Standards for a
Shared Statewide System

IWCE

**INTERNATIONAL WIRELESS
COMMUNICATIONS EXPO**

IWCE Session M133

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Federal Engineering, Inc.
"Unleashing the Power of Technology"

Participant Expectations

- What are your expectations from this session?

- Why are you here?

- What would you like to take away?

Session Overview

- Present key issues and considerations with regard to standards on a shared system
- Specifically applies to land mobile radio (LMR)
  - Concepts apply broadly
- Our goal is a highly interactive session

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What Types of Standards

- Technical Standards
- Interface Standards
- Configuration Standards
- Operational Standards (SOPs)
- Naming Standards
- Maintenance Standards

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STANDARDS?   STANDARDS?

WE DON'T NEED NO STINK'N STANDARDS!

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What Types of Standards

- Technical Standards
- Interface Standards
- Configuration Standards
- Operational Standards (SOPs)
- Naming Standards
- Maintenance Standards

- Governance Standards!

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Governance

"*A support system that helps decision makers within Federal, State, local, and tribal governments make informed decisions that meet stakeholder requirements.*"

- DHS Establishing Governance Guide, December 2008

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Governance – SAFECOM Continuum

Governance Considerations

- May be THE most important aspect of system planning and operation!
- Outline the structure and policies that will be used for governance and ensure that ALL users are represented in the process
- Develop technical user and management structure
- Establish system/user policies and procedures

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What is Effective Governance?

Effective Governance Promotes:

- Transparency
- Consensus building
- Shared understanding of interoperability goals
- Technical coordination
- Operational consistency
- Sustained effort

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The Rest of the of Standards

- Technical Standards (Security)
- Interface Standards
- Configuration Standards
- Operational Standards (SOPs)
- Naming Standards
- Maintenance Standards

BB4   Security?

Brad Barber, 3/23/2017

Technical Standards

System and Application Specific

- LMR
  - P25
  - LTE
  - DMR
  - TETRA
  - Etc.

- Backhaul
  - Microwave and Fiber
  - COE/CE
  - MPLS
  - SONET
  - Etc.

Interface Standards

- Depends on technology
- Agreement within the network simplifies coordination at the edges

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Configuration Standards

- ● Why?
  - – Establishes standards and policies for adding users, sites, dispatch consoles, etc.

- ● Examples:
  - – Minimum standards for subscriber radios
  - – Connections of devices within and external to the radio network
    - • Console connections to control systems (internal)
    - • Gateway connections to external systems

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Operational Standards (SOPs)

- Why?
  - Establishes common policies and practices for system operations

- Examples:
  - System administration
  - Use of shared channels or talkgoups
  - Access to systems, subsystems, sites, etc.
    - Ex: Roaming to low density sites
  - Priority levels
  - Use of system features
    - Call alert, emergency call, private call, etc.

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Naming Standards

- **Why?**
  - Allows for simple identification of users, modes, sites, etc.
  - Enhances operability, interoperability, user safety
  - Examples:
    - XXFD.TWR1.M   XXUT.TD.TRK1.P
    - Z1.FD.DISP1   Z1.SITE1.TWR

- **Resources**
  - APCO/NPSTC 1.104.2-2017 Standard Channel Nomenclature for the Public Safety Interoperability Channels
  - NPSTC Intrastate Channel Naming Recommendations

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Maintenance Standards

- Why?
  - Establishes best practices, qualifications for managers, engineers, and technicians
  - Ensures that maintenance windows and notifications procedures are followed
    - Maintenance that cause outages are scheduled and deferred if critical communications are ongoing
  - Improper maintenance of any component in a networked system can be widespread, e.g. cascade affect
  - Establishes recordkeeping requirements
    - Impacts system analysis and safety programs

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Planning Aspects to Remember

- **Develop preliminary system plan**
  - Will have to be refined as system design evolves
- **Communicate goals, needs and objectives continuously**
  - Develop a communications plan early and use it often
    - List sever, web site, conferences, group meetings, emails, newsletters, social media, press releases
- **Set realistic expectations**
  - Project Scope, Project Timelines, Responsibilities

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Q&A - DISCUSSION

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YOUR EXPECTATIONS REVISITED

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Thank You!!

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