



DPS Public Safety Communications Bureau

Interoperable Communications Background, Legislative Report and RICPs Round #2 With Timelines

**Presented to the 4th Annual Texas Interoperable
Communications Statewide Strategic Planning Session**

*By Mike Simpson, Texas DPS Assistant Director -
Law Enforcement Support Division*

August 24, 2010

Strategies & Plans

Goals / Vision

National Strategy for Homeland Security

National Preparedness Priorities

- *Strengthen Interoperable Communications*



National Emergency Communications Plan (NECP)

Standards-Based Shared Communications where

Emergency responders can communicate:

- *As needed, on demand, and as authorized;*
- *At all levels of government; and*
- *Across all disciplines.*



Texas Statewide Communications Interoperability Plan (SCIP)

Statewide “System of 24 Regional P25 Voice Communications Systems by 2015”



Regional Interoperable Communications Plan (RICP)

Independently operating systems—comprised of people, technology, and organizations—are connected, enabling emergency responders to effectively support



Jurisdiction (City/County/Emergency Services District) Interoperable Communications Plans

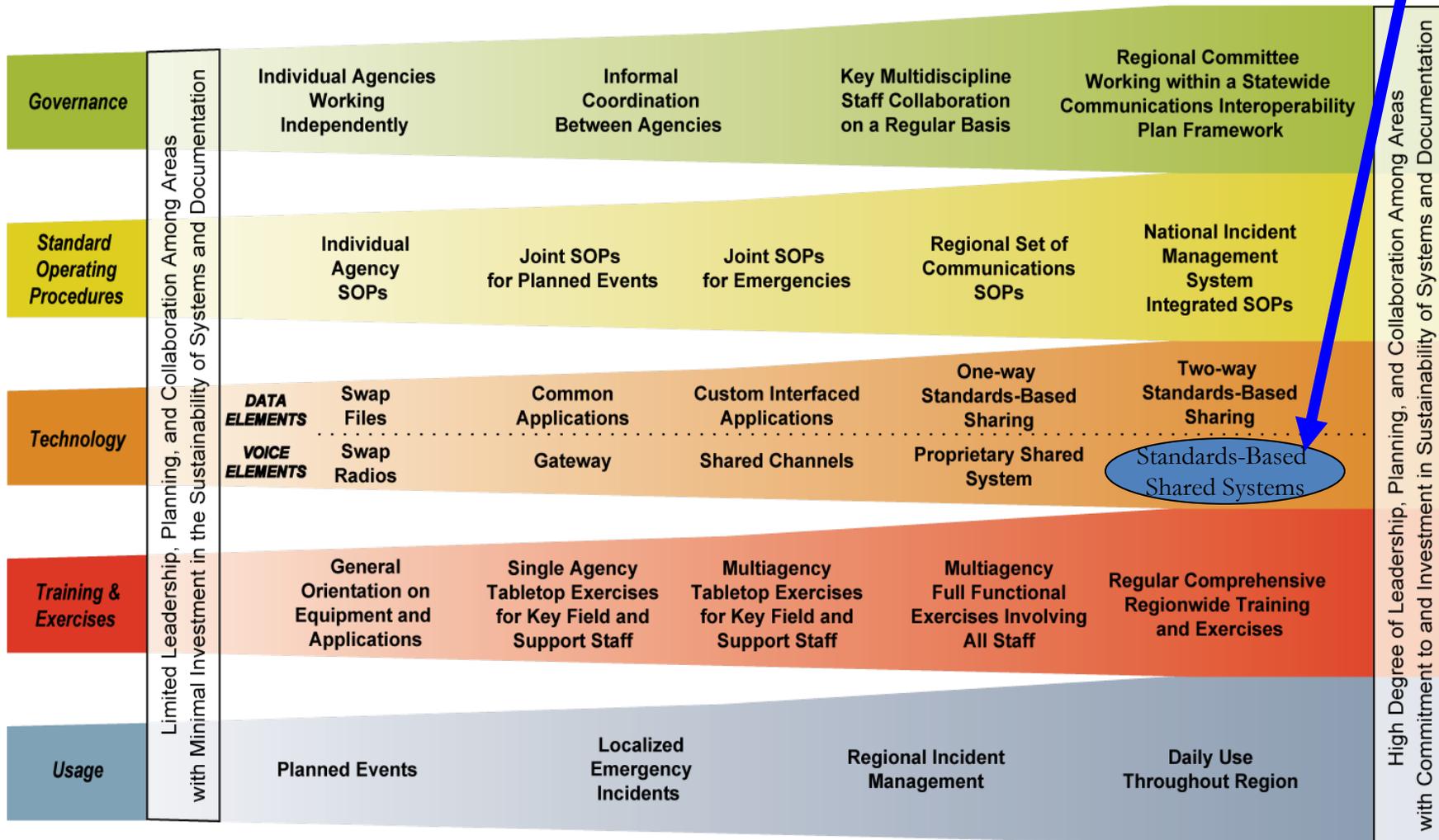
day-to-day operations, planned events, and major incidents. 2



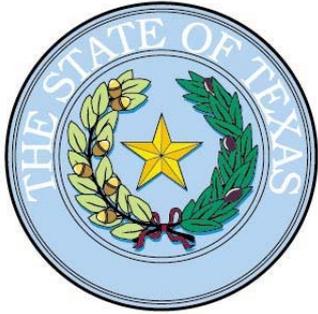
Interoperability Continuum

12/2008

BEST



Least Interoperable on Left - Most Interoperable on Right



Texas Statewide Communications Interoperability Maturity Model

Level 5 - Full Interoperability
(P25 Standards-Based, Shared Systems)

Level 4

Improved Interoperability
(Use of Proprietary Shared Systems)

Level 3

Mid-Range Interoperability
(Use of Shared Channels)

Level 2

Limited Interoperability
(Use of Gateways)

Level 1

Minimal Interoperability
(Swap Radios)

Governance

Individual Agencies Working Independently

SOP

Individual Agency SOPs

DATA

Technology
Swap Files

VOICE

Technology
Swap Radios

Training and Exercises

General Orientation on Equipment and Applications

Usage

Planned Events

Governance

Informal Coordination Between Agencies

SOP

Joint SOPs for Planned Events

DATA

Technology
Common Applications

VOICE

Technology
y
Gateway

Training and Exercises

Single Agency Tabletop Exercises for Key field and Support Staff

Usage

Localized Emergency Incidents

Governance

Key Multi-Discipline Staff Collaboration on a Regular Basis

SOP

Joint SOPs for Emergencies

DATA

Technology
Custom Interfaced Applications

VOICE

Technology
Shared Channels

Training and Exercises

Multi-agency Tabletop Exercises for Key Field and Support Staff

Usage

Localized Emergency Incidents

Governance

Key Multi-Discipline Staff Collaboration on a Regular Basis

SOP

Regional Set of Communications SOPs

DATA

Technology
One-Way Standards-Based Sharing

VOICE

Technology
Proprietary Shared System

Training and Exercises

Multi-agency Full Functional Exercises Involving All Staff

Usage

Regional Incident Management

Governance

Regional Committee Working within a Statewide Communications Interoperability Plan Framework

SOP

National Incident Management System Integrated SOPs

DATA

Technology
Two-Way Standards-Based Sharing

VOICE

Technology
Standards-Based Shared Systems

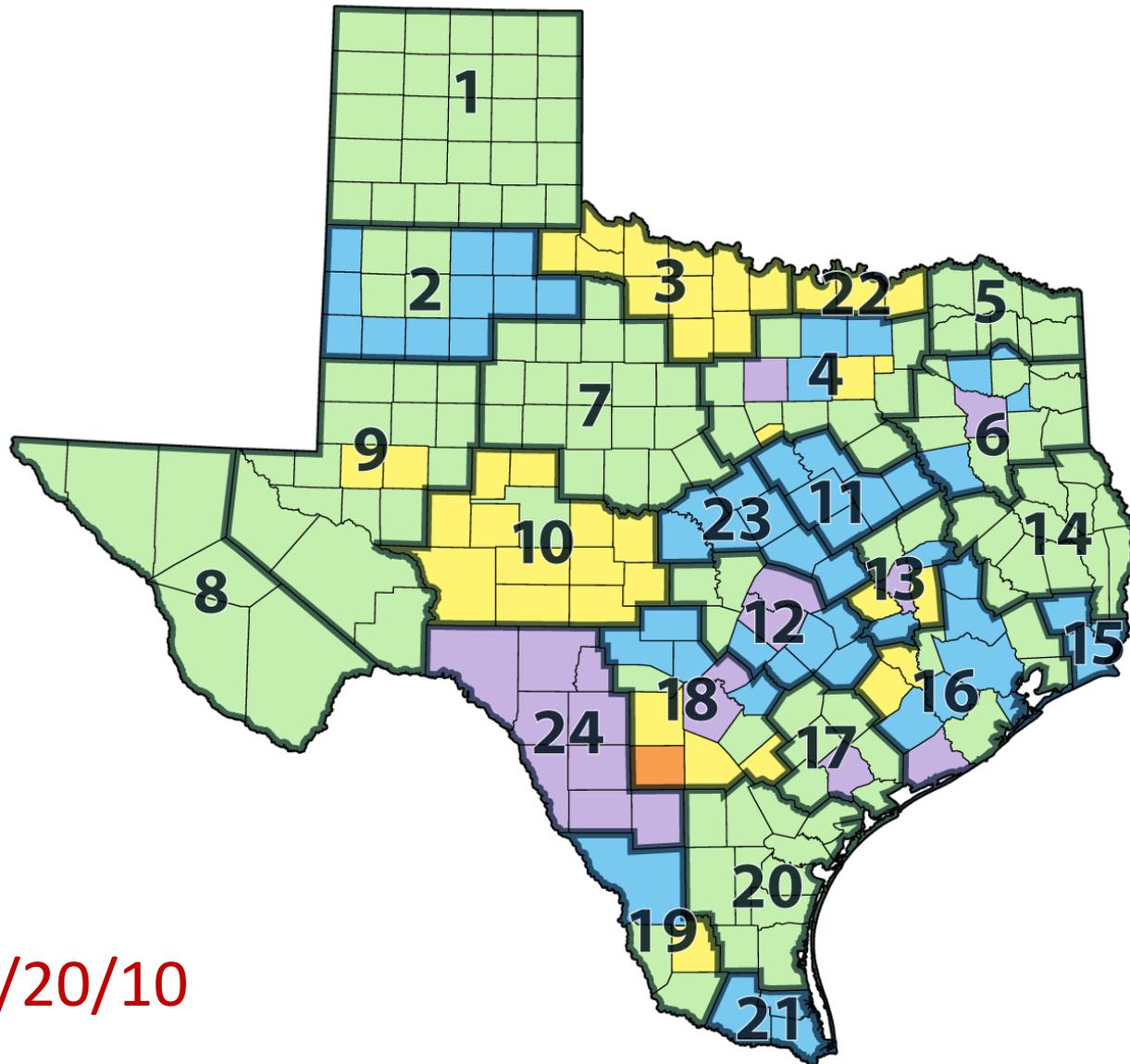
Training and Exercises

Regular Comprehensive Region wide Training and Exercises

Usage

Daily Use Throughout Region

County / COG Interoperability Levels



AS OF 8/20/10

ILLUSTRATION OF TEXAS STATEWIDE COMMUNICATIONS INTEROPERABILITY GOAL

Region 1 of 24

All Public Safety Agencies within the COG move to P25 standard by end of 2015

VHF P25
Conventional



700/800 MHz
P25 Trunked



Requires Master Gateway
for Interoperability

700/800 MHz P25
Conventional



VHF P25
Trunked

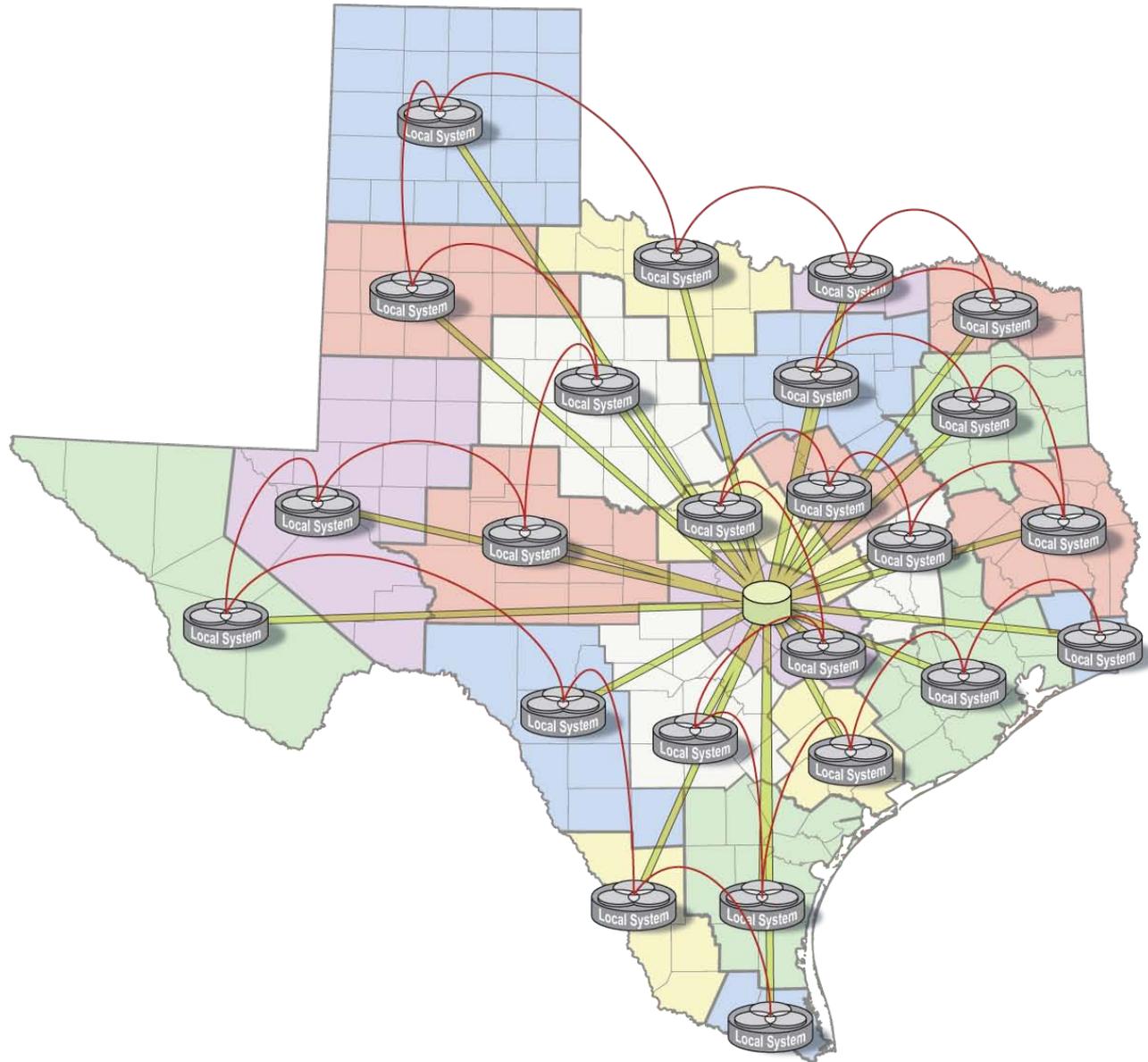


Multiple backhaul paths for
connectivity between regions:
Microwave, Leased T-1's
Fiber and NG 9-1-1 Broadband

Twenty Three Additional Regions



Texas “System of Systems” Approach



Situation (Problem Statement)

The Texas State Senate Finance Committee is interested in the status of the state's communications interoperability and wants to gain a clear understanding of:

- Interoperable communications plan for the state
- Current status on implementation
- Future requirements
- Next steps
- Budgetary issues associated with this process (what funds from what sources have been expended to date, and what funds are required to achieve desired state by when)

DPS is assuming responsibility for statewide interoperable communications and must develop an updated, detailed strategic plan for enhancing interoperable communications throughout TX

Requirements/ General Tasks

- Meet Federal and State standards as set forth in the National Emergency Communications Plan (NECP), approved Texas State Communications Interoperability Plan (SCIP), Texas Regional Interoperable Communications Plans (RICPs), APCO P25 digital radio communications suite of standards, and user needs
- Integrate existing and future programs for development, maintenance and capital replacement of interoperable communications
- Understand all current and potential grants/funding sources and limitations (federal grants award through DPS and CJD, federal grants directly to local jurisdictions, and local funds including operational budgets along with bond monies used for interop communications)

Requirements/ General Tasks

- Clarify and fine-tune governance structure to manage the State's interoperable communications efforts
- Develop interagency efficiencies, to include sustainment/O&M, where possible
- Display key interoperable communications information via TxMAP (CASM data)

Tasks, Deliverables, and Timeline

1. June 15, 2010 – Desired date for DPS Management Approval of using grant funding to perform Statewide Communications Interoperability Study and SCIP revision
2. June 16, 2010 – Internal DPS Interoperable Communications Study Working Group (DISWG) organizational meeting
3. June 16, 2010 – Briefing to State Auditor's Office on interoperability
4. June 22, 2010 – DISWG meets again, but with added external contractors (DISWG Team will meeting every Wednesday from 10 am-12-noon)
5. June 30, 2010 (and every quarter thereafter) – Submit 3rd Quarter FY-2010 Agency Interoperability Status Report to LBB and Governor (Requirement stated in Texas GAA, Article IX, 81st Legislature, 2009)

Tasks, Deliverables, and Timeline (Continued)

6. July 12, TxRC Steering Committee Meeting to review planned agenda items for Strategic Planning Session
7. Aug. 24, 2010 – Annual SCIP Strategic Planning Session in Austin with COG and State Agency Reps
8. Aug. 30, 2010 – Complete final draft of SCIP Implementation Report for DHS-OEC
9. Aug. 31, 2010 – Provide needed information for the report to Legislature on status of interop duties (Requirement in Government Code Section 421.098 that the Office of the Governor is to provide a report to the Legislature by September 1 of each year on the status of its duties related to interoperability) – this can basically be the SCIP Implementation Report mentioned above

Tasks, Deliverables, and Timeline (Continued)

- 10 Aug. 31, 2010 – DPS provides Senate Finance Cmte. (& other Cmte's.) on status of DPS 2010 Statewide Communications Interoperability Study, with information developed to date
11. Oct. 27, 2010 – TxRC Steering Committee approves revised SCIP and DPS Statewide Communications Interoperability Study findings
12. Nov. 17, 2010 – Governor's Statewide Communications Interoperability Executive Committee approves revised SCIP and DPS Statewide Communications Interoperability Study findings
13. Dec. 1, 2010 – Revised SCIP and DPS Statewide Communications Interoperability Study Findings forwarded to the Governor

Tasks, Deliverables, and Timeline (Continued)

14. June 30, 2011 – Final Drafts of Revised Regional Interoperable Communications Plans (RICPs) are submitted by the COGs to the Statewide Communications Interoperability Coordinator (SWIC), with enhanced sections on statewide Public Safety Agency Needs Assessments/Requirements, Conceptual Systems Designs, Estimated Budget Details on achieving P25 Standards Based Shared Systems interoperability by the end of 2015 **(NOTE: A preliminary draft due date will be 3/31/11. This will allow time for review prior to the 6/30/11 final submission deadline date.)**

REVISED RICPs By 6/30/11 (Drafts Due 3/31/11)

TO INCLUDE:

- 1) Basic Needs Assessment/Requirements Document for each public safety agency within the COG
 - ◆ *Existing Communications Facilities (Towers and Shelters, Microwave, Fiber, etc.)*
 - ◆ *Dispatch Centers*
 - ◆ *Summary of Communications Problems & Needs*

REVISED RICPs By 6/30/11 (Drafts Due 3/31/11)

2) Conceptual System Design (to meet the P25 Standard by the end of 2015)

Design Alternatives & Recommendations:

- ◆ *Technological & Regulatory Considerations*
 - Frequency Band
 - Licensing Issues
 - Mode of Operation
 - Wide Area Technology

REVISED RICPs By 6/30/11 (Drafts Due 3/31/11)

- Digital Radio Characteristics (P25)
- Shared City/County/ COG System(s)
- Dispatching Considerations
- Wide Area Technology

REVISED RICPs By 6/30/11 (Drafts Due 3/31/11)

- ◆ *Design Features & Recommended Approach:*
 - System Reliability
 - Interoperability
 - Encryption
 - Telephone Interconnect?
 - Growth Flexibility
 - Automatic Vehicle Location
 - Emergency Features

REVISED RICPs By 6/30/11

(Drafts Due 3/31/11)

- ◆ *(Design Features & Recommended Approach Continued)*
 - Specialized Equipment
 - Equipment Standardization
 - Channel Scan
 - Unit ID
 - Improved Audio Quality
 - New Equipment
 - Paging & Alert Systems

REVISED RICPs By 6/30/11 (Drafts Due 3/31/11)

The Actual Design Document:

- ◆ *Radio Coverage Requirements*
- ◆ *Repeater Sites*
- ◆ *System Capacity*
- ◆ *System Architecture*
- ◆ *Dispatch Center Configuration*

REVISED RICPs By 6/30/11 (Drafts Due 3/31/11)

3) Budgetary Estimates

- ◆ *Infrastructure Pricing by Site*

- ◆ *Subscriber Pricing by Agency*

4) Hiring of a Consultant to do Tasks Above, Do it In-House, or a Combination Thereof? Updating of Existing Study? MOU funds to DPS to Help You Do It?

REVISED RICPs By 6/30/11
(Drafts Due 3/31/11)

What do you do if your public safety agencies won't come to the meetings or cooperate?

REVISED RICPs By 6/30/11

Statewide RICP Round #2

*Workshop in Austin 9/28th,
29th or 30th – 9 am-4pm (exact
date & location pending*

*Bring your consultants and radio
vendors, if already selected*

REVISED RICPs By 6/30/11
(Drafts Due 3/31/10)

DPS Technical Assistance Unit

DPSTEchnical.assistance@txdps.state.tx.us

(512) 424-7134

Interoperable Communications Internet Links

Texas Radio Coalition web site for more information,
including the Texas Statewide Communications Interoperability Plan (SCIP):
<http://txrc.region49.org>

Texas Statewide Communications Interoperability Channel Plan (TSCIP):
<http://tsiec.region49.org/MOU+TSICP.pdf>

National Emergency Communications Plan:
http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf

Contacts:

Mike Simpson, Statewide Communications Interoperability Coordinator & Assistant Director, Texas Department of Public Safety – Law Enforcement Support;
(512) 424-7427; mike.simpson@txdps.state.tx.us

Todd Early, Deputy Statewide Communications Interoperability Coordinator & Deputy Assistant Director, Texas Department of Public Safety – Public Safety Communications Bureau; (512) 424-2121; todd.early@txdps.state.tx.us