

# Standards for a Shared Statewide System



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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

# *What Types of Standards*

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



*STANDARDS? STANDARDS?*

*WE DON'T NEED NO STINK'N STANDARDS!*

# *What Types of Standards*

- Technical Standards
- Interface Standards
- Configuration Standards
- Operational Standards (SOPs)
- Naming Standards
- Maintenance Standards
- **Governance Standards!**

*“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

# Governance – SAFECOM Continuum

Governance	Standard Operating Procedures	Technology	Training & Exercises	Usage	Individual Agencies Working Independently	Informal Coordination Between Agencies	Key Multi-Discipline Staff Collaboration on a Regular Basis	Regional Committee Working within a Statewide Communications Interoperability Plan Framework	Limited Leadership, Planning, and Collaboration Among Areas with Minimal Investment in the Sustainability of Systems and Documentation	High Degree of Leadership, Planning, and Collaboration Among Areas with Commitment to and Investment in Sustainability of Systems and Documentation
					Individual Agency SOPs	Joint SOPs for Planned Events	Joint SOPs for Emergencies	Regional Set of Communications SOPs	National Incident Management System Integrated SOPs	
					<b>DATA ELEMENTS</b> Swap Files	Common Applications	Custom-Interfaced Applications	One-Way Standards-Based Sharing	Two-Way Standards-Based Sharing	
					<b>VOICE ELEMENTS</b> Swap Radios	Gateway	Shared Channels	Proprietary Shared System	Standards-Based Shared System	
					General Orientation on Equipment and Applications	Single Agency Tabletop Exercises for Key Field and Support Staff	Multi-Agency Tabletop Exercises for Key Field and Support Staff	Multi-Agency Full Functional Exercises Involving All Staff	Regular Comprehensive Regionwide Training and Exercises	
					Planned Events	Localized Emergency Incidents	Regional Incident Management	Daily Use Throughout Region		

# 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

# *What is Effective Governance?*

## Effective Governance Promotes:

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





# *The Rest of the Standards*



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



## Slide 11

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**BB4**

Security?

Brad Barber, 3/23/2017

## 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

# 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

# Operational Standards (SOPs)

- Why?
  - Establishes common policies and practices for system operations
- Examples:
  - System administration
  - Use of shared channels or talkgroups
  - 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.





# 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

# 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



# *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 server, web site, conferences, group meetings, emails, newsletters, social media, press releases
- **Set realistic expectations**
  - Project Scope, Project Timelines, Responsibilities

# *Q&A - DISCUSSION*



# *YOUR EXPECTATIONS REVISITED*



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***Thank You!!***

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