





Current Events in the Public Safety Community

IWCE 2013

Wednesday, March 13, 2013 | 11:00 AM

Moderator – Ralph Haller

Panelists – Marilyn Ward, David Buchanan, Harlin McEwen, Tom Sorley and Stu Overby







Welcome Ralph Haller, NPSTC Chairman





NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

NPSTC Member Organizations



Member Organizations

- American Association of State Highway
 Transportation Officials
- American Radio Relay League
- Association of Fish and Wildlife Agencies
- Association of Public-Safety Communications
 Officials International
- Forestry Conservation Communications
 Association
- International Association of Chiefs of Police
- International Association of Emergency Managers
- International Association of Fire Chiefs
- International Municipal Signal Association
- National Association of State Chief Information Officers
- National Association of State Emergency Medical Services Officials
- National Association of State Foresters
- National Association of State
 Telecommunications Directors
- National Emergency Number Association
- National Sheriffs' Association

Associate Member Organizations

- Alliance for Telecommunications Industry Solutions
- Canadian Interoperability Technology Interest Group
- National Council of Statewide Interoperability Coordinators
- Telecommunications Industry Association
- Utilities Telecom Council

Liaison Organizations

- Federal Communications Commission
- Federal Emergency Management Agency
- Federal Partnership for Interoperable Communications
- National Telecommunications and Information Administration
- Office for Interoperability & Compatibility
- Office of Emergency Communications
- Public Safety Communication Europe
- SAFECOM
- U.S. Department of Justice
- U.S. Department of the Interior

NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

How is NPSTC organized?



- Governing Board
 - Representatives from each of its member organizations
- Executive Committee
 - Chair, Vice Chair, Committee Chairs and Vice Chairs
- Technical Committees
 - Interoperability Committee
 - Spectrum Management Committee
 - Technology Committee







NPSTC Discusses Hot Topics Marilyn Ward, NPSTC Executive Director



Social Media



- NPSTC Board will approve the launch of the Social Media Program on Friday.
- You will be able to follow NPSTC issues on:
 - Web Site
 - Twitter
 - Facebook
 - LinkedIn



- National Interoperability Information eXchange:
 - Secure web site
 - Public Safety only access (verified user accounts)
 - Case Studies
 - Colorado, statewide repository for training information
 - Georgia, regional repository for UASI information
- Public Safety Broadband Directory
 - Central repository for public safety broadband information
- Links are on main web site: <u>www.NPSTC.org</u>



- New Standards
 - TIA 4950
 - FM 3640 not yet completed- no power change
- Portables that operate in hazardous environments going forward
 - Class1, Division 1, locations/atmosphere
 - Same protection as FM 3610

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TIA4950

(Class 1, Division 1)

"Intrinsically Safe" (Class 1, Division 1) (Certified prior to January 2012)





- NPSTC is monitoring this issue
- It appears that LightSquared is changing their technical approach and will no longer be a threat to public safety agencies using GPS devices.



- NPSTC is monitoring the Mexico band plan proposal, called the Asian Pacific Plan, and working with the State Department and the FCC
- NPSTC is working with CITIG on northern border communications. CITIG received a grant to fund several meetings.
- Industry Canada is studying the assignment of the "D" Block for public safety in Canada.
- Memorandum of Understanding on interoperability has been exchanged between the U.S. and Canada







NPSTC Discusses Current Spectrum Issues and Narrowbanding

David Buchanan, Spectrum Management Committee Chair





- Narrowbanding below 512 MHz
 - Deadline passed on January 1, 2013
 - NPSTC is working with frequency advisors to determine how the FCC will react to wide band public safety licensees.
- Narrowbanding in 700 MHz
 - NPSTC has notified the FCC of the need to delay implementation of the 6-1/4 KHz voice standard
 - NPSTC is awaiting FCC action on 700 MHz issues.
- 700 MHz General Rule Clean Up
- 700 MHz State Build Out Criteria Support Tool Kit



- 4.9 GHz
 - NPSTC has proposed to facilitate creation of a national 4.9 GHz band plan document
- Deployable Aerial Devices & Robot Spectrum
 - Meeting planned to meet with manufacturers
- Petition to use certain 700 MHz narrowband channels for air to ground use
- Spectrum Audits (VHF Part 22, UHF)







NPSTC Discusses T-Band

Stu Overby, Spectrum Management Committee Vice-Chair





- NPSTC T-Band Report is available for public comment
- Section 6103 of Congressional Law 112-96:
 - FCC must auction public safety T-Band spectrum by 2/22/2021
 - Public safety must move out of band within in two years after auction (by 2023). Proceeds from auction can be used toward relocation costs
 - Law is silent on Industrial/Business T-Band spectrum

T-Band Working Group Report



- FCC froze licensing of new & expanded T-Band systems
- T-Band Frequencies (470-512 MHz) used in 11 metros:
 - Boston
 - Houston
 - New York/NJ
 - San Francisco

- Chicago
- Los Angeles
- Philadelphia
- Washington DC/MD/VA

- Dallas/Fort Worth
- Miami
- Pittsburgh



- NPSTC Chartered a T-Band Working Group
- NPSTC Analysis of T-Band shows:
 - Mix of systems: small individual jurisdiction and larger regional systems
 - 60% of licensees each have fewer than 100 mobiles/portables and 1 to 3 site systems. Over 90% are conventional.
 - Approx. 40% of licensees account for about 90% of mobiles/portables.
 - A key relocation requirement is mission critical voice. Survey responses: 80% voice only, 19% voice & data, 1% data only.
 - Interoperability: 82.5% say interoperability will be impacted if agency has to move from T-band.
 - Some T-Band licensees also use UHF channels in systems.



- NPSTC Analysis (continued):
 - Freeze: 39% were planning changes prohibited by freeze;
 10% planning changes still allowed; 44% say current system meets needs through year 2023
 - NPSTC examined T-Band usage and viability of other public safety bands as potential relocation homes
 - Usage characterized by metro market
 - Essentially no open channels at VHF or UHF; only a few at 800 MHz
 - 700 MHz narrowband could partially support T-Band relocation
 - Unclear when/if 700 MHz broadband will support mission critical voice at coverage and reliability levels of T-Band systems.
 - NPSTC conducted a comprehensive cost analysis of public safety relocation



- NPSTC Conclusions:
 - 5 of the 11 markets do not have sufficient spectrum for T-Band system relocations to another band
 - If spectrum could be located to move public safety, it is estimated to cost \$5.9 Billion to relocate all T-Band public safety users to 700 MHz narrowband spectrum
 - Broadcast operations throughout the country will remain on T-Band channels. I/B users also remain in 11 T-Band markets.
 - Auctioning the spectrum is unlikely to yield the funding needed for public safety relocation.
- Please review NPSTC T-Band Report







NPSTC Reviews Current Activities Nationwide Public Safety Broadband Network

Harlin McEwen, NPSTC Governing Board Member



Harlin R. McEwen

Chief of Police (Ret) - City of Ithaca, NY FBI Deputy Assistant Director (Ret) - Washington, DC chiefhrm@pubsaf.com 607-227-1664



Chairman, Communications & Technology Committee International Association of Chiefs of Police (IACP)

Communications Advisor & Life Member National Sheriffs' Association (NSA)

Chairman, Public Safety Advisory Committee (PSAC) First Responder Network Authority (FirstNet)

International Wireless Communications Exposition Las Vegas, Nevada March 13, 2013

Nationwide Public Safety Broadband Network

Many Years of Public Safety Work

<u>1995</u> – FCC & NTIA established the Public Safety Wireless Advisory Committee (PSWAC)

<u>1996</u> – PSWAC final report. Recommended 97.5 MHz of new spectrum

<u>1997</u> – Congress directed the FCC to allocate 24 MHz of spectrum to public safety in the 700 MHz band (TV Channels 63, 64, 68, 69)

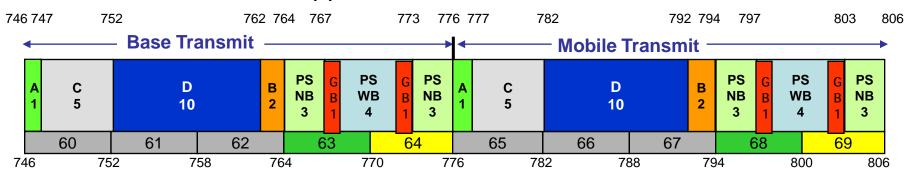
<u>1999</u> – FCC established the Public Safety Coordination Committee (NCC) to recommend how the 24 MHz of Public Safety Spectrum should be used

2003 – NCC final report. Recommended 12 MHz voice & 12 MHz for data

<u>2007</u> – FCC changed channel assignments within the 24 MHz & set forth rules for a new nationwide public safety broadband license resulting in formation of the Public Safety Spectrum Trust (PSST) who was issued the nationwide public safety broadband license

<u>2012</u> – Congress passed groundbreaking legislation (Public Law 112-96) for a new Nationwide Public Safety Broadband Network (PSBN) and the Secretary of Commerce announced appointment of First Responder Network Authority (FirstNet) Board Members

Previous Band Plan – Upper 700 MHz



New Band Plan – Adopted by FCC on July 31, 2007

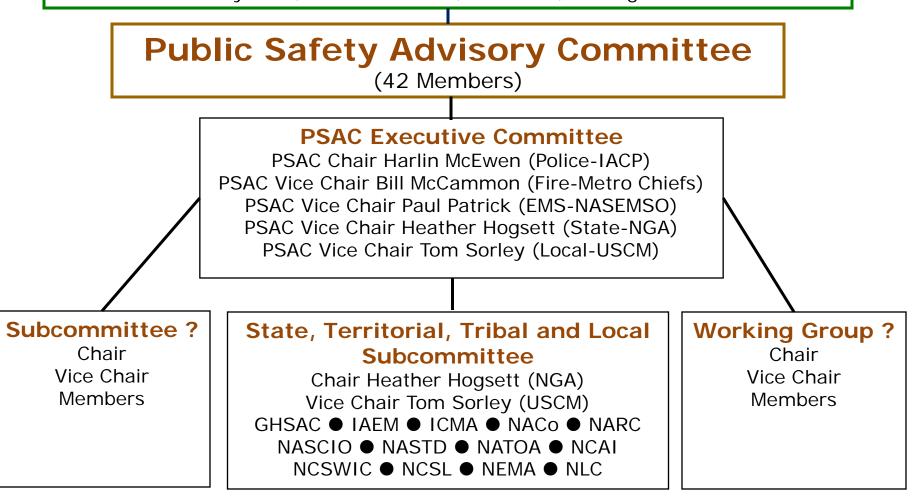
| 74 | 6 | | 758 | 763 | 768 | 769 7 | 72 775 | 77 | 76 | | 78 | 8 793 | 798 | 799 8 | 802 80 | 5 806 |
|----|---------|----|--------|--------|---------------------|-----------------|---------------|----|---------|----|--------|--------|-------------------|---------------|---------------|--------|
| | C 11 | | A 1 | D 5 | PS G BB E 5 1 | B PS NB 3 | PS NB 3 | 3 | C 11 | | A 1 | D 5 | PS (BB H 5 | PS NB 3 | PS NB 3 | В 1 |
| | 60 | 61 | | 62 | 63 | | 64 | | 65 | 66 | | 67 | 68 | | 69 | |

Band Plan – November 15, 2012

| C 11 Verizon W | ireless | Public S FirstNet Bro 10 | | PS NB 6 | C 11 Verizon W | ireless | A 1 | Public Sa FirstNet Broa 10 | | PS NB 6 | B 1 |
|----------------------|---------|--------------------------------|----|---------------|----------------------|---------|--------|----------------------------------|----|---------------|--------|
| 60 | 61 | 62 | 63 | 64 | 65 | 66 | | 67 | 68 | 69 | |

FirstNet Board

Chair Sam Ginn Secretary of Homeland Security, U.S. Attorney General, Director of the Office of Management & Budget, Tim Bryan, Charles Dowd Craig Farrill, Paul Fitzgerald, Jeff Johnson, William Keever, Kevin McGinnis, Ed Reynolds, Susan Swenson, Teri Takai, Wellington Web



FirstNet Public Safety Advisory Committee – Membership List

American Association of State Highway & Transportation Officials AASHTO 1. 2. APCO Association of Public-Safety Communications Officials-International 3. APWA American Public Works Association 4. FCCA Forestry Conservation Communications Association 5. GHSAC **Governors Homeland Security Advisors Council** 6. IAB **Interagency Board** 7. IACP International Association of Chiefs of Police 8. IAEM International Association of Emergency Managers 9. IAFC International Association of Fire Chiefs 10. ICMA International City/County Management Association 11. IMSA International Municipal Signal Association 12. MCC Major Cities (Police) Chiefs Association 13. MCSA Major County Sheriffs' Association 14. Metro Chiefs Metropolitan Fire Chiefs Association 15. NACO National Association of Counties 16. NAEMT National Association of Emergency Medical Technicians **17. NARC** National Association of Regional Councils National Association of State Chief Information Officers 18. NASCIO 19. NASEMSO National Association of State FMS Officials 20. NASNA National Association of State 9-1-1 Administrators

FirstNet Public Safety Advisory Committee – Membership List

| 21. NASTD | National Association of State Technology Directors |
|--------------|--|
| 22. NATOA | National Association of Telecommunications Officers & Advisors |
| 23. NCAI | National Congress of American Indians |
| 24. NCSWIC | National Council of Statewide Interoperability Coordinators |
| 25. NCJA | National Criminal Justice Association |
| 26. NCSL | National Council of State Legislatures |
| 27. NEMA | National Emergency Management Association |
| 28. NEMSMA | National EMS Management Association |
| 29. NENA | National Emergency Number Association |
| 30. NGA | National Governors Association |
| 31. NLC | National League of Cities |
| 32. NPSTC | National Public Safety Telecommunications Council |
| 33. NSA | National Sheriffs' Association |
| 34. SEARCH | National Consortium of Justice Information Statistics |
| 35. USCM | U.S. Conference of Mayors |
| 36. At Large | Charles Werner |
| 37. At Large | Steve Proctor |
| 38. At Large | Police Non-Management Responder |
| 39. At Large | Police Non-Management Responder |
| 40. At Large | Fire Non-Management Responder |







Technology Update

Tom Sorley, Technology Committee Chair



NPSTC Broadband Working Group Recap



- In 2012, a new 700 MHz Broadband SOR was developed by a large working group of more than 170 public safety and industry experts.
 - The extensive, qualitative only draft (300+ pages) was created covering immediate, mid, and long term needs
 - This draft will be used as the basis for each new requirements effort going forward
 - The FirstNet Board of Directors asked NPSTC to provide a Launch Requirements document covering only what public safety will require at launch of network

NPSTC Broadband Working Group Recap

- In December of 2012, the Launch Requirements were approved by NPSTC and were sent to FirstNet for their review.
- Broadband Working Group is waiting on feedback from FirstNet to begin either quantifying the Launch Requirements or begin qualitative Stage 2 work (1-2 year requirements)
- PTT over LTE requirements development underway
- LTE Console requirements work to begin in the next 6 weeks

Radio Programming Compatibility Requirements Working Group



- Goal of Phase 1 Standard Export Format
 - Identify required and optional fields needed for interoperability
 - Publish Export Format document (P25 input?)
- Consensus group developed preliminary document for distribution
- Draft document circulated 12/6/2012
- Held industry webinar 1/10/13 with status check call on 2/15/13
- Deadline for industry feedback was 3/1/13
- Initial results discussion meeting here at IWCE 2013

Technology Issues



- Radio PCR
 - Radio Programming Compatibility Requirements Working Group
 - Common interface allowing a single technician to program
 P25 radios from disparate vendors
- Video Technology Advisory Group (VTAG)
 - Ready to release an updated public safety video guide
 - Excellent resource before procuring or implementing video systems

Video Technology Advisory Group (VTAG)

- Added 3 new members in 2012 (Micheal Falcone, Justin Kates, William Badertscher)
- Video Quality in Public Safety (VQiPS) Leadership Team meeting held 11/5-6/12 with VTAG members in attendance. Set goals/work plan for 2013.

Video Technology Advisory Group (VTAG)

- 2013 Video Quality in Public Safety workshop set for 3/27-28/13 in Houston, Texas
- Ready to release an updated public safety video guide
 - Excellent resource before procuring or implementing video systems
 - More info see:

http://www.pscr.gov/projects/video_quality/vqips/vqips.php



Questions?

Please join us at the

NPSTC Meeting

Friday @ 8:00 a.m. Room N243