





NPSTC Discusses Current Events in the Public Safety Community

APCO 2012

Tuesday, August 21, 2012

Moderator - Ralph Haller

Panelists - Marilyn Ward, Harlin McEwen, Dave Buchanan, Stu Overby, Barry Luke







Welcome & Introduction to NPSTC Ralph Haller, NPSTC Chair



NPSTC Mission Statement



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 and 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 Members:

- Canadian Interoperability Technology Interest Group
- National Council of State Wide 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 of Emergency Communications
- Office for Interoperability & Compatibility
- Public Safety Communications Europe
- SAFECOM
- U.S. Department of Interior
- Department of Justice
 - NIJ COMMTECH

How is NPSTC organized?



NPSTC Governing Board

Representatives from each of its member organizations

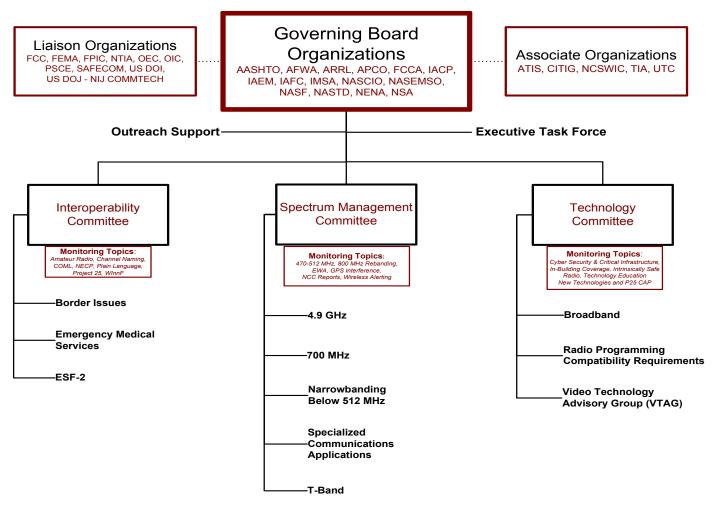
Executive Committee

 The Executive Committee comprises a Chair, Vice Chair, Committee Chairs, Committee Vice Chairs and the Executive Director

Three Operational Committees

- Interoperability Committee
- Spectrum Management Committee
- Technology Committee





as of 8/22/2012

Our Goals



- Create vision for the future of public safety communications
- Develop common policy perspectives through collaborative forums of leadership in public safety
- Educate appropriate governmental bodies regarding public safety communications issues, policies and priorities
- Educate public safety practitioners and leaders on communications issues
- Influence future technologies, providers and standard making bodies to ensure public safety interests are appropriately represented
- Advocate the interests of public safety communications
- Facilitate coordination, dispute resolution and the exchange of effective practices, tools and information







Nationwide Public Safety Broadband Network

Harlin McEwen, NPSTC Governing Board Member





Chief Harlin R. McEwen

Chief of Police (Ret) City of Ithaca, NY FBI Deputy Assistant Director (Ret) Washington, DC

NPSTC Governing Board Member

Chairman
Communications & Technology Committee
International Association of Chiefs of Police

Chairman
Public Safety Spectrum Trust

Nationwide Public Safety Broadband Network (NPSBN)



☐ First Responder Network Authority (FirstNet) Board Members

☐ Status of the Public Safety Spectrum Trust (PSST)

☐ NPSTC's Future Involvement in the NPSBN







Current Spectrum Issues and Narrowbanding

David Buchanan, Spectrum Management Chair



Overview of Spectrum Items



- 700 MHz Narrowband Clean up NPRM
 - Will address several issues with current rules
 - Should include extension of narrowbanding
 - Should include Air to Ground channels
 - No projected date is known
- Utilizing Rapidly Deployable Aerial Communications Architecture in Response to an Emergency – NOI
- Broadband Waivers FCC order established an STA process

VHF/UHF Narrowbanding



- FCC requires VHF/UHF operations to be narrowbanded to 12.5 kHz or equivalent efficiency by 1/1/2013
- In July 2011, FCC issued Public Notice reminding licensees of deadline and setting forth criteria for any waiver requests
- Approximately, 46 waiver requests have been posted by the FCC
 - 11 of those have been granted
 - 1 has been denied
 - 1 has been dismissed (is in T-Band)
- NPSTC urges licensees to do everything possible to meet the 1/1/13 deadline

4.9 GHz Band (4.94 - 4.99 GHz)



- Band allocated to Public Safety and used for high bandwidth, short distance communications
- Based on FCC licensing data as of July 31, 2012:
 - 2481 licenses in the band
 - 563 of those are permanent fixed licenses with 1694 sites licensed
- FCC released Fifth Further NPRM June 13, 2012;
 Comments due October 1, 2012 on some key issues:
 - Coordination and regional planning
 - Expanding eligibility
 - Use as backhaul for the 700 MHz broadband network
 - Aeronautical use
 - Technical parameters

4.9 GHz NPRM – FCC Questions and Committee Proposals



- Propose FCC to Develop Database
- Should applications require frequency coordination
- Propose a Working Group to develop a Nationwide frequency use plan to guide coordinators in coordination process
 - The Working Group will be an open process to gather consensus on a nationwide plan
 - We will encourage Regional Planning Committees to participate and include Region specific elements to the plan

4.9 GHz NPRM – NPSTC Draft Proposals



- Point to Point Links
 - Propose making all links primary
 - Propose Looking to Part 101 rules for technical changes to decrease interference from the point to point links
- FirstNet What Role?
 - Propose Limited use of 4.9 GHz by FirstNet primarily for Point to Point links where fiber or other backhaul is not available
- What usage for Critical Infrastructure and Commercial
 - Propose Critical Infrastructure use on a secondary basis with limitations in that usage to insure PS not crowded out oppose any general commercial use
- Propose air to ground use using low power

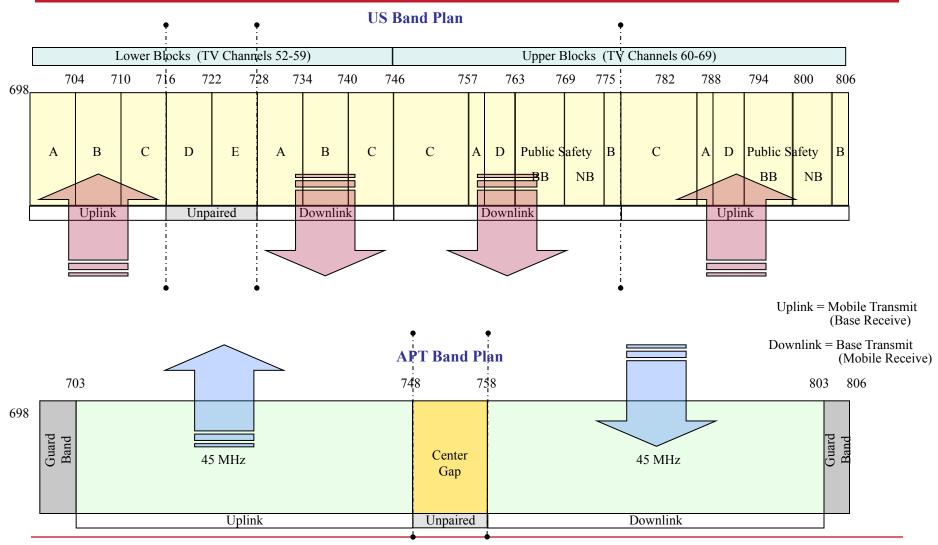
700 MHz Sharing Agreement with Mexico



- Mexico has proposed to adopt Asia Pacific Band Plan
- This plan is mostly incompatible with the U.S. Band plan
- Potential interference from Mexico cell sites up to 100 km from border if sharing agreement is not carefully drafted
- NPSTC and APCO are working with and supporting the State Department, FCC, NTIA and Homeland Security Department to work out an agreement that works for both Countries

US Band Plan vs. Asia Pacific Telecommunity (APT) Band Plan











T-Band Stu Overby, Working Group Co-Chair



T-Band (470-512 MHz)



- Portions of the T-Band are used in each of the 11 metro areas to support Public Safety and Industrial/ Business users:
- Boston
- Chicago
- Dallas/Ft. Worth
- Washington DC (including parts of Virginia and Maryland)
- Houston

- Los Angeles
- Miami
- New York City/Northeast
 NJ
- Philadelphia
- Pittsburgh
- San Francisco/Oakland

T-Band – What's New?



- Section 6103 of Act Requires FCC to:
 - Reallocate T-Band spectrum/start auction of the band in 9 years (by Feb. 2021) and complete relocation of users from the band within 2 years after auction is done.
- T-Band auction proceeds can be used toward relocation costs for Public Safety
- Law does not address:
 - New spectrum home(s)
 - \$\$ amount or parameters for reimbursement to Public Safety
 - Treatment of Industrial/Business users also in the band
- FCC has imposed a freeze on new and expanded licenses in T-Band impacting both PS and I/B Users

NPSTC Initiative



- NPSTC created T-Band Working Group
 - Defining impact by developing inventory of T-Band operations and equipment
 - Examining what, if any, viable relocation options exist by metro area
- If you use T-Band, please join the NPSTC T-Band Working Group
 - To join, contact Barry Luke, NPSTC Support Staff at bluke@npstc.org
 - Also, Public Safety T-Band licensees should participate in NPSTC questionnaire at http://www.surveygizmo.com/s3/993962/T-Band-Frequency-Usage
- Preliminary Report of impact, analyses and recommendations targeted for year end 2012





NATIONAL PUBLIC SAFETY
TELECOMMUNICATIONS COUNCIL



PSWAC Follow-up: Assessment of Future Spectrum Technology (AFST) Working Group

Barry Luke, NPSTC Manager, Committee Support



AFST Report Milestones



- Working Group created by the NPSTC Board in August 2009
- Report released for 30 day public comment period ending April 20, 2012
- Final Version approved by the NPSTC Board on June 6, 2012
- An Ex Parte filing with the FCC occurred on July 18, 2012

AFST Report Findings



- Summary of Report Findings:
 - Spectrum modeling at the scene of major incidents
 - Based on four focus group sessions
 - Southern CA; Houston, TX; Orlando, FL; Washington, DC
 - Use of enhanced public safety applications is documented
 - Assessment of VHF, UHF, 700 & 800 MHz spectrum usage
 - Discussion on alternative communications methods, including Satellite, 4.9 GHz, and others
 - Need for ongoing training, education and support for the Interoperability Continuum

NPSTC Recommendations



Work Plan:

- Assign responsibility for a White Paper on Interoperability Best Practices
- Continue the work of the BBWG regarding requirements and solutions for public safety and issues noted in this report
- Work with appropriate bodies regarding enhancements to Cell Edge Spectral efficiency
- Request the FCC to address issues with Part 22 radio channels (audit, freeze, reallocate, interoperability)
- Request FCC to audit the UHF spectrum and determine if additional interoperability channels can be allocated

NPSTC Recommendations



- Work Plan:
 - Create a working group to study the impact of the loss of T-Band spectrum on public safety agencies
 - Assign a study group to examine bomb robot spectrum allocation issues
- Full Report on the NPSTC website (<u>www.NPSTC.org</u>)
 - "Public Safety Communications Assessment, 2012-2022:
 Technology, Operations, & Spectrum Roadmap"



Questions?

Stop by the NPSTC Booth #1938

- Volunteer online NPSTC Website at www.npstc.org/volunteersInformationForm.jsp
- Email or call the NPSTC Support Office
 - **866-807-4755**
 - support@npstc.org