Public Safety Communications Research Program

November 3, 2014
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Located at the Department of Commerce Boulder Labs in Colorado

The PSCR Program is a joint effort between:

NIST’s Communications Technology Laboratory (CTL) and NTIA’s Institute for Telecommunication Sciences (ITS)
PSCR Sponsors

• Department of Homeland Security’s Office for Interoperability and Compatibility (DHS S&T OIC)
• Department of Homeland Security’s Office of Emergency Communications (DHS NPPD OEC)
• First Responder Network Authority (FirstNet)
• National Institute of Standards and Technology (NIST)
• National Telecommunications and Information Administration (NTIA)
## PSCR Portfolio

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Current Efforts—DHS OIC

• Testing & Evaluation
  – 700MHz Public Safety Broadband Demonstration Network
    • Vendor-neutral test bed to understand how LTE technologies can meet public safety’s expectations
    • Extremely vendor-diverse
    • Built in partnership with industry, through Cooperative Research and Development Agreements (CRADAs)
  – Indoor/In-building Coverage
  – Extended Range Cell Testing
  – Local Control
  – Deployables for Public Safety
  – LMR to LTE Integration
Current Efforts—DHS OIC (continued)

• Network Modeling & Simulation
• Video Quality for Public Safety
• Audio Quality for Public Safety
• Requirements Gathering
• Security Research
  – Mobile Application Security
  – Identity Management
Current Efforts—DHS OEC

• Testing & Evaluation
  – Next Generation Networks (NGN) Priority Services
    • Test and evaluate how LTE technologies can meet the needs of Wireless Priority Service users
      – These services are used during emergencies when commercial networks are congested
Current Efforts—FirstNet

- Standards Development
- Modeling & Simulation
- Testing & Evaluation
  - Quality of Service, Priority, and Preemption
Current Efforts—R&D Roadmapping

• November 2013 Public Safety Broadband R&D Roadmap Workshop
  – Highlight needs for public safety broadband research and development (R&D) beyond the short term horizon (18-24 months) and begin to identify research areas that need to be developed over the long term (5-10+ years) in order for a public safety broadband network to fulfill its ultimate goals.

• Current Efforts
  – Data Analysis and Organization
  – Roadmap Framework
  – Updated Public Safety Scenarios
  – Location Services R&D Roadmap
Thank you!

Questions?