NPSTC UPDATE for IACP Communications and Technology Committee

Don Root

Chair, NPSTC Spectrum Management Committee

San Diego, CA

October 16, 2016

NPSTC Organization

Please Refer to Brochure Handout "What is NPSTC?"

IACP is one of 16 NPSTC Governing Board Members

IACP Voting Representative:

-Deputy Chief Eddie Reyes (primary)

-Chief Tom Roche (secondary)

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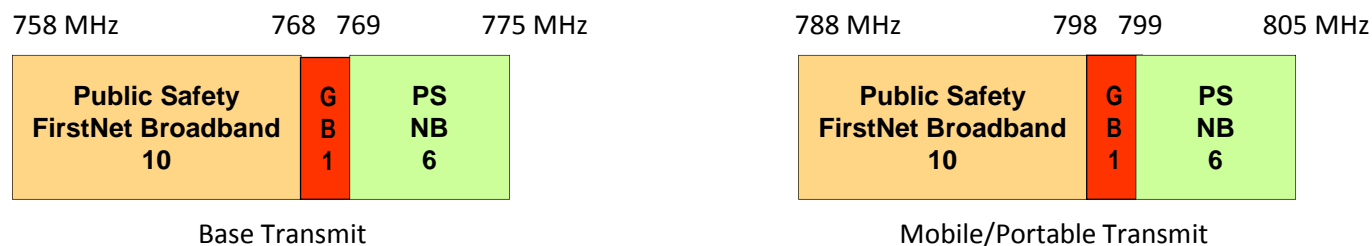
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Key Areas of Focus

- Spectrum

- Broadband and Technology

- Interoperability

- These areas encompass a wide range of issues and topics

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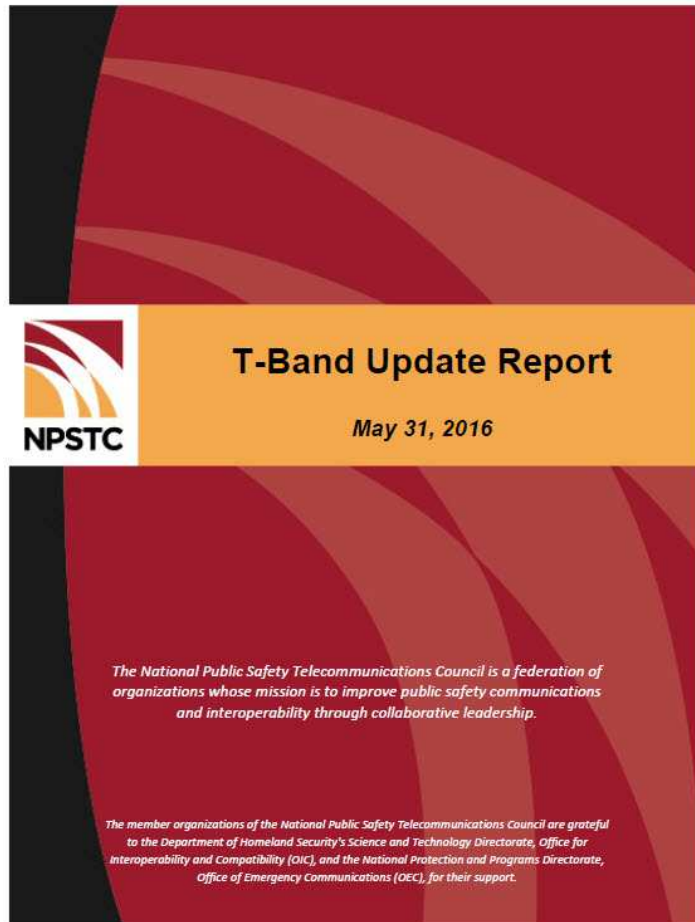
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Spectrum

- NPSTC Position Paper issued October 3, 2016:
  Maintaining Public Safety Communications Reliability and Interoperability in the 700 MHz Band

- Current 700 MHz plan designates separate spectrum for broadband and narrowband operations

758 MHz		768	769	775 MHz
Public Safety FirstNet Broadband 10		G B 1	PS NB 6	

Base Transmit

788 MHz		798	799	805 MHz
Public Safety FirstNet Broadband 10		G B 1	PS NB 6	

Mobile/Portable Transmit

- Two states have raised possibility of placing broadband operations in the narrowband spectrum

- Paper recommends against mixing broadband and narrowband operations in same spectrum

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Spectrum

T-Band Update Report

May 31, 2016

The National Public Safety Telecommunications Council is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

The member organizations of the National Public Safety Telecommunications Council are grateful to the Department of Homeland Security's Science and Technology Directorate, Office for Interoperability and Compatibility (OIC), and the National Protection and Programs Directorate, Office of Emergency Communications (OEC), for their support.
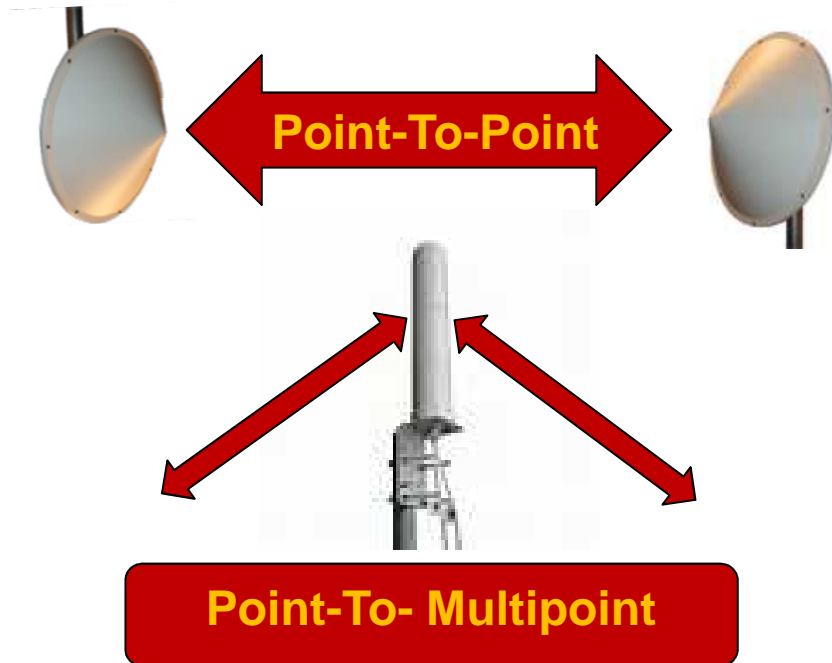
- Found minimal changes in T-Band licenses since 2013
- Counted 90M people in 11 T-Band areas public safety serves
- Catalogued 325 full power & Class A TV stations in T-Band
- Reaffirmed conclusions from March 15, 2013 NPSTC T-Band Report

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Spectrum

- 4.9 GHz Public Safety Band (50 MHz Total)

- FCC Opened Proceeding in 2012 to Modify Rules

- NPSTC 4.9 GHz National Plan Recommendations October 2013

- APCO 4.9 Task Force Report: September 2015

- We Expect FCC Further Proposal

Point-To-Point

Point-To- Multipoint

- Improved Frequency Coordination & Licensing
- Access by Critical Infrastructure
- Airborne/Robotic Use

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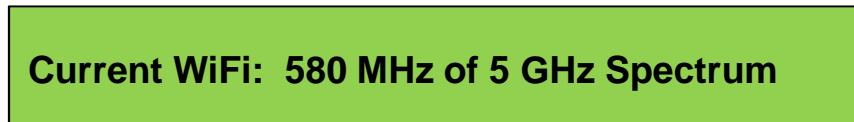
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Spectrum

- 5.9 GHz Dedicated Short Range Communications (DSRC)

- Vehicle-to-Vehicle & Vehicle-to-Roadside Communications

- WiFi Proponents Pressing to Share DSRC Spectrum

- FCC is Testing Spectrum Sharing

DSRC: 75 MHz of Spectrum

Current WiFi: 580 MHz of 5 GHz Spectrum

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Spectrum

- Reconsideration Order and Further NPRM, PS Docket No. 13-87, released 8/22/2016

- Comments Due 10/26/2016; reply comments due 11/10/2016
  - P25 CAP compliance must now be completed before 700 MHz LMR equipment is marketed or sold (decision)
  - States may delegate administration of 700 MHz air-ground channels to 700 MHz RPCs (decision)
  - P25 CAP feature sets for conventional operation (for comment)
  - 700 MHz rules needed to help enable vehicular repeaters (for comment)
  - NPSTC developing comments

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Spectrum

- NPRM, WP Docket No. 16-261, released 8/18/2016

- Comments due 11/22/2016; reply comments due 12/22/2016

  – Proposes to extend "conditional licensing" to 700, 800 and 900 MHz bands- get on the air faster when regular licensing bogs down

  – Proposes that existing licensees be allowed to apply prior to new applicants for 800 MHz band expansion and guard band channels

  – NPSTC plans to support both proposals

    • 700 and 800 MHz band public safety applications would receive RPC approval before submission to FCC

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NPSTC Filings with FCC in 2016

Date Filed	Topic	Type of Filing
10/3/16	700 MHz Position Paper	Letter
9/12/16	Outage Reporting	Reply Comments
8/11/16	Noise Floor	Comments
7/22/16	5.9 GHz DSRC	Reply Comments
7/13/16	Interference Portal	Letter
7/8/16	4.9 GHz	Ex Parte (#2)
7/7/16	5.9 GHz DSRC	Comments
6/21/16	Ligado 1675-1680 MHz	Comments
6/3/16	T-Band Update Report	Ex Parte
5/23/16	Ligado 1545-1555 MHz	Comments
4/21/16	4.9 GHz	Ex Parte (#1)
1/13/16	Wireless Emergency Alerts	Comments

Technology and Broadband

Group	Chair	Meeting Sched (if standing call)	Comment
UAS Robotics WG	Michael Britt	2nd Wed. @ Noon ET	See Detail Slides
LMR/LTE Integration & IO	Chris Kindelspire	1st & 3rd Wed. @ Noon ET	
Broadband Deployable Systems WG	Claudio Lucente	2nd & 4th Tues. @ 11 AM ET	Joint WG with Canada
Broadband Emerging Technology WG	Kim Coleman-Madsen	4th Wed @ Noon ET	Working issues not covered by other groups
Video Technology Advisory Group	John Contestable	Meets Quarterly	Supports DHS S&T/ VQiPS
Radio Program Compatibility Requirements	Dan Robinson & Ken Link Co-Chairs	Meets Quarterly	Beta testing w/ Colorado and Michigan

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Unmanned Aircraft Systems (UAS) and Robotics

- Heard presentations on the following topics
  - Larimer County UAS Program
    (accident scene reconstruction)

  - Use of UAS for SAR
    Texas A&M University

  - Regulatory guidance on UAS
    FAA

  - Michigan State Police Aviation
    UAS program

  - Persistent Close Air Support,
    State of Arizona

  - Meets on the 2nd Wednesday of month at 12:00 noon ET

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Unmanned Aircraft Systems (UAS) and Robotics

- Working on three outreach documents

  1. Considerations for public safety agencies when implementing a UAS program

  2. Overview of current operational uses of UAS/Robotics by Public Safety

  3. Public Safety communications aerial platforms via UAS

ONLY ON 7NEWS
THREE FIRE DEPARTMENTS TO USE DRONES
DRONES WILL BE USED TO LOOK AT DAMAGE, SIZE OF FIRES

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Broadband Emerging Technologies Working Group

- Developing Report on PS Requirements for an Agency Status Page on Nationwide PS BB Network (FirstNet)

- Network status and incident information

- Example use for Status Page:

A police officer can view a list of high priority emergencies among all agencies in the area (his/her city, adjacent city, sheriff, and state patrol).

This would allow a state patrol trooper to maintain situational awareness on major incidents occurring in all jurisdictions

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Broadband Emerging Technologies Working Group

- Hosted several presentations on current topics.

  – NIST overview of sensors and connected systems

  – NIST Smart Cities Project

  – State Alternative Planning Approaches Panel Discussion

  – NG911 and Broadband Data

- Upcoming Presentations

  Public Safety LTE deployment in the United Kingdom (October)

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Interoperability

Group	Chair	Meeting Sched (if standing call)	Comment
EMS WG	Paul Patrick	1st Thurs @ 11 AM ET	Report on EMS Telemedicine Completed 2/16
NPSTC-CITIG Cross-Border Communications WG	Steve Mallory	1st Tues @ Noon ET	Multiple Operational Issues
Common Channel Naming WG	Don Root	3rd Thurs. @ 3 PM ET	2016 Update in Process
Radio Interoperability Best Practices WG	Mark Schroeder	2nd & 4th Thurs. @ 3 PM ET	Working on 13 Best Practices
Encryption Interoperability Task Group	Jason Matthews	New Group- TBD	Will examine issues & discuss w/ IO cmte.

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Cross Border Working Group

- Regulatory Update on Cross Border Base Stations

  – FCC and ISED in Canada released guidance on cross border base station placement on June 30th
    See Handout

  – NPSTC and CITIG have conducted outreach activities

FCC/ISED also discussing 700 MHz PS air/ground operations

Number of channels, power levels, and aircraft height key issues

NPSTC needs input from agencies near U.S./Canadian border

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Cross Border Working Group *(Continued)*

- ## Cross Border 911 Call Routing

  - Mexico is currently implementing 911 to replace its "006" emergency line.

  - The States of Texas & California have identified problems with 911 calls from Mexico being routed to its PSAPs

    - Citizens in Mexico are dialing 911 and reaching TX or CA PSAPs

    - Mexico reports 911 callers in Texas are reaching their PSAPs

  - Texas is working with US and Mexico wireless carriers to address routing.

  - California also starting to address issue

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- NPSTC Relies on Volunteers

- Signup is Simple

Go to www.NPSTC.org

Click on "Participate-Volunteer" tab

Questions: Contact   support@npstc.org

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