

National Public Safety Telecommunications Council (NPSTC)

Meeting by Teleconference

Tuesday, January 9, 2018 | 1:00 p.m. – 3:00 p.m. ET

Call In: (510) 227-1018 | Conference ID: 1927086#

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Welcome and Opening, Ralph Haller, NPSTC Chair. Mr. Haller called the meeting to order at 1:00 p.m. ET. Participants on the phone were asked to send a record of their attendance to Attend@npstc.org. Mr. Haller welcomed Craig Allen, new alternate representative from the International Association of Chiefs of Police (IACP), to NPSTC's Governing Board.

Federal Partners Update

Department of Homeland Security (DHS), Office for Interoperability and Compatibility (OIC), Denis Gusty, Program Manager – CAUSE V, and Sridhar Kowdley, Program Manager – P25 CAP Program Update. CAUSE V: CAUSE is a joint effort between DHS Science & Technology (S&T) and the Defence Research and Development, Canada's Centre for Security Science (DRDC-CSS). The focus is to enhance cross border capabilities, including communications interoperability, shared situational awareness, and mutual aid and information sharing. The project is intended to demonstrate enhanced resilience through improved interoperable shared situational awareness and mutual aid during major events; enhance resilience in border regions by leaving behind working operational interfaces, processes, training, and exercises that will improve shared situational awareness; and execute CAUSE V as a catalyst to build trust relationships in support of the Beyond the Border Action Plan.

CAUSE V focused a Washington State/British Columbia, volcano scenario. The location included three border crossings, the third busiest overall along northern border (Blaine-Surrey), the second busiest truck crossing, a major hub for regional energy transmission, a natural gas pipeline, and hydroelectric facilities feeding a major metro area. The area is a top producer of berries and the site of multiple natural resources, including salmon fisheries and the timber industry as well as significant tourism at the Mr. Baker ski resort.

Experiment objectives included the following:

- Leverage public safety broadband networks to create a common operating picture to enhance decision making across the many agencies involved
- Provide live, or near real-time data and imagery from the field, leveraging robots and human use of Common Operating Picture (COP) applications in the Emergency Operation Centers (EOCs)
- Explore the use of digital volunteers to support emergency operations
- Test mutual aid processes, including moving specialized resources and personnel across the Canada-U.S. border and expediting the pre-vetting process

Three public safety broadband wireless (PSBN) bubbles were established at the two border crossings (Blaine and Sumas). Participants were provided with PSBN-enabled wireless devices to support the

following capabilities: GIS-based situational awareness (real-time), video conferencing/voice/email, information sharing, and Internet of Things (IoT) – sensors, drones, and robots. Participants successfully performed field tests to demonstrate traffic prioritization, load balancing, pre-emption, and network access. Improvements are still needed in order to enable high-bandwidth applications (e.g., streaming high-resolution aerial imagery), as well as stability improvement in the handheld devices.

Twelve missions were conducted during the experiment: Unmanned Aerial Vehicles (UAVs) streamed videos to the EOC over test PSBN and captured imagery for ortho-mosaic maps, and unmanned Submersible Vehicles (UAS) conducted water-based search and rescue missions.

Information from field responders, robots, and digital volunteers was successfully shared over a common platform and visualized by all participants. *Participants suggested more work is still needed to integrate single sign-on capabilities, standardize symbology, and optimize viewers to prevent information overload while still letting them drill down into the information to get the detail needed.*

Participants used the technology available during the experiment to create new analyses and maps and shared these with other players during the experiment over the common platform, which helped provide valuable input to decision makers. *Participants indicated that additional hands-on training was important to fully leverage the technology tested during the experiment.*

Two trained Digital Volunteer/Virtual Operations Support Teams (VOSTs) monitored a simulated social media platform to identify misinformation and other topics. They identified more than 100 messages with mission critical information from over 700 social media posts and shared that information to the EOC using digital forms. An After Action Report and Video will be published in March/April 2018.

P25 CAP: Mr. Kowdley provided an update on the P25 Compliance Assistance Program (CAP). OIC has integrated information on the website to include the Steering Committee for OEC, OIC, and the User Needs Community. OIC has developed a streamlined reporting process that will send test report information. OIC will hold a webinar explaining this in the near future. In its most significant effort to assist the user community, OIC is developing an automated compliance test tool that will provide ISSI and CSSI information to the user. OIC will participate in a TR8 meeting next month. Mr. Kowdley asked users to send information on how they are using ISSI and CSSI, saying many are not fully utilizing the functions of those platforms. He also asked those interested in participating in early testing to contact OIC.

Department of Homeland Security (DHS), Office of Emergency Communications (OEC), Ron Hewitt, Director. Mr. Hewitt reported the SAFECOM survey is open until February 23, urging public safety to take the survey. He thanked NPSTC for providing outreach on the survey. The results will inform the National Emergency Communications Plan (NECP), on track for release next year. OEC is working with FEMA on the FY18 grants, including requirements for full Statewide Interoperability Coordinators (SWIC) and reflecting the NECP priorities. These opportunities will be located up front in this year's guidance.

SAFECOM has created a task force to investigate incident communications within the National Incident Management System (NIMS) framework, including Incident Command System (ICS) changes within the LMR LTE environment. Border efforts continue with a focus on building a communications network along the southern border and enhancing frequency coordination with Canada. OEC continues to work

with the Department of Interior and individual states to sign MOUs with states to allow spectrum sharing with federal spectrum.

Regarding data interoperability, OEC is working to standardize incident patient tracking data with the National Association of State Emergency Medical Services Officials (NASEMSO). With the National Governors' Association (NGA), OEC is conducting four regional workshops this year focused on enhancing governance. In the area of law enforcement communications priority, OEC is working with its provider to ensure *272 works on LTE networks.

FirstNet NPSBN Development

FirstNet, Kevin McGinnis, FirstNet Public Safety Board Member. Chief McGinnis briefed the group on recent FirstNet activities. December 28 marked the close of the opt-in period. All but one territory has opted in. Marianna Islands has until March to opt-in. All the opt-in agencies can utilize priority and preemption offered by AT&T. By March, FirstNet expects to have the network core operational; it will provide full encryption, connect all states and territories to the network, and provide a 24/7 secure ops center. This year FirstNet will create an app store.

Chief McGinnis made the following comments in his role on the Governing Board: "Verizon has made some unfounded claims in the media. It said that it has the only public safety LTE network in the country and this is simply not true. Since the last IWCE meeting when it announced that it would build a public safety core, its position on this has been inconsistent. It has said it could build a core for public safety that could link with the FirstNet core. There is a reason that no national commercial wireless cores are linked with one another. It would create a networking complexity and cybersecurity risk that would jeopardize the NPSBN. Finally, it promised priority and preemption on their network for public safety, but did not avail itself of the opportunity to participate in the RFP for the NPSBN from the beginning. This is too little, too late."

FirstNet Public Safety Advisory Committee (PSAC), Tom Sorley, Committee Chair. The PSAC has held a number of meetings in preparation for the work to come after the opt-in/opt-out process was complete. The PSAC has received updates from AT&T, added new members, and has had two meetings with AT&T on work done on user profiles and public safety grade. The PSAC plans to ramp up team calls focused on those two areas in 2018. It continues to meet with FirstNet to ensure the emphasis is on public safety needs. AT&T and FirstNet briefed the PSAC on the public safety portal and products. He said it is rewarding to see that so much of the advice from the PSAC and NPSTC has been included in the portal and the technology development. Ramping up the tribal consultation process and policy is another focus. Mr. Sorley thanked Chief McGinnis and Paul Patrick, NPSTC Vice Chair, for their assistance. He noted that Todd Early, Early Builders Working Group, briefed the PSAC on the effectiveness of the response to the Houston hurricane.

Mr. Sorley echoed Mr. McGinnis's comments. He said that PSAC members "all basically agreed that it wasn't a good idea" to permit Verizon to connect its public safety core to FirstNet's core. "There has been a lot of things going on in the market about people making claims that really aren't provable or defensible," he said. "We need to make sure we're holding folks accountable for what they say." He noted, "Members of the PSAC discussed the Verizon 'pitches' to stakeholders on connecting the cores and what that cellular provider offered. The consensus of the PSAC was that these claims are not

provable. Public safety needs to hold these companies accountable for their claims."

Both men agreed that Verizon's offering of priority service and preemption was "too little, too late," noting that the carrier did not submit a bid in response to FirstNet's request for proposals (RFP).

Technology and Broadband Committee, Kim Coleman Madsen, Chair; Andy Thiessen, Vice Chair; Dr. Michael Britt, Vice Chair

Public Safety Communications Research (PSCR), Dereck Orr, Acting NIST CTL Lab Director, PSCR Division Chief. Mr. Orr reported on three open grant programs and challenges at PSCR. The VR Navigation Challenge seeks user tools to be used for heads up display and has a \$125,000 grant attached. Judging will occur at the June conference. The UAV Vehicle Payload Challenge is geared to how long aerial platforms will be able to keep a potential LTE network in the air in a public safety incident. Winners will demonstrate their solutions at the June conference. This \$320,000 challenge closes on January 29. Point Cloud City, another grant program, is seeking cities to allow the application and use of lidar maps that will facilitate open source mapping. The grant is worth up to \$500,000 and closes on March 14. PSCR just closed a VR research program in December. PSCR received 50 applications. Awardees will participate at the June conference, to be held June 5-8, in San Diego, CA.

LMR LTE Integration and Interoperability Working Group, Chris Kindelspire, Chair. Mr. Kindelspire reported the LMR LTE Integration and Interoperability Report has been approved by the Governing Board. The report will be transmitted to the FirstNet PSAC for review and to the Telecommunications Industry Association (TIA) for consideration of recommendations. Chapter 5 of the report contained recommendations for additional work by the LMR LTE Integration and Interoperability Working Group, including the following:

- Page 45: PSAP Consoles. *Additional first responder input is needed to help define needed capabilities for these devices (dispatch consoles).* Recommendation: NPSTC produced an early report on LTE console functionality that should be refreshed.
- Page 46: Digital Voice Encryption. *Digital voice encryption is an important component for certain communications occurring exclusively on MCPTT talkgroups. Certain technical, standards, and policy issues must be addressed and more information is needed on how encryption is managed on a nationwide network and to what extent local public safety agencies will have control over management of local encryption keys. Most public safety agencies tightly manage these resources and limit the sharing of encryption keys with other agencies. However, the NPSBN will allow nationwide MCPTT interoperability and thus introduce challenges with the effective implementation of encryption.* Recommendation: NPSTC should task the LMR LTE Integration and Interoperability Working Group to further study this issue.
- Page 46: LTE Talkgroup Management. *Work is needed to assess technical and policy issues regarding the creation and management of LTE talkgroups. As the Working Group was discussing the need to interconnect LMR and LTE talkgroups, it became apparent that the NPSBN will be supporting thousands of LTE talkgroups. Management of LTE talkgroups, including Talkgroup IDs and Talkgroup Aliases, are needed to prevent technical and operational challenges involving duplicate IDs and names.* Recommendation: NPSTC should task the LMR LTE Integration and Interoperability Working Group to further study this issue.

- Page 46: Talkgroup PTT ID. *A nationwide standard is needed to define creation of PTT IDs by public safety agencies. As the Working Group was discussing the need for MCPTT IDs to be exchanged with LMR PTT IDs, it became apparent that a standard will be needed to manage this information. This includes procedures for regionalization of nationwide LTE talkgroup coverage and the establishment of regional (state or multi-county) LTE interoperability talkgroup standards. FirstNet is providing a nationwide interoperable communications network that will allow first responder devices to operate virtually anywhere. The identity of the first responder is a critical safety feature and some form of identification is needed for itinerant users who have traveled outside of their home agency service area.* Recommendation: NPSTC should task the LMR LTE Integration and Interoperability Working Group to further study this issue.

Motion and Vote: Paul Fitzgerald, National Sheriffs Association (NSA), moved the Governing Board approve the Chapter 5 recommendations to allow the LMR LTE Integration and Interoperability Working Group to continue the efforts for the recommendations noted above. Lloyd Mitchell, National Association of State Foresters (NASF), seconded. Approved.

Public Safety Internet of Things (IoT) Working Group, Barry Fraser, Chair. Mr. Fraser reported the Working Group is transitioning from a survey of the PS IoT landscape to development of deliverables. The group is beginning to develop use cases specific to law enforcement, fire, EMS, and PSAP operations and continuing a focused investigation of specific technology solutions and challenges. The group will produce targeted outreach materials for the above groups, highlighting the capabilities and limitations of actionable intelligence.

Unmanned Aircraft Systems (UAS)/Robotics Working Group, Dr. Michael Britt, Chair. Dr. Britt reported the Working Group is monitoring the current activities of the National Council on Public Safety UAS, first responder use of UAS devices, and the regulatory landscape changes within the FAA.

Dr. Britt noted the use of UAS by criminals and drug gangs. In Riverside, California, “Police say they really haven’t seen anything like this before. An alleged drug operation is using a drone to deliver narcotics to customers waiting in a church parking lot. After the drugs were delivered, neighbors say, the customers would drive by the home and throw money onto the front lawn.” Police were alerted after neighbors started seeing the drone and arrested two people on felony drug charges.

The Working Group is finalizing the UAS Aerial Communications Platform report.

Broadband Emerging Technologies Working Group, Dr. Michael Britt. Dr. Britt, reporting for Ms. Coleman Madsen, said the Working Group is continuing to monitor FirstNet activities and the proposed FirstNet device and application ecosystem. The January 24 Working Group meeting will feature a Town Hall presentation to discuss public safety agency use of social media during disaster events, including outbound social media messaging to the public, intelligence gathering from crowd source social media data, and responses to inbound social media messages requesting emergency response. The Working Group will host PIOs from several agencies, who will address their response to these events: Hurricane Harvey, Hurricane Irma, California wildland fires, and the Pulse nightclub shooting.

Radio Programming Compatibility Requirements (Radio PCR) Working Group, Dan Robinson, Chair. Dr. Britt, reporting for Mr. Robinson, said the Working Group is monitoring TIA efforts to create a

standardized process and schema for radio manufacturers to export and import basic radio programming data. The Working Group will be reviewing Version 7 of the PAM Tool later this month and will provide updates regarding industry consolidation. Some vendors have merged and/or changed product lines. The January meeting of the Radio PCR Working Group was changed to Thursday, January 25, 2018, at 2:00 p.m. ET.

Video Technology Advisory Working Group, John Contestabile, Chair. Dr. Britt, reporting for Mr. Contestabile, reported the VTAG is working with the DHS S&T VQIPS as DHS plans its annual conference, tentatively scheduled for May 9-10 in Albuquerque, New Mexico. Full details will be announced soon. The quarterly Working Group meeting will occur on Thursday, January 25, 2018, at 11:00 a.m. ET and will feature a presentation on video analytics and redaction.

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

Committee Issue Update, Don Root. Mr. Root discussed the December 1, FCC Public Notice on the Technical Advisory Committee (TAC) Spectrum Policy Recommendations. Comments are due January 31; replies are due February 15. If ultimately adopted, the TAC recommendations would cause major changes in spectrum policy, including greater involvement of receiver standards. The Committee will be discussing its response on the January 12 Committee call.

FCC Forum on Cellular Interference, Jason Matthews and Dave Buchanan, NPSTC Delegates. The Committee is following up on the 800 MHz Cellular Power Level Decision. The FCC issued a decision March 24, 2017, allowing cellular systems to use power flux density and higher power. There was a Multi-Stakeholder Forum held November 6, 2017. Dave Buchanan and Jason Matthews participated in the Forum for NPSTC and the Association of Public-Safety Communications Officials (APCO) International.

Mr. Buchanan said the question being asked about this issue is: Why should public safety and public safety vendors bear this burden? He provided a brief history of the 800 rebanding issue. With the exception of the Mexican border, rebanding has been completed and has succeeded. Interference complaints have dropped noticeably. In the 10-40 Rulemaking, the FCC addressed power limits for cellular providers. Cellular started out as analog, moved into the broader band, then into GSM and EVDO technology, and 3G digital data and voice. 4G, introduced with LTE, uses much wider bandwidth. Cellular operators are now trying to transition to LTE, which causes public safety issues as public safety spectrum is located adjacent to the cellular band. The public safety signal into the receiver is lower, but there is also a much higher power broadband that goes to the receiver. Some receivers can resist the higher power levels better than others. The FCC has raised the power levels allowed by the cellular providers.

Mr. Buchanan said there is not much choice as to what public safety can do regarding this potential interference, but he said it would not surprise him if the interference problems go up again as the cellular providers build out LTE. Mr. Buchanan made the following recommendations to NPSTC and APCO:

- Make a formal request to TIA to include the means to measure the strong signal intermodulation, so public safety can evaluate how radios will act in a strong signal environment.

- Develop informational material. Public safety needs to report to the CTIA website, which activates the mandate that cellular providers assist public safety.
- Develop a task force for optimal system design to make it more resilient to interference to the limits of the public safety coverage area.

Motorola has some models with a feature to its radios, allowing switchable attenuation, but the radio arrives from the factory with this feature turned off. This information needs to be communicated to public safety users. He noted that even though cellular providers have permission to go higher, they have instructed their engineers to stay at the lower levels and not go to the maximum power.

He advised public safety to monitor the TAC and its findings. He said he expected the impact of the TAC findings will also occur in microwave and the 6 GHz band.

Mr. Haller asked if Mr. Root would like Governing Board action on these recommendations. Mr. Root said the Committee will develop a report to be presented at IWCE in March.

Federal Communications Commission (FCC) Filings, Don Root. Mr. Root provided the following list of comments and letters to date.

Date Filed	Topic	Type of Filing
11/09/17	WRC-19 Draft Positions	Comments
10/30/17	TAC Inquiry on Technical Rules	Comments
10/2/17	3.7-24 GHz Flexible Use NOI	Comments
7/31/17	Blue Alerts	Comments
7/31/17	Arizona Pub Svc Co (Utility)	Comments
6/03/17	WRC-19/LMCC 460-470 MHz	Letter, FCC
5/24/17	Broadband Healthcare	Comments, FCC
5/01/17	700 MHz A-G Border	Comments, FCC
4/12/17	V2V Mandate & Standardization	Comments, DOT/NHTSA
3/24/17	Wilson/Cellular Boosters	Comments, FCC
3/06/17	Higher Ground	Comments, FCC

1/27/17	North Dakota on-VLAW 31	Comments, FCC
1/22/17	P25 Encryption Capabilities	Letter, DHS/OIC

Federal Partners Update

Federal Communications Commission (FCC), Michael Wilhelm, Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau. Mr. Wilhelm reported on the latest actions at the FCC. The Commission released a Public Notice on December 7, with comments due January 22 and replies on February 21. The PN seeks comment on all of the response efforts made during the hurricane season. The FCC was active in providing fuel, generators, and power for systems. The Commission approved 200 Special Temporary Authority (STAs) requests and performed some on-the-fly frequency coordination. It provided access to the Universal Service Fund to rebuild infrastructure. Mr. Wilhelm asked if NPSTC participants could provide firsthand accounts for how the FCC can best assist communities in situations like these hurricanes.

Regarding FirstNet opt-ins, the Commission expects the Marianna Islands to opt-in. The 700 MHz Narrowbanding Report and Order are circulating. It addresses the P25 CAP, vehicular repeaters, and some other interoperability issues. Mr. Wilhelm called the NPSTC comments very valuable.

Regarding 800 rebanding, the rebanding anti-windfall threshold was reached. Rebanding expenses did not exceed the value of the 4.9 GHz spectrum. The ultimate expenditure was \$3.5 billion. About 100 stations remain to be rebanded in Mexico. The Commission is enjoying good cooperation from Mexico and cellular providers.

The FCC has issued a number of waivers to account for special circumstances, several of which allow public safety to partner with electric utilities. This has occurred primarily with statewide systems and is a win-win for both entities. The Commission has also received waiver requests for sharing in the intercategory rules. The 800 MHz interstitial channels proposal is still an active issue being worked. If it is adopted, it will provide access to many more 800 channels.

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

Common Channel Naming Working Group, Don Root, Chair. The Working Group is examining how Nationwide LTE Interoperable Talkgroups may function and what type of naming standard may be needed, considering questions such as: What is the LTE equivalent of 8CALL90 or UCALL40? And what is the LTE equivalent of a nationwide simplex channel?

The first meeting, held in December, examined the current use of LMR nationwide interoperable channels. The Working Group is reviewing barriers and challenges with current use. Does a first responder know if the specific LMR resource is active in an area, and if it is monitored by a dispatch center? The January meeting will explore how LTE talkgroups are configured and options for nationwide use.

Emergency Medical Services Working Group, Paul Patrick, Chair. Mr. Patrick reported the Working Group is continuing to monitor new technology and its impact on first responders. It published an outreach paper on sensor-based medical alarms and their impact to EMS agencies. The Working Group is following the deployment of a mobile tele-stroke unit in the LA area that is used to diagnose and treat stroke patients. The technology has a broadband data connection to the hospital that can support CT scan imaging. The group is also updating the EMS Broadband Applications list created for FirstNet in 2014.

Radio Interoperability Best Practices Working Group, Mark Schroeder, Chair. Mr. Schroeder presented three Best Practice Statements for publication previously approved by the Governing Board in November.

- *Best Practice #8 – Radio Device Management*
- *Best Practice #9 – Deployment for Interoperability Resources*
- *Best Practice #10 – Communications Span of Control*

The final three Best Practice Statements were distributed to the Governing Board last week in advance of this meeting. The last set of reports distributed the 13 reports of the Radio Interoperability Best Practices Statements, which completes the initial set of recommendations by the Working Group.

Motion and Vote: Anton Damm, Forestry Conservation Communications Association (FCCA), moved that the Governing Board approve the three final Best Practice Statements: *Best Practice #11 – Managing Encryption for Interoperability Resources*; *Best Practice #12 – Channel Assignment in High Risk Environments*; and *Best Practice #13 – Interoperability Resource Information – Storage and Access*. Doug Aiken, NPSTC Vice Chair, seconded the motion. Approved.

These 14 documents will be combined and published as a single document.

- *Radio Interoperability Best Practices Master Report*
- *BP #1 – Nationwide Interoperability Channel Naming and Usage*
- *BP #2 – Interoperability Systems Change Management Practices*
- *BP #3 – Training and Proficiency in the Management and Usage of Interoperability Equipment and Systems*
- *BP #4 – Interoperability Relationships*
- *BP #5 – Infrastructure Management*
- *BP #6 – Channel Assignment Based on Infrastructure Coverage*
- *BP #7 – Interoperability Resources – After Action Reviews*
- *BP #8 – Radio Device Management*
- *BP #9 – Deployment for Interoperability Resources*
- *BP #10 – Communications Span of Control*
- *BP #11 – Managing Encryption for Interoperability Resources*
- *BP #12 – Channel Assignment in High Risk Environments*
- *BP #13 – Interoperability Resource Information – Storage and Access*

Motion and Vote: Mr. Mitchell made a motion to move the Working Group into a monitoring status to be managed in the Interoperability Committee. John McIntosh, Association of Fish and Wildlife Agencies (AFWA), seconded the motion. Approved.

The Working Group will reactivate as necessary to address radio interoperability best practice issues. Mr. Schroder offered special thanks to all of the Working Group participants who contributed to this process, including researching AAR documents, finding expert recommendations, and helping develop these statements. Mr. Haller thanked Mr. Schroeder and the Working Group for this excellent effort. Chief Lenihan added his thanks to support staff, Barry Luke and Dawn Ober, for putting complex ideas into clear recommendations.

Cross Border Working Group, Steve Mallory, Chair. Reporting for Mr. Mallory, Chief Lenihan said the Working Group has been monitoring the outcome of recent CAUSE V cross border interoperability experiments sponsored by DHS OIC and OEC and the Canadian government. In February, the Working Group will hear a report on the recent meeting of the Western Border Interoperability Working Group (WBIWG) Meeting held at the Coutts/Sweetgrass Border Crossing between Montana and Alberta.

The group is continuing to compile a cross border communications channel inventory across the northern border areas and is awaiting feedback from the cellular carriers on the 9-1-1 data sharing document. The deadline was extended until February when additional smaller carriers along the border were added to the review list.

The Working Group is coordinating with the Spectrum Management Committee to monitor FCC actions regarding changes proposed by Canada to the 700 MHz Air to Ground frequencies and the availability of additional VHF interoperability channels at the U.S./Canadian border.

Upcoming Meetings

NPSTC will meet in person on Friday, March 9, 2018, in Orlando, FL, at IWCE.

Adjournment. Sheriff Fitzgerald moved to adjourn the meeting; Marilyn Ward, Executive Director, NPSTC seconded. The meeting adjourned at 3:00 p.m. ET.