

National Public Safety Telecommunications Council (NPSTC)
Full NPSTC Meeting
March 31, 2017

Welcome and Opening, Doug Aiken, NPSTC Vice Chair. Mr. Aiken called the meeting to order at 8:30 a.m. PDT. Participants on the phone were asked to send a record of their attendance to attend@npstc.org. Following the Governing Board roll call, meeting participants introduced themselves. A quorum was present. Mr. Aiken thanked the American Radio Relay League (ARRL) for their continued assistance in shipping AV equipment.

Technology and Broadband Committee, Tom Sorley, Chair; Andy Thiessen, Vice Chair, and Michael Britt, Vice Chair

3rd Generation Partnership Project (3GPP) Standards, Andy Thiessen, via teleconference. Mr. Thiessen reported Release 14, soon coming to a close, is focused on the common use of mission critical components: Push-to-Talk (PTT), data, and video. Release 15 comprises Phase 1 of the 3GPP initiative to create 5G standards. Some LMR LTE interoperability work is proposed, including how MC-PTT systems are interconnected with LMR systems. LTE direct mode work will not occur in Release 15. This release was designed to develop a smaller set of features to speed the deployment timeline. There will be a meeting of working group SA6 in China on April 3 to finalize study items.

Release 16 will focus on Phase 2 of the 3GPP initiative to create 5G standards and additional study of direct mode architecture options. 3GPP is looking at vehicle to “everything” (V2x). FirstNet will examine whether V2x may work for public safety direct mode by studying gaps between V2x proposals and what first responders need.

The SA6 working group was established by 3GPP to work on mission critical services and was initially dedicated to public safety. SA6 will either transition to include non-mission critical work or it will be phased out, which is unlikely. Expansion of the scope of SA6 work would allow more visibility to commercial operators and may result in commercialization of some public safety services. The U.S. supports this change.

Mr. Sorley asked what work remains to be done in Release 15 and if it will move into Release 16. Mr. Thiessen said 3GPP likes to do its work in phases. The initial work is in the form of a study, which is not yet a normative work item. As discussions begin to identify the normative work items for Release 16, the study item will be raised and considered. Phil Kidner, Tetra Critical Communications Association (TCCA), said he has heard 3GPP is suffering from a lack of resources from principals with communications expertise. He asked if the SA6 proposal might resolve this issue. Mr. Thiessen said the lack of resources is occurring in the CT3 working group. Public safety does not have a delegate in CT3 but has been relying on partners to advance public safety issues.

Public Safety Internet of Things (IoT) Working Group, Barry Fraser, Chair. In January, the Governing Board authorized the creation of a new Working Group to study IoT. Preliminary work has been accomplished in the Broadband Emerging Technologies Working Group, but IoT is a large area of study. Mr. Fraser reported the IoT Working Group has 80 members from public safety, industry, and academia. Its plan is to examine the current state of IoT and the specific issues that impact public safety. They will create outreach materials to educate public safety on IoT, schedule presentations to discuss IoT usage by public safety agencies, examine the role of standardization of the IoT ecosystem, identify issues and concerns for action by the NPSTC Governing Board, and advocate for best practices and technical requirements as appropriate.

The Working Group plans the following presentations in the next few months to familiarize the group with the current state of IoT.

- Presentation by National Telecommunications and Information Administration (NTIA) on the IoT Green Paper (general IoT focus).
- Presentation by NIST on the Global City Team Challenge (local government focus).
- Presentation by DHS S&T on First Responder of the Future (public safety focus).

The Working Group will examine specific issues that impact public safety.

- IoT and sensor support for various public safety responses.
- IoT and sensor networks.
- The role of edge and analytic processing.

Radio PCR Working Group, Dan Robinson, Chair. Mr. Sorley, reporting for Mr. Robinson, provided an update on the PAM Tool. Project 25 standards were developed to allow multiple manufacturers' radios to operate on a single radio system for interoperability. The Radio Programming Compatibility Requirements (PCR) Working Group focused on the incompatibility between manufacturers' programming software and sought to provide a tool for public safety to streamline the programming process between manufacturers' radios. The Working Group, which includes radio system vendors, stakeholders, and first responders, began meeting in 2012 to develop a tool that would benefit public safety and help eliminate human errors during multijurisdictional events. An Excel spreadsheet tool was created to provide a basic level of data exchange between various P25 vendor radios. This spreadsheet assists in the interoperability programming of P25 radios and will help reduce errors during programming.

Version 6 is being finalized. It is compliant with the DHS National Interoperability Field Operations Guide (NIFOG) Version 1.6.1 (April 2016) and spreadsheet functionality has been improved. Relm has been added to the manufacturers' list. The Working Group is coordinating with DHS S&T to have the PAM Tool checked for 508-compliance, at which point it will be hosted on the DHS or SAFECOM website.

The Working Group presented to the Telecommunications Industry Association (TIA) in February and submitted a request for a Technical Bulletin. The Technical Bulletin will create a standardized data exchange format for basic radio programming. The TR-8 Private and Personal Radio Standards Committee is now evaluating the request and comments received from TIA members.

UAS and Robotics Working Group, Michael Britt, Chair. Dr. Britt said the Working Group's first report, *Unmanned Air Systems and Robotics – Guidelines for Creating a UAS Program*, has been completed. It identifies specific components, including costs, policies, and risks that must be evaluated by public safety agencies. Motion and Vote: Jim Goldstein, International Association of Fire Chiefs (IAFC), moved to approve the UAS Working Group report. John McIntosh, Association of Fish and Wildlife Agencies (AFWA), seconded. Approved.

The next report will focus on UAS and Aerial Communications, including how UAS can provide voice and data communications to support an incident. This report will examine both LMR and LTE implementations. In the future the Working Group will continue to examine public safety use and schedule additional education presentations on UAS/Robotics use by public safety and new technologies offered by industry.

Broadband Deployable Systems Working Group, Claudio Lucente, Chair, via teleconference. Mr. Lucente reported the Working Group has completed its mission to research and produce a comprehensive report on the use of Broadband Deployable Systems (BBDS). More than 150 participants have engaged with this effort, which began in August of 2014. The final report is 254 pages and includes significant technical detail and discussion. Technical assistance was provided by Defense Research and Development Canada's Centre for Security Science, Public Safety Communications Research (PSCR), and Simon Fraser University as well as robust industry interaction. The report includes five main components:

- Operational, technical, and background information. This information is contained throughout the report in the various chapters relating to specific BBDS components and issues.
- Public safety technical requirements. Fifty-four technical requirements have been identified, which articulate necessary capabilities of BBDS technology.
- Deployment considerations assume that BBDS can be owned, dispatched, and operated by local/state/provincial/federal agencies, and by the NPSBN contractor. There will be operator training issues for first responders, public safety technicians, and FirstNet contractor teams.
- Technical challenges. A series of technical challenges has been identified that may inhibit the capabilities that are expected from the utilization of BBDS by public safety agencies.
- Conclusions and recommendations. The Working Group identified 18 conclusions, which illustrate public safety's expectations of BBDS technology and 16 action items to articulate a "path forward" for the implementation and use of BBDS.

Upon approval, this report will be transmitted to the FirstNet Public Safety Advisory Committee (PSAC) and will be publicly released by NSPTC. Additional work in this area will be managed by the Broadband Emerging Technologies Working Group and/or the Technology and Broadband Committee. Harlin McEwen, Honorary Chair, International Association of Chiefs of Police (IACP), thanked Mr. Lucente for leading the Working Group in the production of this critical work. Kevin McGinnis, FirstNet, echoed Chief

McEwen's comments saying that FirstNet considers this work to be very valuable. On behalf of the Governing Board, Mr. Aiken thanked Mr. Lucente for this important project accomplished by the U.S. and Canada.

Motion and Vote: Mr. McGinnis, National Association of State Emergency Medical Services Officials (NASEMSO), moved to approve the BBDS report as presented. Lloyd Mitchell, Forestry Conservation Communications Association (FCCA), seconded. Approved.

Motion and Vote: Mr. Mitchell moved to close out the Broadband Deployables Working Group. Paul Fitzgerald, National Sheriffs' Association (NSA), seconded. Approved.

Broadband Emerging Technology Working Group, Kim Coleman Madsen, Chair, via teleconference.

Ms. Coleman Madsen reported on recent activities of the Broadband Emerging Technology Working Group. In February, the group held a panel presentation on LTE small cells and the impact to public safety. Gary Monetti moderated the panel, which involved four industry participants. During the March session, there was a presentation by the Broadband Deployable Systems Working Group on the key findings in its report. In April, the Working Group will tentatively include a presentation by the City of Houston and Harris County on broadband utilization at the Super Bowl.

The Working Group will be reviewing two reports coming from the NPSTC EMS Working Group later in the year: *Rural Implications for EMS Usage of Public Safety Broadband* and a *Broadband EMS Applications Update*.

LMR LTE Integration and Interoperability Working Group, Chris Kindelspire, Chair. There are three focus areas for this Working Group: Validate existing 2012 NPSTC Mission Critical Voice Requirements; examine additional features and capabilities needed for LMR LTE interoperability; and monitor 3GPP standards process regarding LMR LTE Interworking. Eight use cases have been completed, which assess how public safety agencies will communicate during LMR and LTE joint operations.

- Use Case 1: Single Talkgroup PTT Voice Interworking
- Use Case 2: Multiple Interconnected LMR/LTE talkgroups
- Use Case 3: Off Network Communications
- Use Case 4: Consultation/Full Duplex Voice
- Use Case 5: Incident Command Monitor/SCAN
- Use Case 6: Emergency and Unit/Talker ID
- Use Case 7: Cellular Push to Talk/Over the Top Push-to-Talk
- Use Case 8: Encryption

An additional 12 items are under discussion by the Working Group. These include individual/private call, radio monitor, and radio check. The group is researching the issues surrounding these features:

- Which ones are essential to LMR LTE integration? Which ones are optional?
- Which features can be managed through other means? Can a dispatcher walk to another terminal to inhibit a radio?

- Which features are needed on consoles, but not on subscriber radios? Some requirements may be satisfied through the console, which can integrate a variety of technologies, vs. having the feature supported through the interface.

Public Safety Communications Research (PSCR), Dereck Orr, Division Chief, via teleconference. Mr. Orr reported on key PSCR areas. On March 9, PSCR held a mission critical voice roundtable, including industry and public safety participants to begin to define the quality of experience parameters using mission critical voice. The grant program, offered through the Public Safety Innovation Accelerator Program to advance research, development, and testing of key broadband technologies useful to public safety agencies, has had a very high level of participation. Subject areas include mission critical voice, location based service, analytics, and communications demand modeling. PSCR received 175 solicitations with 162 now under review by expert panels. PSCR will begin the awards process in May. They hope to welcome the winners at the June conference in San Antonio, June 12-14, on Riverwalk. Key topics at this conference are mission critical voice, location-based services, FirstNet panel, deployables, user interface and usability, poster demos by awardees, virtual environments, and breakouts sessions.

Video Technology Advisory Group (VTAG) Working Group, John Contestabile, Chair. The VTAG recently reviewed the Video Handbook update. The handbook is to be published as an addendum to Volume I, presently under review by the DHS First Responders Group. VTAG held their annual meeting in Seattle, WA; the next VTAG Meeting will be held on April 26, 2017. VQiPS (Video Quality in Public Safety) is finalizing a new charter and governance document. This is likely to result in an increase in enrollment in VTAG. Commercial operators will be moved to VTAG with public safety representatives on VQiPS. The priority for the remainder of the year is on video analytics redaction and video transport. VQiPS is working with Washington State University on a study of body-worn camera, reviewing police interactions with the public and what circumstances result in good outcomes. The VQiPS is beginning with a literature review to assess existing material. Chief McEwen suggested this is not a task of the VQiPS because it is a policy issue, not a technical issue. Mr. Contestabile said it is a gray area, but VQiPS doesn't view itself as a technical group.

FirstNet NPSBN Development

FirstNet, Kevin McGinnis, FirstNet Public Safety Board Member. Mr. McGinnis reported on the momentous signing between FirstNet and AT&T, the selected builder and operator of the network. To begin work, AT&T has offered public safety from states that opt in the ability to use all of the AT&T bands with priority and preemption until Band 14 is built out in their state. The first three Task Orders have already been generated and transmitted to AT&T. He expects accelerated activity in the next 18 to 24 months as the network is actually built.

FirstNet Public Safety Advisory Committee (PSAC), Harlin McEwen, Committee Chair. Chief McEwen said this has been a wonderful week for public safety. He said he began this journey in 1995, when the effort to acquire more spectrum for public safety began. In 1997, Congress directed the FCC to give public safety the 700 MHz narrowband spectrum, which became half of the spectrum making up the D Block. Chief McEwen said he will step down as the PSAC Chair in a few days. FirstNet Chair, Sue Swenson, will make the announcement of his successor in a few days. He commented on NPSTC's

structure and relationship with the PSAC, saying the mixture of public safety and industry members within NPSTC has facilitated the development of public safety requirements to the PSAC.

Federal Partners Update: Department of Homeland Security (DHS)

Dusty Rhoads, Chief of the Public Safety and National Security Emergency Preparedness

Communications Governance Branch, Office of Emergency Communications (OEC). Mr. Rhoads reported on recent activities at OEC. As reported at earlier meetings, OEC sponsored five states to participate in the National Governors' Association (NGA) workshops. Consistent themes from the workshops included the need to:

- Manage technology sustainability.
- Establish strong governance structures to help with sustainability.
- Elevate issues to the highest level.
- Craft the right message on the technological revolution.

Sampling of best practices from the workshops included early involvement of state legislature, mayors, and other elected officials to build relationships, and messaging public safety communications sustainment as a life-saving, public safety issue.

OEC has established the Southwest Border Communications Working Group (SWBCWG) Ad Hoc Focus Group, which is intended to support the administration's focus on border security. There will be a SWBCWG Meeting on May 23-24, 2017, in Sacramento, CA. On the Northern Border, OEC is beginning CAUSE V Planning. The Canada - United States Communications Interoperability Working Group (CANUS CIWG) meeting will be held June 20-21, 2017, in Buffalo, NY.

OEC will update the 2006 Baseline Survey of Communications Capabilities this year with the Nationwide Communications Baseline Assessment (NCBA). The goal is to conduct a nationwide baseline assessment of the current ecosystem of communications capabilities needed and in use by emergency response providers. There will also be a SAFECOM Nationwide Survey (SNS) this year to assess current status of communications. It will gather the data needed to conduct the NCBA from federal, states, territories, tribal, and local jurisdictions. There will be questions that focus on the nation's current emergency communications capabilities and identifying gaps. The target audience will be Fire and Response, Law Enforcement, Emergency Medical Services, and Public Safety Answering Points. OEC is aiming for a fall release. The survey will be open for 30 days.

NPSTC Organization Update

TETRA and Critical Communications Associations (TCCA), Phil Kidner, Affiliate Representative. Mr. Kidner said TCCA is delighted with the success of FirstNet. He recently attended an excellent FirstNet international forum in Reston, VA, with strong participation from around the world. He said he believes there are challenges in the 3GPP standardization process regarding public safety. Of the 28 countries in Europe, all except 1 are keeping or upgrading their LMR systems. They are beginning to use LTE via commercial networks. He reiterated that LMR is here to stay with the exception of the United Kingdom, which is currently looking to move from LMR to LTE, provided by commercial providers. He expects the U.S. will benefit from lessons learned in the U.K. Mr. Sorley asked how public safety can provide

additional resources to the 3GPP process. Mr. Kidner said 3GPP needs the participation of technical people.

20 Years of Progress Celebration. Ralph Haller, NPSTC Chair, announced NPSTC's anniversary celebration of 20 years. This all-volunteer organization saw a need and came together to support public safety through consensus collaboration, reports, filings, and recommendations. Public safety has advanced significantly in the last 20 years partly due to the hard work of NPSTC volunteers. Mr. Haller asked attendees to stand to signify attendance at a NPSTC meeting in the last 5, 10, 15, and 20 years.

Mr. Haller noted Marilyn Ward initiated early discussions, which included the four frequency coordinators and interested public safety persons. Doug Aiken suggested the name for NPSTC. Chief McEwen and Ms. Ward approached David Boyd, then a director at the National Institute of Justice, who helped to provide support from the Department of Justice, and later from the newly formed Department of Homeland Security through the Office for Interoperability and Compatibility (OIC) and the Office of Emergency Communications (OEC).

In a lighter moment, Mr. Haller introduced Tim Lowenstein, former SAFECOM Vice Chair, who presented the first diploma ever issued by the Never Clueless University to Chief McEwen for having lived a life that was never clueless and for his unparalleled commitment to public safety.

Spectrum Management Committee, Don Root, Chair; Charlie Sasser, Vice Chair

Committee Issue Update, Don Root. Mr. Root reviewed several issues under Committee consideration and study.

700 MHz Public Safety Air-to-Ground (ATG). The FCC issued a Public Notice March 15; comments are due May 1, 2017. There are eight channels previously designated for U.S. air-to-ground use. The current U.S./Canada agreement does not cover ATG operations. The FCC and Canada's Innovation, Science and Economic Development Canada (ISED) are in discussions. There are several options:

- Maintain the same ATG channels in U.S. and Canada. Each country restricted in ATG use.
- Assign different ATG channels in U.S. and Canada. Choice of channels and maximum height in Canada determines impact to U.S.
- Create a mix. Some channels would be the same for interoperability; others distinct.

The Spectrum Management Committee is studying options to draft substantive recommendations.

800 MHz Cellular Service Reform. An FCC decision issued on March 23 changes the rules to enable broadband and permits Power Flux Density (PFD) to use same power across band, whether broadband or narrowband. It conforms 800 MHz cellular technical rules to those in other CMRS bands and retains existing interference resolution rules and procedures. The impact to public safety includes a possible increase in interference. The FCC has called for a public forum among public safety, public safety equipment manufacturers, and commercial carriers to address band coexistence. The FCC has raised the possibility of public safety receiver requirements.

National Highway Traffic Safety Administration (NHTSA) Vehicle-to-Vehicle (V2V) Proposal. Comments are due April 12, 2017. The NPRM proposes to mandate V2V communications for new light vehicles for crash avoidance. It also proposes to standardize the message and format of V2V transmissions. The action would phase in over 4 years following the final rule. The Spectrum Management Committee plans to draft supporting comments for the Governing Board review and approval. The NPRM includes discussion on 5.9 GHz DSRC.

700 MHz Deployable Trunked Channels. NPSTC and the National Regional Planning Council (NRPC) jointly issued a report in October 2015, entitled *700 MHz Nationwide Deployable Trunked Solutions*. Since that time, NRPC has implemented its administration of system IDs, etc., but the Committee feels the need to revise and update this report to address technical standards that are more in depth and provide more information to include the following actions:

- Educate agencies on how to obtain a deployable trunked system ID.
- Determine whether P25 Phase II mode can be used in addition to the P25 Phase I mode.
- Address some concerns in the U.S./Mexico border area regarding potential conflicts on deployable trunked system control channels.
- Promote adoption of 700 MHz deployable trunked channels in Canada.
- Determine whether to develop a sample programming template to use in updating the PAM tool, working with the Technology and Broadband Committee.

Motion and Vote: Mr. McIntosh moved to approve an update to the *700 MHz Nationwide Deployable Trunked Solutions*. Eddie Reyes, IACP, seconded the motion. Approved.

4.9 GHz. The 4.9 GHz NPRM previously in circulation at the FCC was pulled from circulation in January 2017. Mr. Root said some degree of edits or modifications are being made. NPSTC is awaiting FCC adoption and/or release. He expects the NPRM to include some discussion on spectrum sharing. The Committee has held two educational sessions to learn how dynamic spectrum management through a spectrum access system (SAS) is designed and is being tested at 3.5 GHz. The spectrum environment is a key factor in sharing mechanisms.

Federal Communications Commission (FCC) Filings, Charlie Sasser. Mr. Root, reporting for Mr. Sasser, reviewed anticipated filings and completed filings. All filings are available for review on NPSTC's website.

- NPSTC submitted comments regarding Wilson/Cellular Boosters to the FCC on March 24.
- NPSTC submitted comments to the FCC regarding Higher Ground on March 6.
- NPSTC submitted comments to the FCC regarding North Dakota VLAW31 on January 27.
- NPSTC sent a letter to DHS regarding Encryption Capabilities on January 22.

NPSTC expects to submit comments to the FCC in these matters:

- 4.9 GHz NPRM, date TBD.
- Comments are due May 1, 2017, regarding the 700 MHz ATG Border.
- Comments are due April 12, 2017, regarding the V2V Mandate & Standardization to DOT/NHTSA.

Federal Partners Update: Federal Communications Commission (FCC)

David Furth, Deputy Bureau Chief. Mr. Furth congratulated NPSTC on 20 years of achievement. The change in administration at the FCC has been a surprisingly smooth transition. There is a lot of staff continuity in the Bureau. Mr. Furth expects the connection with NPSTC to remain a very positive one. As Ajit Pai has become Chairman, he has needed to review the many issues the Commission is handling. The Chairman is very interested and supportive of public safety issues, exemplified by the response to the AT&T 911 outage recently.

- Mr. Furth said he hopes the 4.9 GHz issue will be re-issued soon and NPSTC's comments will, of course, be part of the record.
- The FCC plans to finalize its rules for conducting interoperability reviews of alternative plans from states well in advance of FirstNet delivering state plans. FirstNet plans to have those state plans ready this fall.
- The Bureau plans to release a public notice soon to announce the streamlined process for state, local, and tribal licensees to access federal interoperability channels. The National Telecommunications and Information Administration (NTIA) drafted a model memorandum of understanding to enable such agreements. A couple of states have already executed them.
- The Bureau will issue a proposal to create interstitial channels in 800 MHz and will also address the 800 MHz cellular power order adopted last month.
- The Bureau is actively working on the border issues, specifically the ATG channel use in Canada and the U.S. In Mexico, the 800 MHz rebanding process has been slow, but they are starting to move licensees on the border.
- In 700 MHz, the issue is the existing protocol between Mexico and the U.S. This agreement was made before the creation of the D Block and FirstNet. Mexico is using the Pan Asian bandplan, which does not coincide well with the U.S. bandplan. Continued discussion will ensue. That band includes FirstNet spectrum, 700 narrowband, and commercial interests.

Charles Cooper, Field Director, Enforcement Bureau. Mr. Cooper discussed the reorganization of the field offices, completed this year. There are three umbrella regions and 13 offices. The FCC is monitoring how well the reorganization is working. The Enforcement Bureau closed two offices in San Juan, Puerto Rico, and Anchorage, Alaska. The presidential transition delayed staffing a bit, but that is now moving forward. About half of public safety interference complaints are from the FAA and the Coast Guard, while the remaining complaints are from local and state municipalities. Mr. Sorley thanked Mr. Cooper for the Field Office provision of technical assistance during the Super Bowl.

Interoperability Committee, John Lenihan, Chair; Jason Matthews, Vice Chair

Chief Lenihan reported on the issues the Committee is monitoring. There are reports of public safety using digital formats that are not P25. The use of a standard format is the basis of interoperability. Digital Mobile Radio (DMR) and TETRA are replacing legacy analog systems.

Also on the Committee's monitoring list, Mr. Matthews reviewed elements of encryption issues. The P25 Compliance Assessment Program (CAP) is working to update its encryption standards. The FCC's AES encryption standard applies to 700 MHz only. The manufacturers are beginning to introduce compatible versions of Motorola's Advance Digital Privacy (ADP) under different names. Mr. Sorley asked whether

NPSTC should issue a document regarding the false security of this 40-bit encryption. Mr. Matthews agreed that such outreach could be valuable.

The Committee is also monitoring state laws on use of handheld devices. Many states are enhancing their laws to prevent mobile device use while driving. The Committee is reviewing the impact to public safety operations. There is an exception for emergency vehicle use, but this would still affect, among others, volunteer firefighters and school bus drivers who use handheld radios.

Emergency Medical Services Working Group, Paul Patrick, Chair. Mr. Patrick said the EMS Working Group has completed a new report on *Public Safety Broadband Data: Implications for Rural EMS*, which highlights unique issues facing rural EMS providers. It addresses three components: time, resources, and incidents, and examines solutions to improve patient care. The report is in final editing. The Working Group is starting to review the *EMS Broadband Public Safety Applications* list that was created in 2012. They will determine the current status of applications and identify new applications that may be needed by EMS.

Radio Interoperability Best Practices Working Group, Mark Schroeder, Chair. Chief Lenihan, reporting for Mr. Schroeder, said the Best Practice Master Report and three Best Practice Statements were approved by the Governing Board on January 24, 2017. These documents have been published and distributed broadly. Best Practices 1, 2, and 3 address the following:

- BP #1: Nationwide IO Channel Naming and Usage.
- BP #2: IO Systems Change Management Practices.
- BP #3: Training and Proficiency in the Management and Usage of IO Equipment and Systems.

Best Practice # 4 on Governance and Interoperability Relationships has been completed and distributed to the Governing Board. Work continues to finalize the next Best Practice document covering Infrastructure Management.

Motion and Vote: Paul Gilbert, American Association of State Highway and Transportation Officials (AASHTO), moved to accept Best Practice #4. Mr. McGinnis seconded. Approved.

Cross Border Working Group, Steve Mallory, Chair. The Working Group is finalizing input on the Cross Border 911 Data Sharing Report. This report provides guidance to PSAPs along the U.S./Canadian border on how to access customer account and location data that resides with a commercial carrier in the other country. It also provides guidance for the management of calls, which did not trigger a 911 call.

The group is reviewing the FCC Public Notice on 700 MHz Air-to-Ground channels, recently heard a presentation from the FCC's Brian Marengo, and is also monitoring efforts in the Spectrum Management Committee. The Working Group will participate with the Canadian Interoperability Technology Interest Group (CITIG) at the upcoming CANUS Communications Interoperability Working Group meeting in Buffalo, NY, with DHS OEC and Public Safety Canada.

Adjourn. Mr. Haller adjourned the meeting at 11:45 a.m. PDT.