



NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

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**National Public Safety Telecommunications Council Meeting  
International Wireless Communications Expo (IWCE), Las Vegas, Nevada  
March 15, 2013**

The National Public Safety Telecommunications Council (NPSTC) held Committee meetings on March 15, 2013, at the International Wireless Communications Expo (IWCE), in Las Vegas, NV.

**Call to Order and Roll Call, Ralph Haller, Chair, NPSTC**

Ralph Haller, Chair, called the meeting to order on March 15, 2013, at 8:00 am. Mr. Haller called the roll, establishing a quorum was present. Mr. Haller reminded attendees to choose their nominees for NPSTC's public safety communications awards, including the DeMello Award, the Chairman's Award, DJ Atkinson Technical Award, and Leadership and Participants Awards, to be awarded at the May meeting.

**Technology Committee, Tom Sorley, Chair**

**Broadband Working Group (BBWG), Andy Thiessen, Chair**

Mr. Thiessen reported on the expected next phase. The BBWG presented the 700 MHz Broadband Launch Statement of Requirements (SoR) to the FirstNet Authority via their Public Safety Advisory Committee (PSAC) in December 2012. As the SoR was being developed, the BBWG was engaged in parallel efforts to finalize the work of the Security Task Group, led by Mark Adams, and the Mission Critical Voice (MCV) Task Group, led by Steve Devine. The Security Task Group is completing an interim security report comprised of use cases describing the breadth and depth of security required. The MCV Task Group is focusing on three different aspects of MCV over LTE--defining Push to Talk (PTT) over LTE; determining what would be required to implement PTT capability over LTE;; and ensuring that operational needs are met.

The BBWG will work with the FirstNet Board to determine what it wants to pursue next: quantifying the launch requirements, beginning work on phase two requirements, or qualitative requirements. Industry is waiting for guidance on what the next big push will be. Chief Harlin McEwen, International Association of Chiefs of Police (IACP), and Chair, PSAC, said the PSAC will meet for 2 days in Boulder in June to cover these issues. The PSAC will encourage FirstNet to respond to those questions.

For the next draft of the 700 MHz Statement of Requirements (SoR) for the Nationwide Public Safety Broadband Network (NPSBN), the BBWG will seek industry representatives to help develop technical requirements and first responders to ensure public safety needs are met. Mr. Thiessen added that the BBWG had a request from the console vendor community asking for console requirements. He did not know what the console requirements were and this was out of the scope of the SoR; however, it made the BBWG realize it needed to address issues such as command and control.

There has been a lot of discussion about when mission critical voice (MCV) will be available on FirstNet's network. The BBWG is considering creating a task group to give public safety a tool to communicate

with policymakers and Congress about the political and financial realities of when MCV will be possible from a realistic, not just technical, perspective. Steve Devine and Jim Hasset will lead that effort.

Last year TETRA and NPSTC signed a Memorandum of Understanding (MoU) to work together on creating a global set of requirements for broadband. The BBWG will work to harmonize requirements and develop a process to do that whenever the requirements are initiated. Mr. Sorley added that if the public safety community is successful in achieving this globalization of requirements and, ultimately standards, public safety will be able to take advantage of the worldwide market.

Pam Montanari, Interoperability Committee, Vice Chair, asked how volunteers who have not participated before can be part of phase two. Mr. Thiessen said to forward the names of potential volunteers to him. When the BBWG is ready to initiate the next SoR effort, they will also issue a release seeking volunteers.

PSCR will host a Public Safety Broadband Stakeholder Conference on June 4-6, 2013. This 3-day meeting will bring together representatives from public safety, state, local, and federal government, FirstNet, industry, and academia. This meeting is open to all, but there is a registration fee. Mr. Thiessen said many from FirstNet board will attend, and he is assembling an international panel with excellent attendance expected.

#### **Radio Programming Compatibility Requirements (PCR) Working Group, Pam Montanari**

Ms. Montanari said the Radio PCR Working Group, created to help the development of middleware to export radio programming seamlessly from one P25 radio to another, held a meeting the previous day to complete their spreadsheet of desired programming information. The Working Group is focusing on device providers because this is a device issue. They have software information from 14 manufacturers. Three vendors have provided the completed spreadsheet information so far. Radio PCR would like to develop an import/export excel file from the spreadsheet information. Mr. Sorley said Vertex, ICOM, EF Johnson, and Tait have promised information.

#### **Video Technology Advisory Working Group, Tom Sorley reporting for John Contestabile**

Mr. Sorley reported the Video Quality in Public Safety (VQiPS) document expected to be published in January should be available in the very near future. The VQiPS Workshop to be held in Houston, TX, in March, was cancelled due to sequestration.

#### **Monitoring Topics**

P25 CAP (Project 25 Compliance Assessment Program) is still waiting for the lab work to be completed. Mr. Thiessen said release of this information is imminent. The next step will be to broadcast the lab information.

Intrinsically Safe (IS) Radio: Paul Szoc, Chair, IS Working Group reported there is a National Fire Protection Association (NFPA) meeting to be held in Florida this March to discuss the whole portable safety standard. FM Approvals report they have updated their standard but it does not seem they have changed the disputed power level. Bob Speidel, Telecommunications Industry Association (TIA), said TIA

has published documents and is waiting for the review board to approve. The TIA documents were published in August 2012.

**Presentation: NextNAV LLC, Gary Parsons, Chief Executive Officer**

At NPSTC's September 2012 meeting, Ganesh Pattabiraman, President of Network Operations and Deployment, NEXTNAV, discussed mobile wireless location technology including the background, benefits and challenges in different technologies, and potential solutions to the challenges of indoor location for wireless devices.

The FCC formed the Communications Security, Reliability and Interoperability Council (CSRIC) to improve reliability for 911. CSRIC3, Working Group 3, was tasked to examine and make recommendations on indoor location accuracy standards. The group included regulatory, public safety, and industry participation. CSRIC3, WG3 has recommended that the FCC utilize the information gathered from a "real world" test program to do an analysis of current and next generation technology, evaluate the performance of devices in various scenarios, and inform a future rulemaking process to introduce indoor location accuracy standards. The NextNAV testbed, which ran in the San Francisco Bay Area through the Fourth Quarter of 2012, is complete.

Mr. Parsons, Chief Executive Officer, provided an update on the completion of NextNAV's testbed for CSRIC. The testbed measured performance of all technologies in a blind-to-vendors basis. The FCC will publish a report on Monday, March 18, 2013, and is looking at the results of the testbed, implications for public safety, and potential for a rulemaking. The FCC will assemble another 2-year study group to answer follow-on questions, CSRIC 4, and possibly repeat the testbed based on the new information acquired in the first study.

Standards are mandated by the FCC for 911 location, but they are very broad and only apply to outdoors. GPS chips in phones are helping to solve the outdoor location problem but the same capability needs to be possible indoors, not only for 911 to find the caller, but to identify an officer down or enhance firefighter security. E911 is now dominated by wireless calling, with 70 percent of calls from wireless today and an increasing number from indoors. Almost 55 percent of renters do not have a landline. Mr. Parsons said the challenge in indoor location is pinpointing location within 5 to 50 meters. [150 meters is several city blocks.] Public safety needs the smallest search ring possible; they need building address and floor. Anything greater than 50 meters is too general.

The San Francisco environment provided several challenging environments to be tested: a very dense morphology, an old urban morphology, and new urban, suburban, and rural morphologies. Technologies were tested against different construction types and the above morphologies. Seven were tested; four eventually went through; and three vendors reported results. In addition to horizontal accuracy, NextNAV added vertical accuracy and a specification for how the technology worked in that regard.

Discussion: Mr. Sorley asked about the potential device cost that includes vertical accuracy. For vertical accuracy, Mr. Parsons said, NextNAV uses a \$.75 chip that measures barometric pressure that is added

to the GPS chip that uses triangulation to determine horizontal location. Weather changes can cause the results from the barometric chip to fluctuate. An additional sensor calculates for the weather factor.

Lance Valcour, Canadian Interoperability Technology Interest Group (CITIG), said the Canadian Association of Chiefs of Police (CACP) and Fire sees this location technology as a priority. He asked if the Department of Homeland Security's (DHS) Science and Technology Directorate (S&T) is involved. He also noted Worcester Polytechnic Institute holds an annual event on this issue, and encouraged NextNAV to coordinate with DHS, Canada's Industry Canada (IC), the FCC, and Worcester.

Peter Reed, FirstNet consultant, recommended working with Mr. Thiessen and the BBWG to add location accuracy as an in-building requirement of the public safety network in the next phase of the SoR.

**Spectrum Management Committee, David Buchanan, Chair, and Stu Overby, Vice Chair  
T-Band Working Group, Stu Overby and Joe Ross, Co-Chairs**

Mr. Overby reported on the work of the T-Band Working Group. The T-Band frequencies in 470-512 MHz are authorized for use in 11 metro markets by both public safety and industrial/business users. Public safety has built extensive communications networks on the T-Band, which provides frequencies in metro areas where spectrum demand is the greatest. An unexpected provision of Public Law 112-96, enacted February 22, 2012 that created the NPSBN, also requires the FCC to recover and auction the public safety T-Band spectrum.

Unless the law is changed, the FCC must start to auction the spectrum no later than February 2021 and to relocate public safety from the band within 2 years after the auction concludes. There is a provision for cost reimbursement from the auction proceeds to agencies that have to relocate, but the legislation does not address a new spectrum home or commit to a specific reimbursement amount. The law does not address industrial/business users in the T-Band. The FCC cannot change the requirement, only Congress can amend the law. On February 11, 2013, the FCC issued a Public Notice (PN) seeking input on how to comply with the legislation. Comments are due May 13, 2013; and Replies on June 11, 2013.

The T-Band Working Group formed in June 2012. Approximately 60 members joined and participated in conference calls every 2 weeks.

NPSTC's T-Band Report addresses the overall impact to public safety and clarifies T-Band usage, with an FCC license analysis and questionnaire for public safety agencies. The report further analyzes potential spectrum alternatives; estimates the cost of relocation, if spectrum were available; and quantifies likely auction revenue, compared to relocation cost.

Metro Area	TV Channels Designated for Land Mobile Use	Nominal Amount of Spectrum in MHz (includes both Public Safety and Industrial/Business)	% of Active Land Mobile Channels Licensed to Public Safety. [% Varies Across TV Channels]
Boston	14, 16	12	64%, 87%
Chicago	14, 15	12	40%, 56%
Dallas	16	6	20%
Houston	17	6	3%
Los Angeles	14,15,16,20	24	93%, 100%, 100%, 83%
Miami	14	6	17%
New York	14,15,16	18	69%, 70%, 100%
Philadelphia	19,20	12	82%, 78%
Pittsburgh	14,18	12	41%, 100%
San Francisco	16,17	12	37%, 35%
Washington, DC	17,18	12	28%, 21%

The Association of Public Safety Communications Officials – International (APCO) and the Public Safety Frequency Coordination (PSCA) provided an alternative spectrum band analysis in VHF and UHF, and other working group members analyzed the 800 MHz and 700 MHz bands (see report) for the top 11 markets.

Mr. Ross discussed the analysis of the ULS database to determine a typical licensee in the T-Band. The vast majority of licensees are small but there are also very large systems in the T-Band as well. In addition, the WG issued a questionnaire to gather further information. The responses represented about 25 percent of the entire user market.

The questionnaire asked why jurisdictions chose the T-Band. Over 90 percent use the T-Band daily, over 70 percent use it for interoperability, and almost 40 percent patch it to other bands. Over 80 percent said there would be a negative impact on interoperability if the T-Band were not available. Over 50 percent said they do not have a viable alternative to the T-Band, citing no spectrum available to move their operations. A little over 15 percent had an alternative plan but no funding to move.

**Cost Issues:** The estimated cost of moving from the T-Band is \$5.9 billion. The Working Group devoted a great deal of time to determine the cost of relocating, relying on the ULS database as a reference, and estimating the number of items that would need to be replaced, using the fully loaded cost [item plus

Region	Total Cost (M)
Boston	\$ 831.0
Chicago	\$ 759.7
Dallas	\$ 82.8
Houston	\$ 11.4
Los Angeles	\$ 857.3
Miami	\$ 49.4
New York	\$ 1,428.4
Philadelphia	\$ 1,151.6
Pittsburgh	\$ 203.4
San Francisco	\$ 355.1
Washington, DC	\$ 209.5
<b>Total</b>	<b>\$ 5,939.7</b>

installation, management, engineering, etc]. The Working Group assumed systems would move to 700 MHz. Depending on the number of sites in a system, the Working Group made an assumption on how many more sites the system would need.

Another factor to consider: Under the 800 MHz rebanding the vast majority of equipment could be reconfigured, but to move to 700 MHz from the T-Band, new repeaters, mobiles, portables antennas, etc would be needed, as well as some additional backhaul. Licensees may also require the operation of parallel systems

during the transition. The Working Group further broke down the capital costs into categories including systems, site-related costs, repeaters, subscribers, planning, and taxes, which applies in the case of some jurisdictions. There are also operational costs that are not captured in this model.

Joe Hanna, Directions, asked if there was any adjustment for what will not be spent due to the T-Band application freeze. For example, Chief Dowd in New York City was going to spend \$500,000 on narrowbanding that they will not be spending now because the FCC has waived the narrowbanding

requirement in the T-Band. Chief McEwen said the conclusions of the report find that moving out of the T-Band is not feasible so the ancillary issues like the costs saved by not narrowbanding are not ultimately relevant.

Mr. Reed asked if the Working Group had reached out to FirstNet. Mr. Ross said the Working Group did not reach out to FirstNet. They had calls relating to the feasibility of transition and did not see any solution in broadband to the T-Band problem. Public safety cannot plan on a potential eventuality. Mr. Overby said this issue had been discussed extensively on the Working Group calls and public safety representatives believe there is a high risk in the assumption that the NPSBN system will be built and provide reliable MCV by the time the T-Band transition occurs.

Mr. Ross explained the Working Group took all the ULS information such as what each licensee has in terms of base stations, channels, sites, etc. for each metro. They created formulas to determine how much each licensee would need, on an individual basis, for transition, using the same cost assumption for all the metro areas. They assume it probably will be more expensive in certain areas such as LA, but certainly not less. Dave Buchanan, Spectrum Management Committee, Chair, said an effort was made to assign reasonable, conservative costs. The probability is that it will be more expensive, but the Working Group wanted to keep this realistic. Mr. Ross said one impact is the use of multi-band radio (MBR). If an agency has interoperability partners who remain at UHF and the agency goes to 700 MHz, both agencies would need MBR for interoperability. However, to be conservative, the Working Group estimated a reasonably low number of MBRs needed. Barry Luke, Support Office, said all of the cost modeling information and formulas, many of which are broken down to line-item costs, are included in the appendix of the report.

**Key Conclusions:** Given the lack of alternative spectrum, cost of relocation, major disruption to vital public safety services and likelihood that the spectrum auction would not even cover relocation costs, NPSTC believes implementing the T-Band legislation is not feasible, provides no public interest benefit, and that the matter should be re-visited by Congress.

**Spectrum:** Analysis of public safety spectrum bands shows that at least 5 of the 11 metro areas do not have sufficient spectrum in any band to relocate their existing T-Band operations. These areas are the Boston, Chicago, Los Angeles, New York, and Philadelphia metros. The adequacy of relocation spectrum in three additional areas, San Francisco, Washington, D.C., and Pittsburgh is marginal. It is not yet viable to rely on the planned nationwide public safety broadband network as a likely option to support mission critical voice operations that would be displaced from the T-Band.

**Cost:** The cost to move public safety operations in the 11 metro areas to new frequencies is estimated to be in excess of \$5.9 billion. If TV and industrial/business were also required to move, that would require additional relocation funding, resulting in the net auction revenue being a greater negative value.

**Public Gain:** It appears the intent of the law may be to gain additional broadband spectrum for public use. Extensive TV broadcast operations throughout the country and industrial/business systems in 11 metro markets will remain on T-Band channels even if public safety systems are relocated out of the

band. These circumstances are unlikely to produce the auction revenue needed for public safety relocation or result in additional broadband spectrum for public use.

**Motion and Vote:** Chief Szoc moved to adopt and publish the T-Band Report; Lloyd Mitchell, Forestry Conservation Communications Association (FCCA), seconded. Unanimously approved.

#### **4.9 GHz Working Group, Dave Buchanan, Chair**

Mr. Buchanan reported that NPSTC filed comments to the FCC recommending the Commission support NPSTC's development of a national plan in collaboration with the established frequency advisory committees and regional planning committees (RPCs). Periodically the Committee has a status call with the FCC to check the status of the 700 MHz clean-up items, other topics, and this particular plan. They last held a status call on March 8. While there is no official FCC blessing to develop a national plan at this time, the Committee recommends beginning planning work with a target timeline of 3 months to develop a draft plan, with up to 2 months for stakeholder and Governing Board review/approval. The planning effort is extremely important for this effort.

**Discussion:** The Working Group wants to research how to work with current implementations: mesh, hot spots, air-to-ground, etc. Mr. Reed said FirstNet as a federal agency would not be able to use 4.9 GHz. Mr. Buchanan agreed but said the FCC specifically asked how 4.9 GHz could be used with FirstNet for existing LMR backhaul.

**Motion and Vote:** Chief McEwen moved the 4.9 GHz Working Group begin developing a 4.9 GHz national plan. Jim Goldstein, International Association of Fire Chiefs (IAFC), seconded. Unanimously approved.

#### **700 MHz State Channel Construction Requirements, Stu Overby**

In 2000, the FCC designated 2.4 megahertz of the 700 MHz narrowband spectrum for statewide geographic licensing. Each State received an FCC license to use this spectrum throughout its jurisdiction, subject to state-to-state coordination at the state borders. State licensees are required to comply with build-out deadlines, certifying that they are providing substantial service to a certain portion of the state's population or territory within a certain period of time. "Substantial service" is defined as the construction and operation of a system that provides "service that is sound, favorable and substantially above a level of mediocre service which just might minimally warrant renewal." Public safety licensees have not been subject to this type of build-out requirement before.

NPSTC has developed suggested procedures to be used by state license holders to demonstrate substantial service when filing a build-out notification certification. The documents include a bulleted list of steps to take in demonstrating substantial service, a draft letter to send to the FCC, FAQs, and a spreadsheet example of state license construction detail to help the states comply with this FCC requirement and avoid any loss of needed spectrum. The NPSTC Board previously approved outreach documents on this topic and the FCC provided informal feedback and clarification. The finalized documents are being published this week, and will be posted to the NPSTC website. NPSTC will also proactively distribute documents to states with a cover letter. Mark Grubb, David Warner, and Billy Carter volunteered to help with distribution logistics.

### **700 MHz Filings, Stu Overby**

Mr. Overby reported NPSTC filed comments February 11, 2013, regarding the LA-RICS [Los Angeles Regional Interoperable Communications System Joint Powers Authority] waiver request to use 700 MHz reserve channels. The Committee anticipates the following additional filings this year:

- Response to FCC T-band Public Notice: Comments due May 13; Replies due June 11
- Additional information on 4.9 GHz
- Response to Notice of Proposed Rulemaking (NPRM) on multiple 700 MHz narrowband clean-up issues: (Date TBD)
- Possible follow-up comments to FCC on Government Accounting Office (GAO) receiver standards and spectrum sharing

The Commission is expected to release a Rulemaking on the clean-up items in 700 MHz in the very near future.

Discussion: Mr. Overby reported that NPSTC participated in a recent GAO report on receiver standards. Fred Frantz, WinnF, said the Wireless Innovation Forum (WinnF) is also doing work on receiver standards. For more information contact Mr. Frantz. Bill Brownlow, American Association of State Highway and Transportation Officials (AASHTO), said AASHTO would like the Committee to look into generating a response to the NPRM opening the 5.9 GHz band for use by U-NII devices. This could have an impact on public safety. An NRPM has been released by the FCC but not yet published in the Federal Register.

### **Monitoring Topics, Dave Buchanan**

FCC Disposition of 800 MHz Mexican Border Plan: A rulemaking decision is expected soon.

700 MHz broadband in the Mexican Border Area: The Mexican government is looking at using the Asia/Pacific Plan for the 700 MHz band, which is totally incompatible with the American plan. Their transmitter outputs would be the receiver inputs on the American side. Treaties are in place to protect the U.S., but ongoing discussions continue.

FCC Decisions on VHF/UHF Licensees Who Did Not Narrowband: The FCC recently issued guidance on this issue.

Potential FCC VHF & UHF Spectrum Audit: Rural areas heavily use VHF spectrum. The Spectrum Roadmap, Public Safety Wireless Advisory Committee (PSWAC) Follow On, calls for this audit.

700 MHz Relocation of Certain Narrowband Public Safety LMR Deployments: Under the old bandplan, in what is now broadband spectrum licensed to FirstNet, there are still agencies operating who need to be relocated. A key issue is funding for the relocation, which FCC needs to help address.

Special Use Cases: Air-to-Ground Video and Bomb Robots issues will be folded into the 4.9 GHz effort.



900 MHz Paging: Still seeking a few more channels from the FCC. Although this is an older technology, it continues to be valuable to public safety.

**Interoperability Committee, John Powell, Chair, and Pam Montanari, Vice Chair**

**Priority Telecommunications Services: Public Safety Applications, Joanne Sechrest, Office of Emergency Communications (OEC), Department of Homeland Security (DHS)**

Ms. Sechrest reported on tools public safety can use when communicating in an emergency. GETS or the Government Emergency Telecommunications Service is a calling card that can be used from virtually any telephone to provide priority for official calls, and WPS, or Wireless Priority Service is an add-on feature to existing cellular service subscribed on a per-cell phone basis to provide priority for official calls made from cell phones. Federal, state, local, and tribal government, and critical infrastructure industry organizations are eligible to use GETS and WPS.

There are a number of applications. For example, callouts to off-duty personnel, other agencies, critical resource partners, and the public, or anyone whom you need to reach via their landline, cell, or satellite phone. The GETS call can be made from a dispatch landline to off-duty responder's home or cell phone. WPS can be used for special event incident coordination when local calls are congested during county fairs, sporting events, parades, festivals, concerts, etc. GETS/WPS can be used to access teleconferencing bridges, status recordings, fax, and voice to maintain leadership communications during an emergency. It is important to make test calls to become familiar with the program and to incorporate usage into exercises. The priority restoration service places GETS registered circuits first for repairs. Chris Essid, Deputy Director, Office of Emergency Communications (OEC), DHS, said OEC welcomes the assistance of NPSTC and its member organizations in education and outreach.

Discussion: Mr. Buchanan said this network can implement a priority structure for public safety up front. Chief McEwen said FirstNet is discussing these types of things. A question to be answered is should FirstNet include its own telephony as part of the network or rely on commercial services, and should GETS be part of the service at least initially? Michael Britt, State of Arizona, said FirstNet should incorporate the governance and lessons learned from GETS into the NPSBN. Mr. Mitchell asked about fees. GETS is free. There is a very reasonable fee for WPS available via a POC in the county. Chief McEwen suggested sharing this important information with Communications Unit Leader (COML) training classes.

**Border Issues Working Group, Terry La Valley, Chair**

Mr. LaValley updated the group on the latest work on the border. There are two areas of focus: spectrum usage and spectrum management. Regarding spectrum usage, the two countries currently share radios and do work arounds. A 1951 treaty laid the groundwork for some changes.

Spectrum Usage (1951 treaty): In 1951 through an exchange of notes *the "CONVENTION BETWEEN CANADA AND THE UNITED STATES OF AMERICA RELATING TO THE OPERATION BY CITIZENS OF EITHER COUNTRY OF CERTAIN RADIO EQUIPMENT OR STATIONS IN THE OTHER COUNTRY."*

Article II of the 1951 Treaty said, *“The respective countries agree that mobile radio stations properly licensed in one country are permitted to be operated in the territory of the other country, (a) Mobile radio units installed in public safety vehicles.”*

The Border Working Group is working with the FCC to promote an exchange of letters with the Canadian Government because this approach is faster than an actual treaty modification. The “exchange of letters” would modify the terms of the Treaty to include portable radio usage to be allowed (mobile only currently) and incorporate the following three operating conditions into the document:

- Operation of mobile and/or portable radio transceivers on the other side of the border in the “direct,” i.e., non-repeater mode.
- Use of base station repeaters on the other side of the border to interoperate with public safety officials in the other country.
- Use of base station repeaters on the other side of the border to interoperate with public safety officials in their own country.

Technical agreements between the U.S. and Canada usually begin under the auspices of the Radio Technical Liaison Committee (RTLCL). A “draft” document was sent to Canada by the FCC for review and is currently being reviewed by Industry Canada’s (IC) legal department. Formal discussions were scheduled to take place at the RTLCL meeting last month in Ottawa, but were postponed due to the legal review process. Once IC (technical) has the document, formal discussions will occur at the next RTLCL meeting (August /September).

Spectrum Management (1962 treaty): The licensing of U.S. radio stations using frequencies above 30 MHz and located *along the U.S./Canada border* is governed by coordination procedures set forth in a 1962 Treaty with Canada titled “Coordination and Use of Radio Frequencies Above 30 MHz” or the “Above 30 MHz Agreement” or “Agreement.” It defines the coordination zones along the borders of approximately 120 km or 75 miles and the frequencies to be coordinated. It sets the framework for the exchange of technical information and on-air-testing, and facilitates the exchange of frequency data to promote compatible operation and minimize interference.

There are challenges to frequency coordination: Both the FCC and IC use different engineering programs to determine interference. Both nations use different policies to govern narrowbanding. Harmful interference is defined differently between the two nations, and licensing databases may not contain all records.

IC has agreed to a spectrum audit on the border and the FCC is also looking at a similar audit.

Next steps: CITIG and NPSTC will work together to develop a series of informational documents intended for the first responder community. These documents will contain information on spectrum usage policies and treaties within the international boundaries, coordination processes, and contact information and web sites pertaining to spectrum management. Regional meetings are set to occur over the next 6 months in Canada.

**Emilie Brown, Senior Policy Advisor, Public Safety Canada (PSC)**

Ms. Brown spoke on the Beyond the Border Initiative and Action Plan released by the leaders of the U.S. and Canada. Their 5-year work plan includes eight goals--one of the most important is reaching out to stakeholders. In support of that, PSC wants to reach out to CITIG and NPSTC to collaborate on border initiatives. Another goal for PSC is 700 MHz harmonization, with working groups on both sides of the border to ensure interoperability across the border. Ms. Brown said the integration of the U.S. IPAWS [Integrated Public Alert and Warning System] with the Canadian Multi-Agency Situational Awareness System (MASAS) successfully validated the first goal with a cross border demonstration in March.

Chief McEwen said public safety is concerned that the cross border working groups are made up of federal stakeholders when local public safety involvement is clearly needed. Ms. Brown agreed, saying PSC also hopes to integrate local to local stakeholder involvement as well. Mr. Valcour said CITIG has been discussing these issue for 5 years without PSC Canada participation, but in the last 2 years, PSC has not only been actively involved, but is leading the effort.

**700 MHz Cleanup NPRM Update, Roberto Mussenden, Attorney-Advisor, Policy and Licensing Division, Public Safety and Homeland Security Bureau (PSHSB), FCC**

Mr. Mussenden said the 700 MHz NPRM is “on the 8<sup>th</sup> floor,” receiving final edits. The engineers working on it say the clean-up suggestions provide a lot of clarity. Mr. Furth [via teleconference] said the NPRM deals with some issues raised in 2005 and the issues filed by NPSTC in 2008 or 2009. Some issues will be handled by an Order, and some with a new Notice of Proposed Rulemaking to deal with some recent issues such as the narrowbanding deadline in 2016. The Commission has already granted one 700 MHz narrowbanding deadline waiver to Louisiana. Another issue is the proposal to use the interoperability channels for air-to-ground. The Commission has issued a waiver to the State of Maryland to use the interoperability frequencies in this manner. There is a pending request from Los Angeles Regional Interoperable Communications (LA-RICS) to use the reserve channels, and a host of other technical issues to be cleaned up in order to be consistent with existing standards and technology. Mr. Furth said to expect a Notice soon, but could not say when exactly. Anything raised in the NPSTC Petition For Rulemaking is part of this Notice, he added.

Mr. Powell said there have been a number of requests to name/apply standards to itinerant low power channels. As the Notice is published, NPSTC’s Common Channel Naming Working Group and the standard will need to be reopened for revision, public comment, and standardization.

**Motion and Vote:** Mr. Brownlow moved to reopen the Common Channel Naming Working Group. John McIntosh, Association of Fish and Wildlife Agencies (AFWA), seconded the motion. Unanimously approved.

**Emerging Digital Radio Technologies (EDRT) White Paper, John Powell**

Mr. Powell reported that the scope of the EDRT white paper has been expanded to include issues of interoperability with the railroads. The FCC has discussed extending eligibility to railroad law enforcement. Working through IACP’s Railroad Section, there have been suggestions of changing the rules to allow access. Chief McEwen said it must be clear that it is not the railroad, but the railroad police only.

**John Price, First Responder Group (FRG), Program Manager, DHS, Office for Interoperability and Compatibility (OIC)**

Reporting for Dr. David Boyd, Mr. Price provided an OIC update. He said *Radio Resource* magazine recently released an article on the work of VQIPS, noting that the quarterly VQIPS meeting to have been held in March had been postponed due to sequestration. The Virtual USA team participated in a cross border demonstration in which the FRG collaborated with Canada's first responders on enhancing situational awareness. On March 27, FRG will be hosting a capacity-building seminar on using tools to assess a jurisdiction's needs, and, on March 28, OIC will participate in a national information-sharing consortium, hosted by the Red Cross.

OIC is working with the National Aeronautics and Space Administration's Jet Propulsion Laboratory to develop a tool for urban search and rescue teams to use microwave radar to find human heartbeats and to differentiate the human heart from an animal's. This tool will also be extremely useful for law enforcement to determine the presence of dangerous individuals in a building before entering to search. OIC is also "looking at a hybrid public safety microphone," which could be used to allow current users of land mobile radio services to leverage broadband networks on existing devices. OIC is also working on a virtual gun, a sensor based-system for testing ammunition and firearms.

**Chris Essid, Deputy Director, DHS, Office of Emergency Communications (OEC)**

Mr. Essid congratulated NPSTC on the development of the NPSBN Launch Requirements. OEC and the National Communications System (NCS) have merged recently and are working to move forward as a new collaboration, with an expanded mission. This enables OEC to ensure end-to-end services to local first responders. OEC continues to work on standards development and new modeling capabilities for their technical assistance (TA) program. With stakeholder involvement from SAFECOM and NPSTC, OEC is focused on broadband outreach, LMR planning, NG 911, outreach and education, and multi-state emergency preparedness.

OEC is establishing a formal relationship with FirstNet. The Emergency Communications Preparedness Center (ECPC) has been working on several deliverables, a broadband user database and a listing of federal expertise for planning and development to be leveraged with FirstNet as appropriate. The ECPC meeting in April will add SAFECOM and the PSAC Chair to serve on the ECPC.

OEC continues to work with the Statewide Interoperability Coordinators (SWICs) for the first major update to Statewide Communications Interoperability Plans (SCIPs) since 2007. SCIP workshops have been held in Maryland, Virginia, West Virginia, and Nevada. Feedback from these workshops helps OEC to target assistance. Next workshops will be held in Oregon, Idaho, and Nebraska. Twenty-eight states have requested assistance, and OEC has met 76 percent of these requests; 40 percent are for support in broadband. There are also six TA engagements underway with the tribal nations. This spring, OEC plans to add the Coast Guard to San Diego first responders in a joint exercise.

SAFECOM grant guidance was released this month on federal policies, programs, and technical standards and includes new material on priorities, broadband, narrowbanding, new requirements under preparedness, and technical standards and resources for grantees on communications projects. The National Emergency Communications Plan (NECP) is being updated to reflect the current state of

communications in the U.S. and will engage with stakeholders from SAFECOM, NPSTC, and the NCSWICs as the NECP is updated.

**FCC Update, David Furth, Deputy Chief, PSHSB, and Roberto Mussenden**

Mr. Furth said, as noted above, the FCC issued a NPRM in the 700 MHz docket relating to issues in the FirstNet responsibilities and updating the rules to reflect legislation. The NPRM asks for feedback on technical service rules applying to the FirstNet spectrum, power and emission limits; specific tasks related to the FCC's licensing responsibilities; narrowband incumbents left over from the prior band plan; and the interface between the Commission and the National Telecommunications and Information Administration (NTIA) on FirstNet.

Mr. Furth said the NPSTC T-Band report just issued is good timing for the FCC, which recently issued questions on implementing statutory requirements of the T-Band legislation, including requests for information on incumbents and much of the information contained in the NPSTC T-Band Report. The Commission appreciates the work of NPSTC's T-Band Working Group in developing this valuable report. Mr. Furth said the Commission expects to move on the 4.9 GHz Notice in the next couple of months. They have input from NPSTC, which is also much appreciated.

Next week the FCC will issue a Notice on 911 reliability, flowing out of systemic 911 failures identified in the Derecho Report. The Commission submitted a report on 911 to Congress with recommendations on establishing an appropriate legal and regulatory framework for NG911 and a proceeding on location accuracy.

Mr. Buchanan reported that NPSTC has approved the establishment of a 4.9 GHz Working Group to develop a 4.9 GHz national plan. NPSTC may do an ex parte filing to make this part of the record. Mr. Furth said this is appreciated and there is much important work to be done.

Chief McEwen asked Mr. Furth about plans for the relocation of 700 narrowband incumbents. Chief McEwen has been working with Lance Johnson at NTIA on this issue and how to minimize the cost of relocation of 700 MHz vehicular repeaters. They previously developed a plan to use the 700 MHz internal guardband for this move, but never put the plan before the Commission. He will suggest that NPSTC submit this proposed plan to the FCC to add to the record. The FCC would have to establish a procedure. Chief McEwen will discuss how to proceed with FirstNet before bringing it to NPSTC's Governing Board.

Mr. Mussenden discussed the status of narrowbanding and the Report and Order (R&O) on Mexico. As of this month, there are still 18,000 wideband call signs, but this is an encouraging number, which has been reduced from 80,000 initially. The Commission issued a PN yesterday with guidance to enable agencies to file changes very easily. The Enforcement Bureau will follow up on interference complaints. They have processed over 200 waiver requests, affecting 4,000 call signs. Many were requesting extensions of a matter of months or less than a year. Attrition has helped; 3,300 call signs cancelled this year. The Commission will alert the frequency coordination community of the waiver recipients and their call signs via the Land Mobile Communications Council (LMCC). The Commission will shortly

release the Report & Order on 800 MHz Rebanding in the Mexican border with a timeline. The clock begins 60 days after publication in the Federal Register.

### **Administrative Session**

#### **Social Media Task Force, Lance Valcour, Chair, and Barry Luke, Support Staff**

Mr. Valcour thanked the Social Media Task Force for the development of a social media strategy, policy, and procedures. Mr. Luke said the Task Force created a set of recommendations based on industry best practices, provided a draft policy for use of social media for Governing Board approval, and provided a recommended implementation framework. The core elements of the policy include: high level policy guidance to staff, an accountability and management process, and identification of roles and responsibilities. The policy is supported with an internal staff procedure manual that defines NPSTC's social media networks, user, names and passwords, and step-by-step instructions for each network. The policy also provides guidance on how to respond to inquiries, comments, spam, etc.

NPSTC's electronic outreach includes the website, with 182,000 hits in February; Constant Contact, used to issue press releases, outreach, and questionnaires to the public safety community; and Yahoo listservs, used to provide information and updates to NPSTC's Committees and Working Groups, with 1,780 members. New to NPSTC are Linked-In, with an existing NPSTC page, created by NPSTC participant, Don Root, in 2008, with 811 followers and growing daily. NPSTC has established a Facebook page and a presence on Twitter as well.

Mr. Valcour said the key message for the Board is that social media is social; it involves an interactive discussion. He said this will not be a time drain on NPSTC's support staff, but will spread NPSTC's outreach message exponentially to public safety.

Paul Leary, National Association of Foresters (NASF), said there appears to be no oversight by the Executive Committee over the Executive Director. He had a concern with the policy wording of "periodic" review and would like more regular, established review. Ms. Ward said staff will be monitoring all social media outlets. Mr. Luke said the policy is tailored as if it were a Working Group reporting back to the Board. Mr. Haller asked if the concern was whether or not a procedure to address a problem that might arise existed. Chief Leary said he was not proposing a change, just stating a concern.

**Motion and Vote:** Kevin McGinnis, National Association of State Emergency Medical Services Officials (NASEMSO), moved to adopt the social media policy. Chief Szoc seconded. Approved. NASF abstained.

Mr. Haller sent NPSTC's inaugural Tweet, [#NPSTC](#) launches social media program 2day at [#IWCE](#), follow us 4 information on [#PublicSafety](#) communications & trends [\\_npstc.org](#). Using Tweet Reach, NPSTC determined this initial message was re-tweeted with 14,110 accounts reached and 34,892 impressions over just 3 days.

#### **DeMello Award, Marilyn Ward**

Ms. Ward asked the Board to consider changes in the DeMello Award process. Regretfully, the cost of paying for travel for the DeMello Award winner and spouse to the RCA dinner has become onerous. She proposed a change in the process that would present NPSTC public safety awards at the spring meeting.

The DeMello Award recipient can choose to receive the award at the fall RCA dinner instead of the spring NPSTC meeting. Travel costs to the RCA dinner would be borne by the award recipient.

The Board reluctantly approved the change, recognizing the reality of the economic situation. NPSTC will still ask for contributions to pay for the actual awards to be presented in the spring. NPSTC will be adding a special Marconi award this year that will recognize the exceptional work of a volunteer or volunteers. This award will not be annual but presented in special circumstances that warrant such recognition.

**Motion and Vote:** Chief Leary moved to present NPSTC public safety awards in the spring. Chief McGinnis seconded. Unanimously approved.

#### **Invitational Travel, Ms. Ward**

Ms. Ward reported that Jeanne Elder, NPSTC's support, has moved on to different employment. She asked that recognition of her excellent support to the NPSTC Governing Board for the last 8 years be part of the official record. Mr. Valcour suggested the Governing Board extend formal recognition and thanks. Sandy Dawkins will be assuming Ms. Elder's role in travel assistance. The invitational travel procedure is described on the NPSTC website. NPSTC plans tentatively to meet on the afternoon of May 14 and a full day on May 15 in Washington, D.C

**Motion and Vote:** Chief McEwen moved the Governing Board officially recognize Jeanne Elder for her 8 years of service; Mr. Mitchell seconded. Unanimously approved.

#### **Executive Session**

The Governing Board met in closed Executive Session.

#### **Adjournment**

The meeting was adjourned at 2:00 pm.