperability Best Practices, Common Channel Naming, 700 MHz Deployable Trunked Systems, and Emergency Medical Service (EMS). The meeting included discussion on the recent ex parte filing regarding a request by Garmin to allow GPS data bursts over GMRS frequencies. General Mobile Radio Service (GMRS) is a land-mobile FM UHF radio service designed for short-distance two-way communication. This change could negatively impact local search and rescue (SAR) teams who use GMRS to communicate with hikers and other outdoor participants. The Committee is researching this issue and is also engaged in research and discussion with the Bureau of Land Management (BLM) over proposed use of VHF Channel "VMED28." Chris Lewis from BLM is reaching out to federal user agencies in California to better understand their request and will report back to NPSTC. The VMED28 channel is heavily used for ambulance to hospital communications throughout the U.S. There was also discussion on a new proposal to the FCC to allow an implanted medical device that uses a very wide frequency range to scan patients and provide real-time data back to the physician. Discussion centered on the need to determine whether potential interference to public safety agencies in the 700 MHz and 800 MHz band was significant enough for NPSTC to file an objection with the FCC.

**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 May 14. Additionally, several small sub-groups developing the individual Best Practice Statements met. Best Practice #1 and #2 contributions are complete and are being formatted for the report.

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 May 19. The group continues to distribute the Canadian Interoperability Technology Interest Group (CITIG)-NPSTC Cross Border Communications Report to the list of organizations, agencies, governing bodies, and entities originally identified. The group also has requested that recipients forward the report to any interested parties. The report is also available for download on the NPSTC website. The Working Group reviewed recent in-person presentations which were held at the CANUS (Canada/U.S.) Communications Interoperability Working Group Meeting in Washington, D.C. on April 30 and at the SAFECOM meeting in Jacksonville, Florida on May 13. Both presentations were very well received and generated a lot of questions and comments. The Working Group received a presentation by Joe Boucher of Mutualink highlighting technology capabilities for sharing video and data across the U.S./Canadian border. This system is being implemented in the Detroit/Windsor area and will link law enforcement, fire, EMS, and emergency management organizations on both sides of the border. The presentation included information on deployable systems and how those could potentially be used to enhance cross border communications. The group learned that the FCC and Industry Canada are in the process of creating a document which outlines the steps necessary in licensing frequencies across the international border. Work is also in progress to determine additional frequencies that may be available along the U.S./Canada border areas for use by public safety agencies.

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 May 21 and was briefed on the status of the draft APCO ANSI Channel Naming Standard 2015 document. The report was approved by the NPSTC Governing Board in early May and presented to APCO for the vetting process. Discussion during the meeting centered on a channel naming matrix for the newly created 700 MHz Transportable Trunking Systems approved by the FCC in April and the 700 MHz Low Power/Itinerant Channels. An update on a BLM (Bureau of Land Management) proposal to use VMED28 was also discussed. The Working Group identified the need to review the NPSTC Statewide Mutual Aid channel naming best practice; however a decision has not yet been made on moving forward.

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 had rescheduled its May meeting to April 30 due to conflicts with the NPSTC Governing Board Meeting and did not meet as a group in May. A subgroup continues to review the questionnaire results and is developing input for a presentation at the VQiPs Workshop in New Jersey in June. The sub-group is also working on development of the final report.

700 MHz Deployable Trunked Systems 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. An operational set of best practices will be developed. UPDATE: This Task Group met on May 14 and 27. The FCC has approved the final channel assignments as recommended by the NPSTC for nationwide deployable channels. Six channels are now reserved for interoperable trunked system use in the 700 MHz band. Assignments for talk group names and talk group structure have been referred to the Common Channel Naming Working Group. Work continues on creating System ID recommendations and developing a draft of the final report.

Spectrum Management Committee: The Spectrum Management Committee met on May 15 to review recent filings and items currently pending or proposed with the FCC along with updates from the Working Groups under their umbrella. The Committee prepared comments on the FCC's proposed implementation of 800 MHz interstitial channels. The draft comments were provided May 2, 2015, for distribution to the Governing Board. The Governing Board reviewed and approved the comments which were submitted to the FCC on the May 11 due date. The Committee also downloaded and reviewed all comments filed by other parties with the FCC on the 800 MHz interstitial NPRM. Based on this review, NPSTC determined that it was unnecessary to submit NPSTC reply comments. The Committee drafted a NPSTC ex parte letter to the FCC that supports recommendations made by the Land Mobile Communications Council (LMCC) in their reply comments to the FCC. The draft ex parte letter was distributed to the Governing Board on May 28, with an expected filing date of June 8 to the FCC.

The Committee submitted an ex parte letter to FCC reaffirming NPSTC's support for the Project 25 Compliance Assessment Program (P25 CAP) and recommending the FCC take steps needed to ensure P25 700 MHz narrowband equipment meets the P25 CAP prior to deployment by public safety entities. The draft reflects discussions held at the May 6-7 NPSTC Stakeholder Forum in DC. The draft ex parte letter was distributed to the Governing Board on May 20, was subsequently approved, and filed with FCC on May 28.

**Interference Protection Working Group:** This Working Group reviews spectrum policy issues which may present an interference threat to public safety radio and data systems. Initial issues for the group include review of the

recently drafted High Efficiency Lighting Interference Report and examine the FCC Notice of Proposed Rulemaking regarding full power, interstitial 12.5 kHz "offset" channels in the 809-817/854-862 MHz band. **UPDATE**: NPSTC representatives met with the FCC on May 7 regarding radio frequency interference from energy-efficient lighting. Julius Knapp, Chief of the FCC Office of Engineering and Technology, Rashmi Doshi, Chief of the FCC Lab, and Michael Wilhelm, FCC Public Safety and Homeland Security Bureau. NPSTC summarized the issues and results of its draft interference report. During the discussion, NPSTC also learned about issues that need to be resolved in the process of future FCC activity on this topic. FCC staff thanked NPSTC for its work on the energy-efficient lighting interference questionnaire. Both NPSTC and FCC staff agreed to work together going forward. NPSTC is finalizing its report on the issue and related questionnaire for Governing Board approval in June, with follow-up transmittal to the FCC.

<u>FirstNet Third Public Notice</u>: FirstNet released a Third Public Notice seeking additional input on the phrase "public safety entity." HCG drafted comments to the FirstNet Third Notice based on input provided by the Governing Board at the May 6-7 meeting in DC. This draft was distributed to the Governing Board for review and approval on May 27 for subsequent filing with FirstNet by the June 4 due date. HCG also assisted in editing the NPSTC draft comments to reflect additional input from APCO International. APCO International's interpretation follows more legalistic lines of its view of Congress' expectations, whereas the other NPSTC member organizations' consensus view is primarily on the best match to public safety needs for the broadband network, including issues of interoperability and ongoing costs. The Governing Board approved a consensus position on May 29 which will be filed with FirstNet on June 2.

<u>FirstNet Draft RFP:</u> FirstNet released its Draft RFP on April 29 including more than 266 pages of material. FirstNet is seeking feedback from public safety and industry on the draft RFP and associated business plan assumptions. HCG has completed a review of the RFP and identified several areas for review by the NPSTC Executive Committee. A draft response will be created and circulated to the NPSTC Governing Board for review and discussion prior to the July 27 deadline.

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. NPSTC has prepared a report which outlines important interaction and field support by the FCC to assist public safety agencies with interference issues. UPDATE: A presentation from the EB Bureau Chief at the Governing Board meeting was received by attendees who expressed concern about the long-term impact on interference mitigation to public safety systems. There were many new faces at the meeting presentation and the highest number of phone participants ever called in to hear the FCC explain their plan. A dozen questions were collected from the people on the phone and submitted to the EB Chief after the meeting. The NPSTC Chair received a call from the Enforcement Bureau Chief on May 28, informing him that the EB is reworking their initial plan and would keep NPSTC informed as they move through the process.

Technology and Broadband Committee: The Technology and Broadband Committee met on met on May 20 to discuss updates from the groups under its control including the Local Control Working Group, the Deployable Systems Working Group, and the Radio Programming Compatibility Requirements Working Group, the Video Technology Advisory Group, and the Priority and Quality of Service Working Group. The NPSTC representative on the Standards Technical Panel (STP) for Performance of Tactical Operation Video Camera, STP3802, provided a report to the Committee. Additional information was provided regarding the FirstNet Third Public Notice regarding the definition of public safety and an overview of relevant discussion during the NPSTC Governing Board meeting. Members of the group were encouraged to review information on the upcoming VQiPs Conference in New Jersey.

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 on May 13 and 27 to continue work on the original project. Sub-groups who have volunteered to develop individual chapters of the final report also met individually throughout the month. The P&QoS Working Group chair met with the co-chairs of the Deployable Systems Working Group on May 12 and 19 to continue discussions on overlapping areas of concern between their individual projects and to reach a consensus on recommendations. P&QoS sub-groups completed their draft chapters and a combined draft has been distributed to the whole group for review. Work on the refresh of the 2012 P&QoS document is expected to be finished in June for submission to the NPSTC Governing Board in July.

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 met on May 1, 15, and 29. Submissions to the Local Control report revision by individual members were presented and discussed by the group. Comments are currently being reviewed by the whole group and incorporated into the document for publication. The group is about three quarters through that process and expects to reach their goal of presenting the final draft to the NPSTC Governing Board for approval in July 2015. A list of issues in the FirstNet RFP relevant to Local Control was distributed to the group for review on the possible need to address those in the final report.

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 May 12 and 26. An Operational Requirements Spreadsheet has been created to accompany the final report and individuals within the group have adopted known existing documents to review. The goal is to identify existing requirements guidelines for public safety broadband deployable systems. The teams will also be noting requirements relevant to the group that are not included in the current set of use cases already developed. The May 12 meeting was dedicated to working on the spreadsheet and updates on the submissions received from individual members. In the May 26 meeting, presentations were given by Paul Christoforou of Lociva – LTE 4G Mobile Network Solutions, and Joe Boucher of Mutualink – Solution to Inter- and Intra-Agency Collaboration. Both presentations helped educate the public safety members of the Working Group on the array of available deployable technologies. The Working Group co-chairs are also creating a new use case involving LTE and Wi-Fi to capture how responders can access these systems, how the connection is maintained as they enter and exit a building, and how to manage zones of overlap coverage.

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: The Public Safety Applications Working Group SA6 meeting held a meeting on May 25-29 in Japan and discussed a number of issues relating to public safety mission critical voice and mission critical video. Current discussions are centering around how or whether to standardize the IMS platform (IP Multimedia System). Options include a fully standardized IMS platform adopted by all carriers or standardized interfaces to support components of the IMS platform. NPSTC is awaiting the release of meeting documents to determine the status of this project. DHS-OIC has tasked PSCR to watch mission critical video program development which is being handled by the French government. NPSTC is monitoring this project also including a review of various use case which illustrate public safety requirements.

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: This group did not meet during the month on May. The group is awaiting completion of the DHS-OIC work plan which is being developed to address several areas that may be selected for enhancement. Work continues on review of a new version of the PAM Tool including a discussion on the distribution schedule. The Working Group continues to review options on how to manage upgrades which will allow customer-entered data to be easily migrated into subsequent versions of the PAM tool and are developing a script for a training webinar.

**VTAG Working Group:** The Video Technology Advisory Group meets quarterly and did not meet during the month of May. Information was distributed via the Group Yahoo site regarding the upcoming Video Quality in Public Safety (VQiPS) Workshop in New Jersey on June 17 and 18..

**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.