

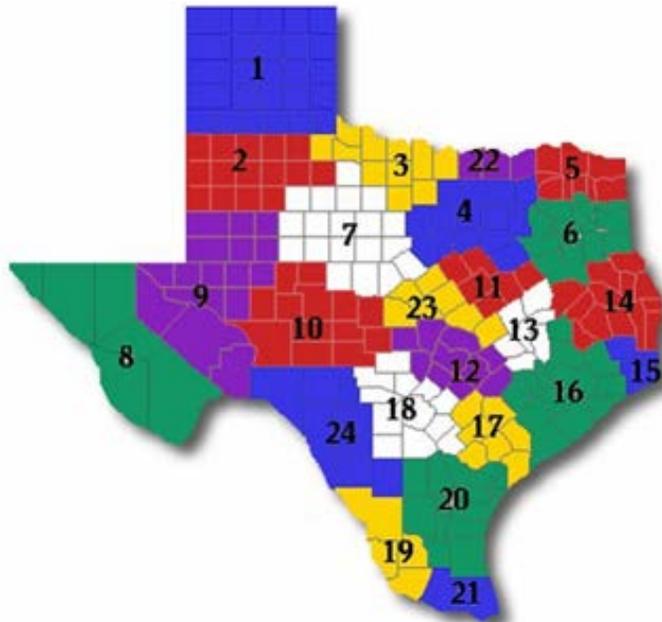
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# [COG Region #] Regional Interoperable Communications Plan (RICP)

Includes

**Volume I: Regional Governance & Regional  
Interoperable Migration Plan**

**Volume II: Regional Standard Operating Procedures &  
Texas Statewide Interoperability Channel Plan**



*Map Courtesy of Texas Association of Regional Councils*

***April 2010***

*Version 21.0 – 2010*

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## Regional Interoperable Communications Plan Approval & Authorization Page

On \_\_\_\_\_ the (Board of Directors/Executive Committee) of the  
(COG Name) adopted the (Name of COG) Regional Interoperability  
Communications Plan (RICP).

The (Name of COG) includes \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,  
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\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Counties and all jurisdictions and/or public safety agencies within these  
counties.

Signed:

\_\_\_\_\_  
Executive Director

Date:  
\_\_\_\_\_



## **RICP Volume I**

The Regional Interoperable Communications Plan (RICP) is divided into two volumes for ease of revisions and approvals for (1) the distribution of funding and build-out and migration of regional communications system(s) to P25 Compliant Standards-Based Shared System by 2015, and (2) referenced revisions to policies and procedures in addition to operational guidance.

**Volume I** Regional Governance & Regional Interoperable Migration Plan

**Volume II** Regional Standard Operating Procedures, Training/Exercise Plan & the Texas Statewide Interoperability Channel Plan

## **Executive Overview**

*“From terrorism to tornadoes, whatever happens, everyone is involved in truly a team effort,” Steve McCraw, Director, Texas Homeland Security Conference, March 23, 2009.*

Recognizing the need for an overarching emergency communications strategy to address communications deficiencies that exist at the regional level, this guide provides the governance and authority needed to decide on the grant funding disbursement for regional interoperable communications. This document includes, on a strategic level, equipment requirements, policies and procedures that explain the equipment’s operational use, training that must occur on the new equipment, the build-out plan of communications systems to achieve region-wide interoperability, and usage by all relative agencies on a daily basis.

This document establishes a Regional Interoperable Communications Plan for the **[Region]**, inclusive of \_\_\_\_\_ Urban Area. The RICP is intended to document:

- 1) Regional Governance Structures (RGOV)
- 2) Regional Interoperable Migration Plans (RIMP)
- 3) Regional Standard Operating Procedures (RSOP)

for public safety, public service and non-governmental emergency responders’ daily operations and emergency response activities available within the designated area, who controls each resource, and what rules of use or operational procedures exist for activation and deactivation of each resource.

The RICP is designed to align the state and regional communications interoperability plan, objectives and goals to the National Emergency Communications Plan. The desired future state is that emergency responders can communicate:

**As needed, on demand, and as authorized**

**At all levels of government**

**Across all disciplines**

To measure progress toward this vision, three strategic goals were established:

| <b>NECP<br/>(National Emergency Communications Plan)</b> |  |
|--|--|
| <b>Goal 1</b>  | <i>By 2010, 90 percent of all high-risk urban areas designated within the Urban Areas Security Initiative (UASI) are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.</i> |
| <b>Goal 2</b>  | <i>By 2011, 75 percent of non-UASI jurisdictions are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.</i>   |
| <b>Goal 3</b>  | <i>By 2013, 75 percent of all jurisdictions are able to demonstrate response-level emergency communications within three hours, in the event of a significant incident as outlined in national planning scenarios.</i>   |

As defined in the National Incident Command System 200, "Leadership and Management", "**Response-level emergency communications** is the capacity of individuals with primary operational leadership responsibility to manage resources and make timely decisions during an incident involving multiple agencies, without technical or procedural communications impediments."

The State of Texas has adopted the goals as outlined in the National Emergency Communications Plan and will develop methodology for the achievement of these goals. These goals describe the minimum response levels for all emergency responders statewide. The diverse communications systems within the state, the diverse response environments within the state, the broad scope of vulnerabilities, and the high probability of several simultaneous disasters being managed at the same time requires a precise concept of "Response-level emergency communications." Additionally, in order to ensure a consistent level of response across a varied communications landscape, Texas must define those actions that constitute the "one hour" stated in the national strategic goals.

The one hour standard begins from the time that:

- An Incident Commander takes charge of the incident, and
- the Incident Commander has assessed the incident and determined the required communications assets and networks to manage the response effort, and
- the Incident Commander has establish an Incident Communications Plan for the initial response.

Basic assumptions regarding Response-level Emergency Communications:

- All responding agencies manage initial shift with basic communications equipment on hand (basic issue radios, interoperability channels programmed, and local channels programmed).
- All agencies will equip units based on locally determined operability needs.
- As incident levels escalate in magnitude, more sophisticated interoperability gateway equipment will be introduced to support shifts beyond the initial response.

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# 1 State of Affairs

The Regional Interoperable Communications Plan is a strategic plan that:

- Establishes a regional vision for the future state of local emergency communications.
- Sets regional goals and priorities for addressing deficiencies in the region's emergency communications structure.
- Provides recommendations and milestones for emergency response providers and relevant government officials to improve their communications capabilities.

The RICP includes the Regional Governance Structures, Regional Interoperable Migration Plans and Regional Standard Operating Procedures. The RICP (inclusive of all three plans) should be brief and provide point of contact (POC) and direction for additional information. Additional documents, such as Tactical Interoperable Communications Plans or consultants proposals) can be added to the Appendix, and should be added to the Table of Contents.

[Region] and [insert state agency(s)] partnered in the development of this Regional Interoperable Communications Plan.

The following is the multidisciplinary team for establishing and completing initiatives and milestones relative to the RICP scope and timeframe.

## Regional Interoperable Communications Plan Point of Contact (POC)

### Regional Interoperability Coordinator (RIC), Primary POC:

Agency Name:  
POC Name:  
Title:  
Address:  
Office Phone:  
Cell Phone:  
24/7 Phone:  
E-Mail:

### Alternate:

Agency Name:  
POC Name:  
Title:  
Address:  
Office Phone:  
Cell Phone:  
24/7 Phone:  
E-Mail:

### State Agency:

Agency Name:  
POC Name:  
Title:  
Address:  
Office Phone:  
Cell Phone:  
24/7 Phone:  
E-Mail:

## Regional Participating Counties/Jurisdictions/Agencies

The following is a list of counties and urban areas represented in the RICP along with POC emergency phone numbers. Also included is information on other regions and/or counties that are also participating in this regional communications system. (Multiple regions and/or adjacent counties can share the same regional communications system).

Table 1 [COG] Participating Counties/Jurisdictions/Agencies POC Information

| Region/County/Urban Area | POC Name | Emergency Contact Information |
|--------------------------|----------|-------------------------------|
|                          |          |                               |
|                          |          |                               |

## State Agencies Contact Information

Table 2 [COG] State Agencies POC Information

| State Agency | POC Name | Emergency Contact Information |
|--------------|----------|-------------------------------|
|              |          |                               |
|              |          |                               |

## Federal Agencies Contact Information

Table 3 [COG] Federal Agencies POC Information

| Federal Agency | POC Name | Emergency Contact Information |
|----------------|----------|-------------------------------|
|                |          |                               |
|                |          |                               |

## Nongovernmental Agencies Contact Information

Table 4 [COG] Nongovernmental Agencies POC Information

| Organization   | POC Name | Emergency Contact Information |
|----------------|----------|-------------------------------|
| Red Cross      |          |                               |
| Salvation Army |          |                               |

## 1.1 Regional Communications Assessment (CASM)

### CASM Overview

The Communication Assets Survey and Mapping (CASM) tool provides the ability for representatives of public safety agencies to collect, store, and visualize communication assets, and analyze interoperability gaps.

Authorization to view data for a particular area or State is controlled by the Administrative Manager (AM); each user must have a user name and password in order to login.

***Each region must have entered and maintain 80% of interoperable communications assets in CASM by December 15, 2009.***

Contact information for the Regional CASM Administrative Manager POC, and alternate is listed in the following table:

**Table 5 Regional CASM AM POC Information**

| System Name | POC Name | Phone | Email | Area of Responsibility |
|-------------|----------|-------|-------|------------------------|
|             |          |       |       |                        |
|             |          |       |       |                        |

## 1.2 Transitioning to Standards-based Shared Emergency Communications Systems

### 1.2.1 Focus Group Sessions

[Insert Region name(s)] annual Focus Group Session will take place on the \_\_\_\_\_ (insert weekday) of \_\_\_\_\_ (insert April, May or June) during the \_\_\_\_\_ (insert Communications Committee name) monthly meeting. The group will identify and/or re-evaluate:

- Areas and agencies lacking operability/interoperability.
  - Identify and plan to overcome gaps in regional operable/interoperable communications, policies and training.
- Accomplishments and status of projects.
  - Identify progress along the Interoperability Continuum. Re-evaluate regional requirements as technology evolves and circumstances dictate. Review communications related SOPs created by the participating agencies, to preclude conflicts or non-compliance with current standards or initiatives.
- Initiatives and priorities for funding.
  - Prioritize and recommend projects for funding based on Statewide Communications Interoperability Plan (SCIP) priorities and initiatives, risk factors as defined by the Target Capabilities List (TCL), and the CASM gap analysis. Review and update the Implementation Timeline and Cost Report.

This information will be submitted annually to Texas Association of Regional Councils (TARC) by July 1, to be integrated into the State Preparedness Report, the revised SCIP Initiatives, and revised SCIP Funding Plan.

### 1.2.2 SAFECOM Interoperability Continuum

The SAFECOM Interoperability Continuum is designed to assist emergency response agencies and policy makers to plan and implement solutions for interoperable communications. This tool identifies five critical success elements that must be addressed to achieve interoperability: governance, standard operating procedures, technology, training and exercises, and usage. *Jurisdictions should use the Interoperability Continuum to track progress in strengthening interoperable communications.*

### **1.2.3 Public Safety First Responder Teams**

Statewide communications interoperability in Texas is based on the System-of-Systems approach. Texas' 24 regions (Councils of Governments) are building integrated public safety regional interoperable communications systems. Several regions are building multi-regional communications systems. These individual systems will provide the communications infrastructure for the statewide system-of-systems.

Regional systems will be used by state and local public safety agencies for daily operations as well as emergency communications operations.

In compliance with the National Priority for Regional Collaboration, the SAFECOM Interoperability Continuum, and the Texas SCIP, be it known that,

Texas State Agencies responsible for providing public safety emergency services are integral partners in regional communications systems, policies and procedures, and are critical members of regional, county and local jurisdictions' public safety first responder teams. State agencies integrated in this effort include (but are not limited to):

- Texas Department of Public Safety
- Texas Department of Emergency Management
- Texas Forest Service
- Texas Parks and Wildlife
- Texas Department of Transportation



**Homeland Security**

# Interoperability Continuum

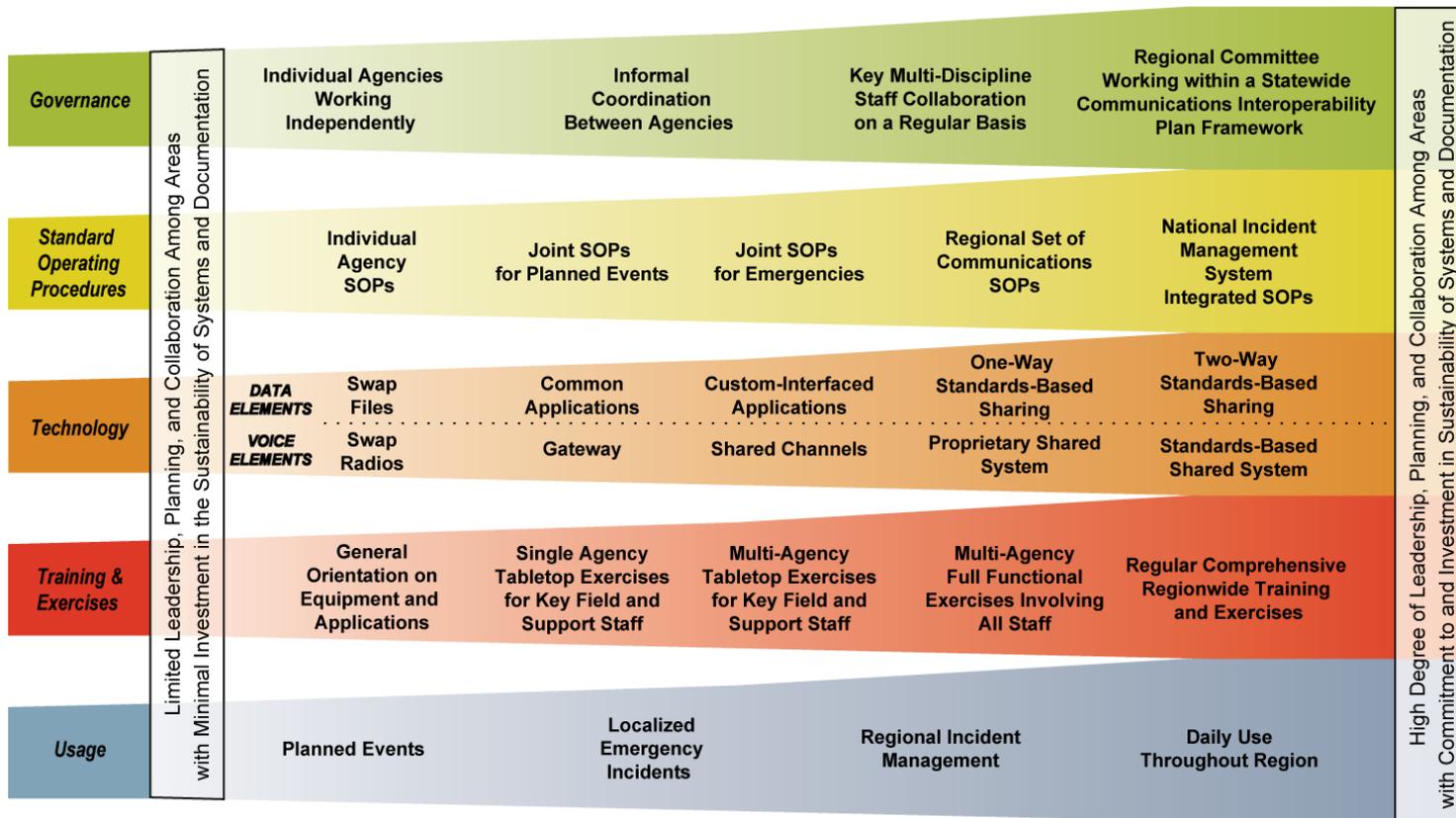


Figure 1 Interoperability Continuum

## 1.3 RICP Maintenance and Update

The RICP consists of two volumes:

- Volume I**      Regional Governance & Regional Interoperable Migration Plan
- Volume II**     Regional Standard Operating Procedures, Training/Exercise Plan & the Texas Statewide Interoperability Channel Plan

Significant revisions to the RGOV and the RIMP will require executive approval from the COG. Revisions to the RSOP are adopted by referenced current version and subsequent versions, the current version of the submitted RSOP can be located at <http://txrc.region49.org/>.

The **[Name of Council/Executive Board]** has the responsibility to review this document at a meeting called, when necessary, by the RICP POC/RIC. Requests for modifications or additions to this document should be submitted to the RICP POC/RIC for distribution to the **[Name of Council/Executive Board]**. Updates to this document can be recommended by any of the participating agencies. Agencies participating in this plan will be formally notified within **[Number of days]** of any approved modifications or additions to this RICP. At a minimum the RIC should review the RICP annually, and if needed, submit any changes.

## 1.4 RICP Ratification Process

After customizing the RICP template with regional policy and procedure information, formally identifying the regional governance structure, and providing a high-level migration design to reach a regional public safety P25 Compliant Standards-Based Shared System for voice communications by 2015, the following ratification procedure will be employed:

- 1) The Texas Radio Coalition (TxRC) Technology Advisors and the Communications Area Managers of the Texas Department of Public Safety (DPS) Bureau of Law Enforcement Communications & Technology will collaborate with the COGs in their regions on the final review and compliance of the RICP.
- 2) The COGs will develop a review and comment period for participating agencies, jurisdictions, and counties.
- 3) The RICP documents approved at the COG will be submitted to the Statewide Interoperability Coordinator.
- 4) *This approval process must be completed by no later than March 15, 2010, for continued eligibility for state and federal communications funding.*
- 5) RICPs must be compliant with the NECP, NIMS, National Response Framework, Target Capabilities List, and the Texas Statewide Communications Interoperability Plan.
- 6) The governor has final authority over statewide communications interoperability.

## 2 Governance

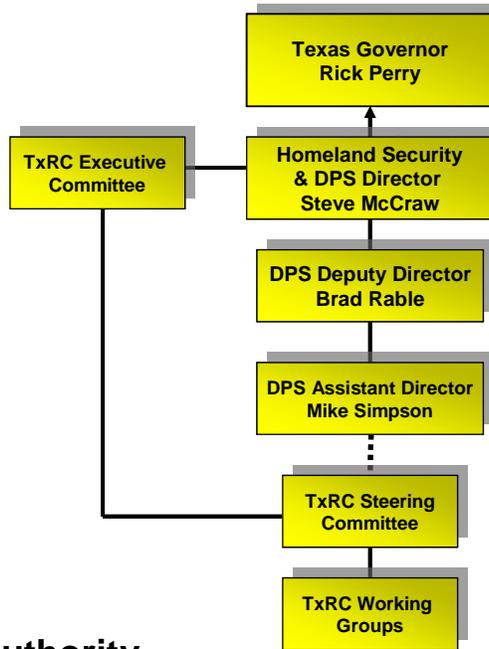
### NECP Objectives:

- To facilitate the development of effective governance groups and designated emergency communications leadership roles;
- To integrate strategic and tactical emergency communications planning efforts across all levels of government;
- To develop coordinated grant requirements that promote Federal participation and coordination in communications planning processes, governance bodies, joint training and exercises, and infrastructure sharing.

### 2.1 State Governing Body

Texas interoperable communications plans and governance is directed and approved by the Texas Governor. The organizational chart below identifies support positions from the Governor's Office down to the regional level.

Figure 2 SCIP State Governing Body



### 2.2 Regional Governance Authority

In accordance with the:

- Texas Government Code [421](#) and the
- Texas Statewide Interoperable Communications Plan.

Texas regions will develop governance structures which will provide oversight for the development and implementation of (1) the regional integrated public safety radio system, (2) the Regional Interoperable Migration Plans and (3) Regional Standard Operating Procedures.

Regions will adopt existing or create new governance agreements that provide supervision in the use of appropriated money, including money from relevant state and federal homeland security grants, for the purposes of designing, implementing, and maintaining a regional

integrated public safety radio communications system that provides interoperability between local, state and federal agencies and first responders.

Regions will develop, implement and train on a common statewide SOP, consistent with National Incident Management System (NIMS), National Response Framework (NRF) and National Emergency Communications Plan (NECP).

Regions will develop strategic plans to migrate radio communications assets to a standards-based-shared system-of-systems by 2015.

## 2.3 Regional Governance Structure Representatives

The RICP was developed under the authority of the [Name of Council/Executive Board]. On [MM/DD/YY] the [Name of Council/Executive Board] appointed members to the [Name of Communications Committee/Subcommittee/Task Force], designated as an advisory committee to the [Name of Council/Executive Board]. Members may include representatives from the following public safety and public service disciplines: (Regions may identify their membership with an organizational chart and/or by description)

- Critical Infrastructure/Utilities
- Emergency Management
- Emergency Medical Services
- Fire/Rescue
- Information Technology (IT)
- Investigations and Intelligence
- Law Enforcement
- Military
- Nongovernmental Organizations (NGOs)
- Public Health
- Public Works
- Tribal Entities

## 2.4 Regional Governing Body Responsibilities

The [governing body] will:

- Maintain and update the RICP at regular intervals, or as critical updated information is identified.
- Disseminate updated plans to all participating agencies.
- Establish training requirements in support of the RICP.
- Promote interoperable communications capabilities through trained communications personnel.
- Initiate Memoranda of Understanding (MOUs) and Agreements for interoperable communications.
- Promote regular interoperable equipment/solutions testing; assist agencies with test evaluations, and dissemination of the results.
- Schedule annual Focus Group Meetings.

## 2.5 Meeting Schedule

The [governing body] meets regularly at the [location/time/date information].

### 3 Regional Interoperable Migration Plan

#### NECP Objectives:

- Emerging technologies are integrated with current emergency communications capabilities through standards implementation, research and development, and testing and evaluation.
- All levels of government drive long-term advancements in emergency communications through integrated strategic planning procedures, appropriate resource allocations, and public-private partnerships.

#### 3.1 Regional System-of-Systems Design

Texas has adopted the “Project 25 Suite of Standards” as the technology solution and long-term interoperability goal for voice public safety agency communications. The Texas SCIP directs the foundation for statewide interoperable communications to be based on the SAFECOM/Office of Emergency Communications (OEC) “System-of-Systems Approach for Interoperable Communications. A system of systems exists when a group of independently operating systems—comprised of people, technology, and organizations—are connected, enabling emergency responders to effectively support day-to-day operations, planned events, or major incidents.”<sup>1</sup>

Utilizing the System-of-System recommendations and in compliance with the Texas SCIP, each region will develop high-level strategic plans to implement a regional interoperable communications system which will become one of 24 regional systems forming the statewide interoperable communications system. Regions should concentrate on providing operability first, then building interoperability within the region.

- Region 1 - Panhandle Regional Planning Commission
- Region 2 - South Plains Association of Governments
- Region 3 - Nortex Regional Planning Commission
- Region 4 - North Central Texas Council of Governments
- Region 5 - Ark-Tex Council of Governments
- Region 6 - East Texas Council of Governments
- Region 7 - West Central Texas Council of Governments
- Region 8 - Rio Grande Council of Governments
- Region 9 - Permian Basin Regional Planning Commission
- Region 10 - Concho Valley Council of Governments
- Region 11 - Heart of Texas Council of Governments
- Region 12 - Capital Area Council of Governments
- Region 13 - Brazos Valley Council of Governments
- Region 14 - Deep East Texas Council of Governments
- Region 15 - South East Texas Regional Planning Commission
- Region 16 - Houston-Galveston Area Council
- Region 17 - Golden Crescent Regional Planning Commission
- Region 18 - Alamo Area Council of Governments
- Region 19 - South Texas Development Council
- Region 20 - Coastal Bend Council of Governments
- Region 21 - Lower Rio Grande Valley Development Council
- Region 22 - Texoma Council of Governments
- Region 23 - Central Texas Council of Governments
- Region 24 - Middle Rio Grande Development Council

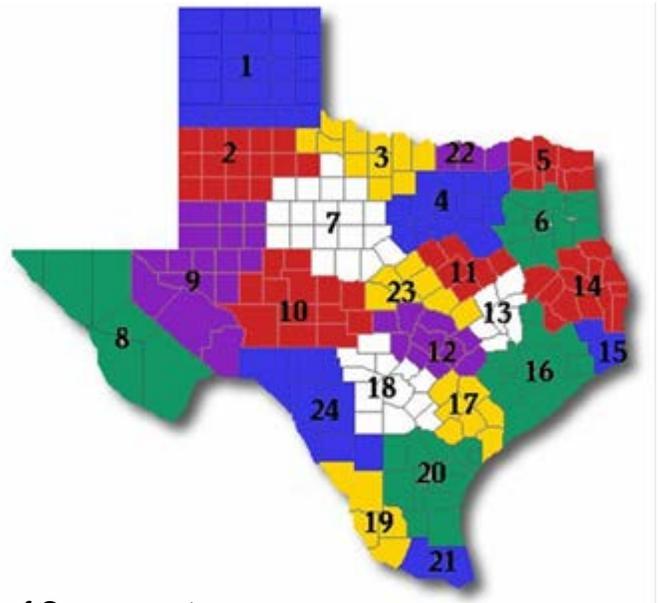


Figure 3 Texas Regional Planning Districts/Councils of Governments

<sup>1</sup> [http://www.safecomprogram.gov/NR/rdonlyres/FD22B528-18B7-4CB1-AF49-F9626C608290/0/SOSApproachforInteroperableCommunications\\_02.pdf](http://www.safecomprogram.gov/NR/rdonlyres/FD22B528-18B7-4CB1-AF49-F9626C608290/0/SOSApproachforInteroperableCommunications_02.pdf)

With a system of systems approach, planners are able to consider how technology is evolving to maintain system connections and overcome interoperability challenges. This approach allows for greater consideration for backwards-compatibility, standard technical interfaces and migrating to advanced technologies.

**Critical Tasks:**

(Note: The communication capabilities (**COMC**) information provided in the following bullets are from the Target Capabilities List. Please see the following website for more information on the TCL: <http://www.fema.gov/pdf/government/training/tcl.pdf>)

- **ComC 1** – Develop communication plans, policies, procedures, and systems that support required communications with all Federal, Regional, State, local, and tribal governments and agencies as well as voluntary agencies.
- **ComC 1.4** – Design reliable, redundant, and robust communications systems for daily operations capable of quickly reconstituting normal operations in the event of disruption or destruction.
- **ComC 1.7.2** – Coordinate procurement and placement of technology communication systems based on a gap analysis of requirements versus existing capabilities.

**Preparedness Measures:**

- Operable communications systems that are supported by redundancy and diversity, that provide service across jurisdictions, and that meet everyday internal agency requirements, are in place.
- Communications SOPs that conform to NIMS are in place and are used in routine multiple jurisdictional responses.
- A multi-agency and multi-jurisdictional governance structure to improve communications interoperability planning and coordination has been established.
- Formal interoperable communications agreements have been established through the governance structure.

## 3.2 Radio Infrastructure Overview

### 3.2.1 Existing Radio Systems

Please summarize the existing radio systems by county or jurisdiction under Non P25 Compliant Systems or P25 Compliant Systems. For additional information on [insert region's] communications systems and assets, please contact the CASM Administrative Manager.

***Non P25 Compliant Systems***

- 

***P25 Compliant Systems***

-

### 3.2.2 Regional Radio System Definition

Multiple shared local public safety radio systems, compliant with the P25 suite of standards or transitioning to P25 standards, linked and/or expanding for regional coverage, providing interoperable communications to emergency responders to effectively support day-to-day operations, planned events, or major incidents;

Or

A single shared public safety radio system, compliant with the P25 suite of standards or transitioning to P25 standards, offering and/or expanding for regional coverage, providing regional interoperable communications to emergency responders to effectively support day-to-day operations, planned events, or major incidents.

The regional radio system may consist of any combination of the following:

- Analog and/or digital radio channels;
- Conventional and/or trunked radio sites;
- VHF, 700 and/or 800MHz frequencies.

Note: See specific system and operational requirements in the text box below.

***The regional radio system must support the  
Texas Statewide Interoperability Channel Plan.***

***For the current version of the TSICP go to: <http://tsiec.region49.org/MOU+TSICP.pdf>.***

#### **Modulation and Encryption**

This plan identifies allowable modulation and encryption on calling and tactical channels:

- **Calling Channels:** Until January 1, 2015, analog modulation is mandatory on all calling channels to facilitate interoperability with legacy radio equipment in the field. Exception: Communications on 700 MHz interoperability channels must always use P25 Phase 1 CAI digital modulation.
- **Tactical Channels:** Until January 1, 2015, analog modulation is preferred on all interoperability tactical channels to facilitate interoperability with legacy radio equipment in the field. Exception: Communications on 700 MHz interoperability channels must always use P25 Phase 1 CAI digital modulation.

Local agencies may use interoperability tactical channels for day-to-day emergency related purposes not requiring communications with emergency resources from other jurisdictions. In such events, non-encrypted digital modulation is authorized on tactical interoperability channels in all bands. When used, digital modulation for interoperability channels shall be P25 Phase 1 CAI compliant and shall use the following configuration criteria:

- Network access code shall be \$293 hex (659 decimal)
- Talk group ID shall be 0001 (hex or decimal)
- Manufacturer's ID shall be 00 (hex or decimal)
- Message ID shall be 00000000000000000000 (20 zero's, hex or decimal)

- For occasional pre-planned events where communications security is an issue, encrypted P25 Phase 1 CAI modes are authorized on tactical channels. Specific encryption algorithms and encryption keys shall be as defined by the event incident commander.

### 3.2.3 [COG] Designated Regional Radio System(s)

This section identifies and provides POC information for the radio system and/or systems that comprise the [COG] Regional Radio System (RRS). The system(s) listed below is/are the designated public safety emergency communications system(s) for this region. Detailed information on this/these system(s) can be found in CASM. Operations on the RRS will be consistent with the RSOP.

Table 6 [COG] Regional Radio Systems

| System Name | Primary Location | POC Information |
|-------------|------------------|-----------------|
|             |                  |                 |
|             |                  |                 |

### 3.3 Migration Plan to P25 Compliant Standards-Based Shared Systems by 2015

#### 3.3.1 [COG] Regional Radio System Characteristics and Description

The vision of the [COG] is to build a Public Safety Regional Radio System with these characteristics:

Check all that apply

- System type:  VHF  UHF  700MHz  800MHz  
 Analog  Digital  Trunked  Conventional
- Gateways (if required):  ACU1000  Network Switch  ISSI  
 Console Patch  Other \_\_\_\_\_(provide name)
- Estimated fixed transmitter sites:  1-5  6-8  9-10  
 11-14  15-18  \_\_\_\_\_(fill-in estimated number of sites)
- Will sites be connected for seamless roaming  Yes  No
- Common Texas interoperability channels to be used throughout the region:  
 VHF  UHF  700MHz  800MHz  
 Other \_\_\_\_\_(provide name)

**Regional Radio System Description: (not to exceed 3,000 characters with spaces)**



### 3.3.2 Operability / Interoperability

Wireless communications is fundamental for emergency responders to perform the most routine and basic elements of their functions. Agencies must be operable, meaning they must have sufficient wireless communications to meet their everyday internal and emergency communication requirements before they place value on being interoperable, i.e., able to talk with other agencies.<sup>2</sup> The communications priorities for funding established by Texas first responders in the SCIP are:

1. Operability – providing radio coverage and user equipment where needed.
2. Interoperability – providing mutual aid infrastructure and capability where needed.
3. Build-out of regional P25 Compliant Standards-Based Shared Systems – upgrading existing or building new P25 compliant shared systems.

Regions will identify and report agencies and areas lacking communications operability and/or interoperability annually in their Focus Group Session.

#### Interoperability

*(The following is an example of how to write the interoperability portion of the radio system.)*

Any legacy systems that are not intended to be replaced by the new or expanded P25 compliant systems will remain in place. Interoperability will be provided to/from these systems.

The XYZ 900 MHz trunked radio system will remain in place and will be made interoperable with both the new B County system and the A County/K County radio system. Audio gateways will be installed to tie the XYZ interoperable channel to the state Interoperable talkgroup 4 on both P25 compliant systems.

### 3.3.3 Risk Mitigation

*(The following is an example of how to write your Risk Mitigation.)*

The primary risk involved in any radio communication system upgrade or migration is the interruption of operational traffic. These risks will be mitigated by leaving all operations on legacy systems until the new system that the operation is moved to, is operational and tested. Then the bridges or gateways will be used to temporary tie the legacy system to the new system. An SOP will be developed for the proper usage of any new system. Operator and user training will be held on any new equipment. The operational communications, individually by discipline, will be moved to the new system. The remaining legacy equipment will remain in place until all operational disciplines are moved and all users are competent on the new system.

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<sup>2</sup> Target Capabilities List, September 2007, [www.dhs.gov](http://www.dhs.gov).

### 3.3.4 Multi-jurisdictional / Multi-disciplinary Talkgroups / P25 Compliant Standards-Based Shared System

*(The following is an example of how to write the Regional Talkgroup/Channel Plan.)*

Jurisdictions within the ABC COG achieve communications interoperability via a regional channel plan shared by all users of the regional system. (See appendix.) The interoperability channel plan was developed by a committee of representatives of all disciplines that use the regional system. The resulting channels were incorporated into subscriber unit templates and programmed into all radios on the system during the FCC-mandated rebanding process.

The [Insert Region] COG regional interoperable channel plan incorporates the requirements of the Texas Statewide Interoperability Channel Plan. It also defines channels specific to the ABC COG regional system designed to address the operational needs of users of this system. The plan further addresses the need to control the size and complexity of subscriber-unit templates by creating interoperability channels and making them common to all radios, minimizing the need to program agency-specific channels into multiple agencies' radios.

New P25 statewide interoperability "ISSI" channels are designed to permit roaming among disparate P25 systems via single-frequency (e.g., VHF, 700 MHz, 800 MHz, 900 MHz) or "multi-band" subscriber units. This capability is integral to the "system of systems" statewide interoperability concept. At the point where statewide "ISSI"-type channels are identified and named, the details will be captured in the TSICP and incorporated into ABC COG's interoperability channel plan.

## 3.4 Implementation of Prioritized Projects

Regions prioritize projects for funding based on SCIP priorities and initiatives, risk factors as defined in the TCL, and the CASM gap analysis. [Insert region] current top three high-priority specific projects are:

**Table 7 Prioritized Projects**

| Project Description | County | Jurisdiction / Primary Agency | Operability / Interoperability | New System/Upgrade to P25 |
|---------------------|--------|-------------------------------|--------------------------------|---------------------------|
|                     |        |                               |                                |                           |
|                     |        |                               |                                |                           |
|                     |        |                               |                                |                           |

### 3.4.1 Key Roles and Responsibilities

Each region will assign a Regional Interoperability Coordinator (RIC), see RICP Section 1 State of Affairs. The RIC will oversee the migration of new and existing communications assets to a P25 Compliant Standards-Based Shared System for voice communications by 2015. The RIC will be the point-of-contact for the Regional Interoperable Migration Plan and all projects associated with the Plan. Dependent upon the size and resources of the region, the RIC may also serve at the Project Manager. Additional Project Managers may be assigned if required. It is suggested that all Project Manager(s) review the Project Manager Guide at [http://txrc.region49.org/RICP\\_documents.html](http://txrc.region49.org/RICP_documents.html).

The Project Manager(s) may create a Project Management Team and assign specific tasks to others, such as purchasing equipment. Major projects require the primary vendor to assign a Vendor Project Manager (VPM) per the Project Manager Guide.

The Project Manager(s) responsibilities are based on the SAFECOM recommendations for communications systems. The three basic operations are:

1. PLAN – specifying the results to be achieved, determining the schedules, and estimating the resources required;
2. ORGANIZE – defining roles and responsibilities; and
3. CONTROL – reconfirming expected performance, monitoring actions taken and results achieved, addressing problems encountered and sharing information with all entities involved.

*Prior to initiating projects, the RIC and/or Project Managers should review current Texas Division Emergency Management (TDEM) grant requirements, policies and procedures, found at <http://txrc.region49.org/>.*

### 3.5 Implementation Timeline and Costs

“Capabilities-based Planning accounts for uncertainties, by developing capabilities suitable for a wide range of threats and hazards, when limited resources necessitate prioritization and choice among preparedness efforts.”<sup>3</sup>

The RIC will provide estimated costs for the:

- Strategic build-out / upgrade of communications assets to a regional P25 Compliant Standards-Based Shared System by 2015,
- Routine operations, including backhaul, and maintenance,
- Resources.

This information will be captured in the “Implementation Timeline and Costs Report” spreadsheet. (See example in Appendix A, go to [http://txrc.region49.org/RICP\\_documents.html](http://txrc.region49.org/RICP_documents.html) to download the template.) The RIC will update the “Implementation Timeline and Costs Report” annually for the Focus Group Session. This report, along with the Focus Group Session Report will be submitted annually to the TxRC and the State Communications Coordinator. Regional cost estimates will be used to procure and disburse grant funding statewide.

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<sup>3</sup> Ibid.

## **RICP VOLUME II**

The RICP is divided into two volumes for ease of revisions and approvals for (1) the distribution of funding and build-out and migration of regional communications system(s) to P25 Compliant Standards-Based Shared Systems by 2015, and (2) referenced revisions to policies and procedures in addition to operational guidance.

- |                  |  |
|------------------|--|
| <b>Volume I</b>  | Regional Governance & Regional Interoperable Migration Plan  |
| <b>Volume II</b> | Regional Standard Operating Procedures, Training/Exercise Plan & the Texas Statewide Interoperability Channel Plan |

### **4 Regional SOPs, Training/Exercise Plans, and the Texas Statewide Interoperability Channel Plan**

#### **NECP Objectives:**

- Emergency responders employ common planning and operational protocols to effectively use their resources and personnel.
- Emergency responders have shared approaches to training and exercises, improved technical expertise, and enhanced response capabilities.
- **[Insert region name]** has integrated preparedness, mitigation, response, and recovery capabilities to communicate during significant events.

SOPs, Training/Exercise Plans and the Texas Statewide Interoperability Channel Plan contain information and the steps to follow when responding to an emergency event. Good plans and training transform policy into well-defined steps that can be consistently performed by users to produce the desired outcome. The Texas Interoperability Channel Plan describes conditions and guidelines for use of state-licensed interoperability or mutual-aid radio channels.

#### **4.1 Regional Integrated SOP**

Volume II Section 4 of the [Insert Region Name] RICP will be available for use by all emergency responders (local, state, federal, non-governmental) at <http://txrc.region49.org/>.

##### **4.1.1 Introduction and Lead Agency**

To remedy the inability to communicate among disciplines, **[insert region name]** public safety agencies have worked cooperatively to develop regional interoperability solutions. These solutions utilize Federal Communication Commission (FCC) designated and system-specific public safety interoperability radio channels (as well as communications vehicles and other mobile equipment,) and establish procedures for their use. The interoperability radio channels (and communications vehicles) are available as needed throughout the region. They are intended to provide both communications operability and interoperability at any multi-agency incident anywhere in the region.

In accordance with the [Statewide Communications Interoperability Plan \(SCIP\)](#), "Each Regional SOP will name a lead agency that will be responsible for the management, maintenance, and upgrade of the SOP. The SOP's will be revised when major changes are needed due to enhancements or other changes in the communications environment."

The lead agency for [insert region(s)] SOP is [lead agency name].

#### 4.1.2 Purpose and Scope

The purpose of this RSOP is to define the authority, roles, and procedures for first responders to use when operating on the [insert region name] interoperability channels and/or activating and using mobile assets. This RSOP also recognizes a number of interoperable communications alternatives to the [insert region name] interoperability channels, which can provide back-up and redundant communication capabilities during critical incidents. This RSOP provides general operational guidelines for using calling and tactical interoperability channels; it is up to individual agencies to develop specific operational and technical SOP's for their internal purposes.

The scope of this RSOP includes all public safety agencies -- police, fire, and EMS -- and public service agencies in [insert region name]. These agencies will work cooperatively to follow this RSOP during any multi-agency response. Agencies outside this region wishing to participate may enter into a Memorandum of Understanding (MOU) with [insert region name] for use of the channels and mobile assets, thereby agreeing to operate according to the procedures outlined in this document.

#### 4.1.3 Definitions, Channel Naming, and Radio Programming Requirements

##### Definitions

**7CALL50** – An FCC-designated public safety 700 MHz frequency used for “calling” or hailing.

**Intended use:** This channel is used for in-bound first responders from outside the region to call Public Safety Answering Points (PSAP's) in the event they need resources or are responding in a mutual aid situation. A call is made to dispatch to determine which tactical frequency the incident is utilizing. The PSAP may use this frequency to direct responding units to an incident location or to advise which tactical channel to use.

**7TAC#** – An FCC-designated public safety 700 MHz frequency used for tactical purposes.

**Intended use:** Example: The law enforcement agency operating at a hostage situation involving more than one agency can utilize any one of the many 7TAC frequencies for communication. The Incident Commander may choose to move Hostage Negotiations to 7TAC51 to lessen radio traffic on a main sector channel. (There are also discipline-specific tactical channels in the 700 MHz band, e.g. 7LAW, 7FIRE, 7MED. See the [Texas Statewide Interoperability Channel Plan or TSICP](#) for the complete list.)

**8CALL90** – An FCC-designated public safety 800 MHz frequency used for “calling” or hailing. (See intended use under "7CALL50.")

**8TAC#** – An FCC-designated public safety 800 MHz frequency used for tactical purposes. (See intended use under "7TAC#." See the [TSICP](#) for the complete list of 8TAC channels.)

**Communications Unit Leader (COML)** – Responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing communications equipment, distribution of communications equipment to incident personnel; maintenance and repair of communications equipment. ; supervision of the COMT, THSP, INCM, RADO COMC; .

**Incident Command System (ICS)** – The combination of facilities, equipment, personnel, procedures, and communications operating, within a common organizational structure, with

the responsibility for the management of assigned resources to effectively accomplish stated objectives pertaining to an incident.

**Incident Commander (IC)** – the individual responsible for the management of all incident operations.

**MHz (Megahertz)** – Radio frequency designator: One million cycles per second.

**National Incident Management System (NIMS)** – NIMS provides a consistent nationwide template to enable all government, private-sector, and non-governmental organizations to work together during domestic incidents. ICS is the national incident management model.

**Public Safety Answering Point (PSAP)** – A regional center where 9-1-1 calls are answered. PSAPS often include public safety radio dispatch centers capable of communications on all FCC-designated public safety calling channels (Texas Law 2, VCALL10, UCALL40, 7CALL50, and 8CALL90. There is no FCC-designated interoperability calling channel for 900 MHz.) to provide a lifeline capability throughout the state.

**Texas Law 2 (TXLAW2)** – 155.370 (Tx) / 154.950 (Rx) – Formerly the statewide "Intercity" VHF channel, now a statewide wideband VHF calling channel.

**UHF (Ultra High Frequency)** – 450 MHz to 512 MHz for public safety, no longer widely used in the State of Texas.

**UCALL40** – An FCC-designated public safety UHF frequency for "calling" or hailing. (See intended use under "7CALL50.")

**UTAC#** – An FCC-designated public safety UHF frequency used for tactical purposes. (See intended use under "7TAC#." See the [TSICP](#) for the complete listing of UTAC channels.)

**VHF (Very High Frequency)** – 150 MHz to 174 MHz for public safety; used by many public safety agencies throughout Texas, including the Texas Department of Public Safety.

**VCALL10** – An FCC-designated narrowband VHF frequency used for "calling" or hailing. (See intended use under "7CALL50.")

**VTAC#** – An FCC-designated narrowband VHF frequency used for tactical purposes. (See intended use under "7TAC#." See the [TSICP](#) for the complete listing of VTAC channels.)

### **Channel Naming**

The Texas nomenclature for FCC-designated calling and tactical channels, as detailed in the [TSICP](#), follows channel-naming guidelines from the National Public Safety Telecommunications Council. However, because these names have changed over time, some agencies' radios may display different names for the same channels, as follows:

- **8CALL90/D** (851.0125 MHz) may show in some radios as "8CAL90/D," "8CALL/D," "I-CALL/D," or "USA-1/D."
- **8TAC91/D** (851.5125 MHz) may show in some radios as "8TAC-1/D," "ITAC-1/D," or "USA-2/D."
- **8TAC92/D** (852.0125 MHz) may show in some radios as "8TAC-2/D," "ITAC-2/D," or "USA-3/D."
- **8TAC93/D** (852.5125 MHz) may show in some radios as "8TAC-3/D," "ITAC-3/D," or "USA-4/D."
- **8TAC94/D** (853.0125 MHz) may show in some radios as "8TAC-4/D," "ITAC-4/D," or "USA-5/D."

(The letter "D" is used to signify "DIRECT," also known as talk-around or car-to-car, channels. These interoperable channels are available in all radios in both repeated and

direct modes. In **DIRECT** or "**D**" mode, the channels operate radio-to-radio only and do not go through system repeaters or dispatch consoles.)

In [insert region name], system-specific interoperability channels/talkgroups are detailed in the [insert region] RICP. Compliance with these naming conventions is required for all radios that access the regional system.

### **Radio Programming Requirements**

Per the [TSICP](#), all public safety agencies in the State of Texas will program their first responder radios with the appropriate in-band interoperability calling and tactical channels.

For VHF users, the appropriate in-band interoperability channels are TXLAW#, TXFIRE#, TXMED#, and TXAIR#, as well as VCALL10 and VTAC#.

For UHF users, the appropriate in-band interoperability channels are UCALL/D and UTAC#/D.

For 700 MHz users, the appropriate in-band interoperability channels are 7CALL90/D, 7TAC#/D, and the discipline-specific interoperable channels detailed in the [TSICP](#).

For 800 MHz users, the appropriate in-band interoperability channels are 8CALL90/D, and 8TAC1/D through 8TAC4/D.

There are no FCC-designated interoperability channels in the 900 MHz frequency band. However, in [insert region], certain 900 MHz channels are designated by Lower Colorado River Authority (LCRA) for interoperability. These channels are available in 900 MHz public safety radios and to other public safety agencies via console patching. See the [insert region RICP] for details.

## **4.1.4 Communications Structure**

### **State/ Regional/Local Specific Information**

#### **Incident Types**

Incidents may be typed in order to make decisions about resource requirements. Incident types are based on the following five levels of complexity. (Source: U.S. Fire Administration)

#### **Type 5**

- The incident can be handled with one or two single resources with up to six personnel.
- Command and General Staff positions (other than the Incident Commander) are not activated.
- No written Incident Action Plan (IAP) is required.
- The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on scene.
- Examples include a vehicle fire, an injured person, or a police traffic stop.

#### **Type 4**

- Command staff and general staff functions are activated only if needed.
- Several resources are required to mitigate the incident.
- The incident is usually limited to one operational period in the control phase.
- The agency administrator may have briefings, and ensure the complexity analysis and delegation of authority are updated.
- No written Incident Action Plan (IAP) is required but a documented operational briefing will be completed for all incoming resources.
- The role of the agency administrator includes operational plans including objectives and priorities.

### Type 3

- When capabilities exceed initial attack, the appropriate ICS positions should be added to match the complexity of the incident.
- Some or all of the Command and General Staff positions may be activated, as well as Division/Group Supervisor and/or Unit Leader level positions.
- A Type 3 Incident Management Team (IMT) or incident command organization manages initial action incidents with a significant number of resources, an extended attack incident until containment/control is achieved, or an expanding incident until transition to a Type 1 or 2 team.
- The incident may extend into multiple operational periods.
- A written IAP may be required for each operational period.

### Type 2

- This type of incident extends beyond the capabilities for local control and is expected to go into multiple operational periods. A Type 2 incident may require the response of resources out of area, including regional and/or national resources, to effectively manage the operations, command, and general staffing.
- Most or all of the Command and General Staff positions are filled.
- A written IAP is required for each operational period.
- Many of the functional units are needed and staffed.
- Operations personnel normally do not exceed 200 per operational period and total incident personnel do not exceed 500 (guidelines only).
- The agency administrator is responsible for the incident complexity analysis, agency administrator briefings, and the written delegation of authority.

### Type 1

- This type of incident is the most complex, requiring national resources to safely and effectively manage and operate.
- All Command and General Staff positions are activated.
- Operations personnel often exceed 500 per operational period and total personnel will usually exceed 1,000.
- Branches need to be established.
- The agency administrator will have briefings, and ensure that the complexity analysis and delegation of authority are updated.
- Use of resource advisors at the incident base is recommended.
- There is a high impact on the local jurisdiction, requiring additional staff for office administrative and support functions.

Below is an example of an expanded **organization chart for Incident Management at a major incident**. It includes the Communications Unit Leader (COML) position in the Logistics sections. A full description of the duties and responsibilities of the Communication Unit Leader can be found in the DHS/OEC COML Student manual..

A depiction of command levels and roles within agencies clarifies the relationship among users. It is imperative that all agencies use the Incident Command System (ICS) as well as the NIMS to manage all incidents. As recommended in ICS and NIMS, *PLAIN LANGUAGE* shall be used when communicating on the calling and tactical channels. **It is the responsibility of the Incident Commander to determine when to use the national calling and tactical channels, however, the following criteria must be met as a minimum:**

- Multi-agency/multi-jurisdictional disasters or emergencies involving imminent danger to life and property.
- Special event control activities, generally of a pre-planned nature and generally involving joint participation of two or more public safety agencies

- Drills, exercises and training sessions.

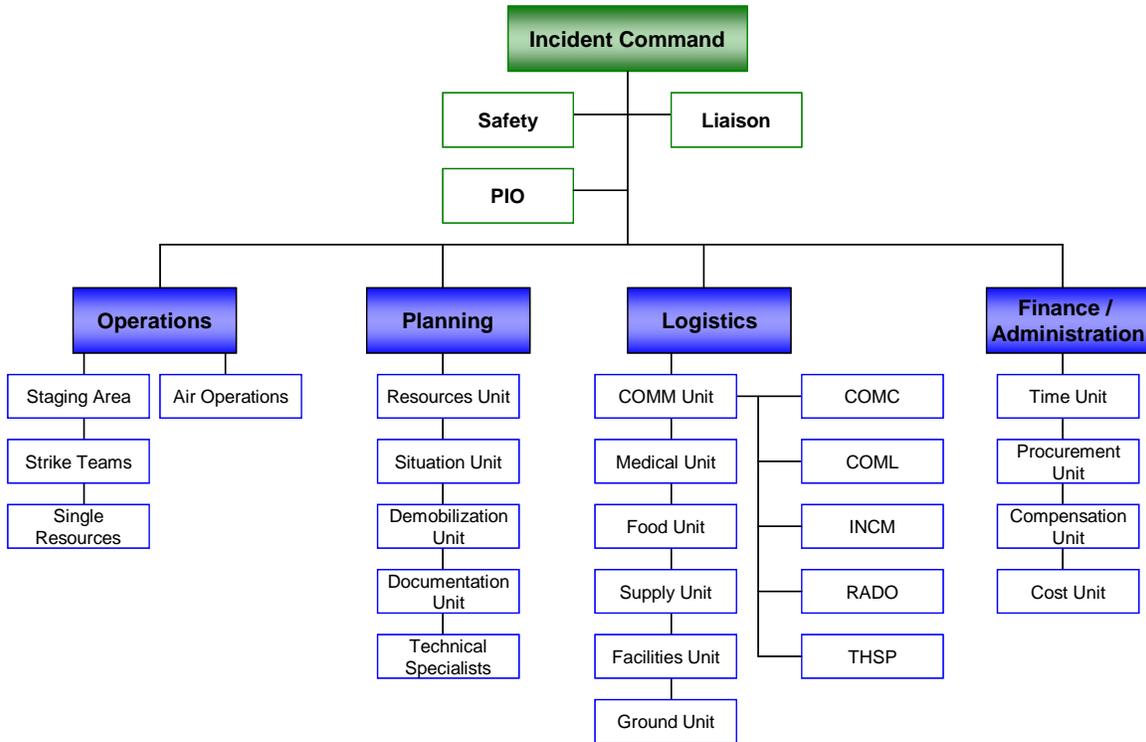


Figure 4 Incident Management – Major Incident

### 4.1.5 Regional Policies and Procedures

General interoperable communications rules of use, policies, and procedures that apply across all participating systems, mutual aid channels and gateways are detailed below.

#### **Regional - Shared System Rules of Use**

- **National Incident Management System** – Use an Incident Command System (ICS) compliant with the National Incident Management System (NIMS) when using any regional interoperability resource.
- **Plain Language** – All interoperable communications during multi-agency, multi-discipline incidents will be in plain language. Avoid using radio codes, acronyms, and abbreviations as they may cause confusion between agencies. Ensure that all verbal requests for assistance or backup specify the reason for the request.
- **Unit Identification** – Announce your home agency prior to announcing your unit identifier during interoperable communication situations. (i.e., [Local Example Here])
- **Encryption** – All encrypted radios users must operate in a “clear” mode when a gateway is used, unless otherwise arranged in advance. **Never assume encryption carries across the gateway.**

- **Monitoring** – The Incident Commander, or their designee, will ensure that each activated interoperability channel is monitored consistently while in use.

### **Regional Shared System Policies and Procedures**

Use the following procedures when requesting, using, or discontinuing the use of shared communication systems:

- When an individual responder needs to interoperate with other agencies on their same shared system, the responder will notify their dispatch center. The dispatcher can then identify and designate an appropriate channel. Note that in cases where no dispatcher intervention is required, responders still notify dispatch that they are switching to a shared channel to maintain responder safety.
- Notify dispatch when the interoperability channels/talkgroups are no longer required and announce the return to normal operations channels.
- For extended incidents:
  - The lead agency dispatcher notifies the COML/designee that interoperability channels/talkgroups are in use.
  - Each agency's dispatch center tells additional en-route responders what interoperability channels are in use for the incident.
  - The Incident Commander determines when the interoperability channels are no longer required and notifies the appropriate dispatch center.

### **Regional Shared System Problem ID and Resolution**

During an incident:

- Agencies using a shared system will report any problems with that system directly to the **[insert region name]** COML/designee. The **[insert region name]** COML/designee ensures effective resolution to reported shared system problems.

### **NIMS and Multi-Agency Coordination**

The Texas Division of Emergency Management has implemented a well developed Multi-Agency Coordination System (MACS) which is compliant with NIMS and the National Response Plan.

Per the [Statewide Communications Interoperability Plan \(SCIP\)](#), **[insert region name]** has adopted and implemented NIMS procedures for emergency response. Use of an ICS, compliant with the National Incident Management System, is required for use of any regional interoperability resource. (Also see SCIP Section 5.5 NIMS Compliance.)

- The first responder on scene becomes the local Incident Commander (IC) and remains IC until he/she is replaced by an IC with more experience and expertise or the incident operational period exceeds 12 hours.
- If needed, the IC may call for additional resources from other disciplines within the jurisdiction and/or other jurisdictions including adjacent cities or county.
- If needed, the IC may contact the city and/or county Emergency Manager to open the Emergency Operations Center; at this point the Emergency Manager will notify the Chief Elected Official and the DPS Regional Liaison Officer (RLO). The RLO is the emergency management link between the state government and city and county governments and non-governmental organizations.
- If additional and/or special resources are still needed the Emergency Manager makes a formal request to the Disaster District Chair (DDC) for state resources.

- The DDC may contact the State Operations Center (SOC) for additional state-level action if necessary.

The figure below shows a graphic assessment of how MACS is implemented in Texas. More details on MACS and Incident Command implementation is provided in Section 2 of the [SCIP](#).

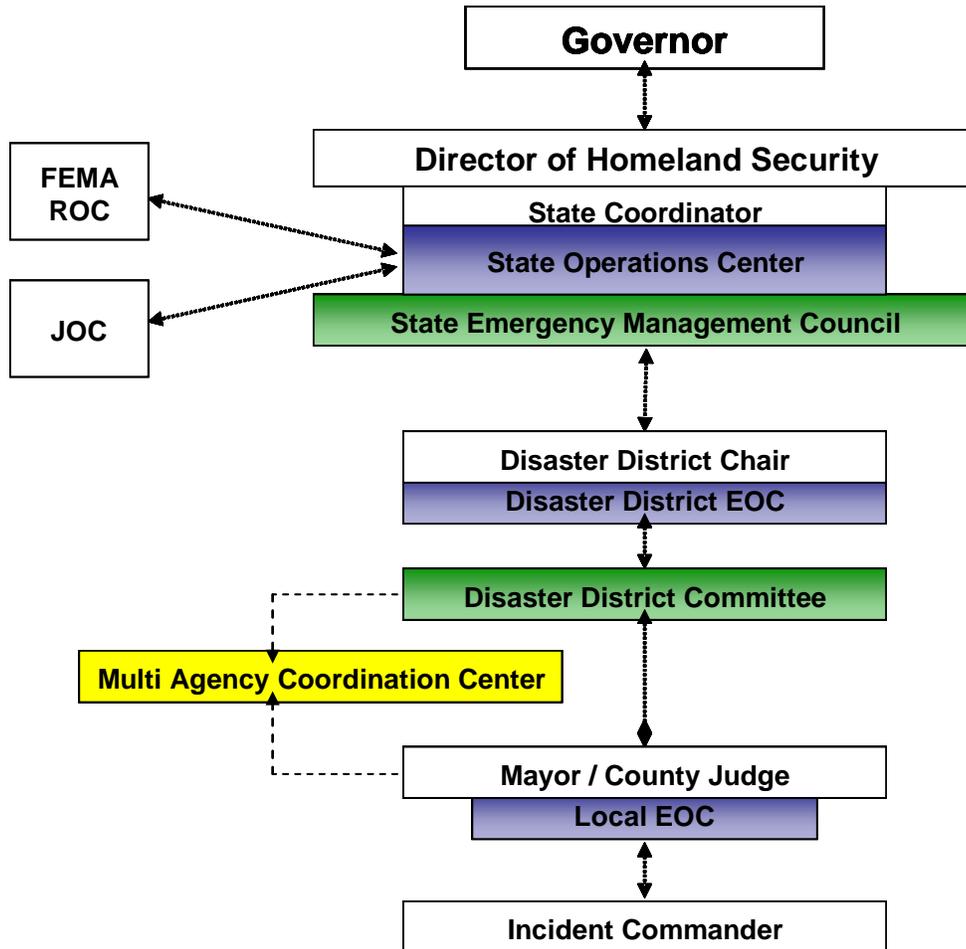


Figure 5 Channels for Requesting Operational Assistance

#### 4.1.6 Use of Interoperability Channels

##### Incident Command System (ICS)

Each agency will use ICS as an operational guide at large-scale incidents. Radio communications procedures on the interoperability channels must be consistent with NIMS.

##### Appropriate Use of Interoperability Channels

Use of interoperability channels shall be limited to their designated purpose of coordination between emergency response agencies, dispatchers, and resources in the field. Such coordination may occur during en-route travel, during exercises, or on-scene.

The interoperability channels are not to be used for routine dispatch operations but may be used by dispatchers for communications with personnel in the field, in accordance with local

and regional policies and procedures. Tactical interoperability channels may be used for day-to-day emergency operations in the absence of higher priority events.

Use of interoperability channels shall be prioritized as follows:

- Emergency or urgent operation involving imminent danger to life or property.
- Disaster or extreme emergency operation requiring extensive interoperability and inter-agency communications.
- Special event, generally of a pre-planned nature.
- Joint training exercises.
- Inter-agency and en-route communications in accordance with local and regional policies and procedures.
- Day-to-day tactical communications on scene.

### **Limited Use and Full Activation of Interoperability Channels**

**Limited Use** - Limited use of interoperability channels is appropriate when an incident can be resolved by public safety or public service agencies. .

**Full Activation** - Full activation is appropriate when an incident requires the activation of Interoperable Channels.

### **Radio Channel Activation Authority**

Use of interoperability channels may be requested whenever an agency I, determines the need to communicate directly with other agency representatives who have access to the channel. Each agency has the right to use the channels as necessary for public safety and availability of necessary resources. It is important to note that use of the channels is not intended to replace the establishment of an on-scene unified command post among responding agencies. Interoperability channels are intended to assist communications until a command post can be established or to speak with an agency representative not yet on the scene.

### **Establishing and Transferring Lead Dispatch Radio Command Control**

The IC, identifying the need for interoperable communications, will contact his/her respective dispatch/radio communications center (i.e., mayor's office, police/fire/EMS dispatch center). The IC will request that specific agencies switch their radios to the designated interoperability channel(s). The dispatch/radio communications center of the agency that initiates use of the interoperability channel(s) has the responsibility to notify all other required agencies by radio or telephone in accordance with the procedures outlined in this SOP. The dispatch/radio communications center will become the lead dispatch/radio communications center.

The designation of the lead dispatch/radio communications center may be changed as the lead agency requires or requests. If the IC is transferred, the new IC will notify his/her respective dispatch/radio communications center by radio or telephone that he or she is the new IC for the agency. That dispatch/radio communications center will then become the lead dispatch/radio communications center of the designated interoperability channel(s).

### **Notification Process for Establishing Command Control**

Each agency participating in incident will follow its own internal notification procedures for establishing command and control. The mayor, county judge, police chief, fire chief, EMS chief, and emergency management agency director or their designees are authorized to activate the interoperability channel(s).

### **Discontinuation of Interoperability Channel Use**

At such a time that communication on the interoperability channel(s) is no longer required, the IC of the lead agency will notify his/her respective dispatch/radio communications center

to discontinue active use of the channel(s), and normal monitoring will resume. The lead dispatch/radio communication center will notify all participating dispatch/radio communications centers that the interoperability channel(s) is no longer in use.

#### 4.1.7 Interoperability Channel Monitoring and Operation

##### Interoperability Calling Channel Monitoring

Each Public Safety Dispatch/Communications Center will monitor Interoperability Channels as defined in the [TSICP](#) on a daily basis.

##### Interoperability Channel Operation

Per the [TSICP](#), all FCC-designated interoperability repeaters are maintained in "receive mode" for monitoring purposes. Repeaters are disabled for transmit operation until needed for two-way communication. This prevents interference with repeaters in adjacent jurisdictions that operate on the same interoperability frequencies.

#### 4.1.8 Regional Shared Channel(s)

Note: In addition to the requirements of the TSICP, each region will monitor interoperability channels listed in Table 8.

##### *Regional Shared Channel(s)*

**Table 8 Region-wide Shared Channel(s)**

| Channel Name | Primary Use | Agencies Supported | Frequency/Band |
|--------------|-------------|--------------------|----------------|
|              |             |                    |                |
|              |             |                    |                |

#### 4.1.9 Communications Alternatives

Several alternatives may have been identified to ensure interoperable communications remain available among all agencies if the interoperability channel is not available. A sample list of alternatives is provided below. It may be helpful to describe capabilities and guide readers to appendices if instruction is required.

##### 1. Telephone Conference Bridges

Telephone conference bridges permit direct communication among a number of users, assuming they have access to telephone services.

##### 2. Cellular/Push-to-Talk Commercial Wireless Technology

Currently, most agencies use cellular/push-to-talk commercial wireless communications technology. In the event that the intra-jurisdictional interoperability channel is malfunctioning, this technology may be used to disseminate critical information to department heads and/or designees.

##### 3. Computerized Emergency Notification System

The computerized emergency notification system will be programmed to contact specific individuals and agencies, depending on the nature of the incident. This includes appropriate media outlets, which could be used to inform the general public of situation updates, specific instructions, and/or emergency locations, if warranted.

##### 4. Internet/E-mail

A lesson learned from September 11, 2001 was the power of the Internet and e-mail. While conventional communications outlets (i.e., wireless phones and land lines) were either damaged or overwhelmed, the Internet was up and provided an invaluable service to the general public. In the same way, the city's online EOC can be used as a means to pass information to various agencies that are involved in the event.

### 5. Satellite Phones

Satellite phones are assigned to the agency heads for intercommunications if conventional phone lines become impaired. A cache of satellite phones will be stored at [ ]; and assigned for use by the EMA director and/or operations officer.

The satellite phone numbers are listed in **Appendix C**.

### 6. Dispatch/Radio Communications Center to Dispatch/Radio Communications Center Messaging

*[This section will be customized for this agency/region/or entity]*

*Example: Police, fire, and EMS share a common computer-aided dispatch (CAD) system capable of providing text messaging between users.*

### 7. Amateur Radio Resources

Amateur Radio Operators (also known as 'ham radio operators') provide a valuable service in time of need. They are licensed by the Federal Communications Commission and are permitted to operate on a broad range of frequencies dedicated for their use. The 'ham radio' operators typically provide their communications equipment (fixed and portable) to serve EOC, shelters, etc. when requested. Frequently the licensed amateurs voluntarily associate with groups or teams such as:

Amateur Radio Emergency Service (ARES)

Radio Amateur Civil Emergency Service (RACES)

Military Auxiliary Radio System (MARS)

**Table 9 Amateur Radio Teams POC**

| Name/Location | Email | Phone | Organization | Call-sign |
|---------------|-------|-------|--------------|-----------|
|               |       |       |              |           |

### 8. Runner System

In the unlikely event that the intra-jurisdictional interoperability channel and redundant back-up systems are all unavailable, the police department will arrange for a "runner system" in which designated personnel respond to the residence of department heads and other key agency representatives to make notifications and provide transportation as necessary.

#### 4.1.10 Regional Gateways

"Gateway" systems interconnect channels of disparate systems (whether on different frequency bands or radio operating modes), allowing first responders using their existing

radios and channels to be interconnected with the channels of other users outside of their agency. Dispatch consoles that are able to create patches will also be captured as gateways. Gateways for regional use or listed on the following table along with POC information.

**Table 10 Region-wide Gateway Systems**

| Gateway Name | Owning Agency | Agency 7 x 24 Phone Number |
|--------------|---------------|----------------------------|
|              |               |                            |
|              |               |                            |

***Regional Gateway Communications Request***

The COML and/or Incident Commander must be aware that activating multiple gateways to support an incident can result in mutual interference. Interference issues are best resolved by the technical support team assigned to the gateways.

The agency requesting the use of a fixed or mobile gateway device for incident/event communications support should document and provide the following information to the owning gateway agency POC, on request:

- Requesting agency
- On-scene agencies requiring interoperability
- Incident/event type (e.g., wild land fire, etc.)
- Equipment required
- Expected duration of event
- Location required/access information
- Incident POC
- User/requestor and/or servicing dispatch contact phone number
- Additional support services requested (e.g., gateway operator, generator, etc.)

***Regional Fixed Gateway Activation***

Once the owning agency grants authorization to use their fixed gateway, the region-wide procedures for establishing communications connectivity are:

- Select a channel or talkgroup on the home system for use in the gateway patch.
- Verify the system-wide availability of required resources (coordinate among control point dispatchers).
- Provide radio call sign/designator information to connected agencies as needed.
- Assign the requested unit/agency to that channel or talkgroup.
- Connect the agency to the appropriate talkgroup.
- Announce to users that interoperability is activated.
- Identify users on the interoperability channel using their agency name and unit identifier through a *roll call*.
- Monitor the interoperability channel to address requests.

***Regional Mobile Gateway Deployment Procedure***

Upon receiving a request for the deployment of a mobile gateway, the owning agency dispatcher should follow these deployment procedures:

- Contact the on-call mobile gateway operator/technician responsible for mobile gateway deployment.
- Dispatch the mobile gateway operator to the incident scene.
- Inform the requesting agency that the mobile gateway is en route and provide an estimated time of arrival (ETA), if available.

The mobile gateway operator should follow these deployment procedures:

- Provide dispatch with an ETA at the incident and method of communications while en route (e.g., designated radio channel, cell number).
- Retrieve the dedicated unit and mobile gateway from its storage location and deliver it to the incident scene
- Report to the Incident Commander or Check-in on arrival.
- Once on-scene, establish patches via the mobile gateway in accordance with the Gateway Activation Procedures listed above.

### ***Regional Gateway Deactivation***

When the gateway connection(s) is (are) no longer required, agencies should follow these deactivation procedures:

- Contact the monitoring dispatcher (for fixed gateways) or the mobile gateway operator (for mobile gateways) to request patch/gateway deactivation.
- Announce over all patched channels/talkgroups that connections will be deactivated prior to the connection being disabled.
- Return all personnel to their appropriate home system channel assignments.

### ***Regional Gateway Problem ID and Resolution***

During an incident:

- Report gateway problems to the owning agency dispatcher (for fixed gateways) or mobile gateway operator (for mobile gateways), who will follow established agency procedures to resolve the problem.

Following an incident, the following general problem ID and resolution processes apply to all regional gateways:

- Report any problems with the gateway to the appropriate POC for that agency. The POC will be responsible for ensuring effective resolution to problems that exist with the gateway.
- Report unresolved gateway problems directly to the [Region COML/designee]. The [Region COML/designee] ensures effective resolution to reported gateway problems.

### ***Regional Gateway Limitations***

Interoperability provided through a gateway can connect participating agency responders but has the following limitations:

- The number of simultaneous patches that can be supported by the gateway will be limited by switch capacity and the number of lines connecting control centers and consoles. As a result, a limited number of patches involving resources at different control points can be supported simultaneously. Likewise, a limited number of

patches involving resources that are accessed through a communications center console may be supported simultaneously.

- Home system coverage may limit communications. Gateway users must be within the footprint of their coverage area.
- Agencies not permanently configured on a given gateway will require additional planning to establish interoperable communications through that gateway.

### **Regional Gateway Test Procedures**

To ensure that equipment components of the gateway operate properly, each agency will participate in the following testing procedure:

- Representatives from multiple agencies should meet on a regular basis to test each gateway.
- Testing should include deployment (mobile only), setup, operation, and deactivation of each gateway.
- If an issue or problem is identified during the testing procedure, determine who will take corrective action. If the issue or problem cannot be resolved, contact the appropriate technical personnel to address the issue or problem.

### **4.1.11 Regional Cache Radios**

Cache radios, also known as “swapped radios,” refer to maintaining a cache of standby radios that can be deployed to support regional incidents. These radios may be from a regional cache or from a participating agency. These radios allow all responders to use common, compatible equipment during an incident. Specific caches within the [Insert Region name] are listed in the following table.

**Table 11 [Insert Region name] Radio Cache(s)**

| <b>POC</b> | <b>Make / Model</b> | <b>Owning / Managing Agency</b> | <b>Frequency Band</b> | <b>Quantity</b> |
|------------|---------------------|---------------------------------|-----------------------|-----------------|
|            |                     |                                 |                       |                 |
|            |                     |                                 |                       |                 |

### **Regional Cache Radio Policies and Procedures**

[Insert region name] radio caches have the following characteristics:

- Portable radios are fully charged and maintained, ready for immediate deployment.
- Deployed equipment includes battery chargers to support extended deployments.
- Personnel are available to transport equipment to the incident scene.
- Technicians are available for on-scene support during the deployment.

Reference additional cache radios in an annex.

All [Insert region name] radio caches are required to have the following channels/talkgroups programmed:

**Table 12 [Insert Region] Cache Radio(s)**

| <b>TSICP Channel Name</b> | <b>Agency Name</b> |
|---------------------------|--------------------|
|                           |                    |
|                           |                    |

### **Regional Radio Cache Request**

The Incident Commander, or the designee, determines when a situation exists that requires the use of a regional radio cache and notifies the appropriate dispatch center. The dispatch center will follow internal agency procedures to contact the COML or Radio Cache Agency POC and relay pertinent information regarding the event. The requesting agency documents and provides the following information to the Radio Cache Agency POC, on request:

- Requesting agency
- On-scene agencies requiring interoperability
- Incident/event type of event (e.g., wild land fire, etc.)
- Equipment requirements
- Expected duration of event
- Location required/access information
- Incident POC
- User/requestor and/or servicing dispatch contact phone number
- Additional support services requested (e.g., technician, chargers, etc.)

The Radio Cache Agency determines what radio caches are available for use, identifies a specific cache, activates that cache, and coordinates the cache deployment with the requesting agency Incident Commander or their designee.

### **Regional Radio Cache Equipment Activation**

Upon receiving a request for the deployment of a radio cache, the owning agency **dispatcher** should follow these deployment procedures:

- Contact the on-call technician responsible for radio cache deployment.
- Dispatch the radio cache technician (or an approved designee) to the incident scene.
- Inform the requesting agency that the radio cache is en route and provide an estimated time of arrival (ETA), if available.

The **radio cache technician (or designee)** should follow these deployment procedures:

- Provide dispatch with an ETA at the incident.
- Retrieve the radio cache from its storage location and deliver it to the incident scene.
- Report to the Incident Commander or Check-in on arrival.
- Once on-scene, sign the cache over to the requesting agency for incident use or, if assigned to remain on scene, coordinate radio cache deployment procedures with the Communications Unit.
  - Each radio in the radio cache will have a unique identification number for inventory tracking. Ask the receiving agency to sign a property transfer form if they take responsibility for managing the radio cache on scene.
  - The requesting Incident Commander, or their designee, will be responsible for:
    - Supporting radio deployments on-scene
    - Maintaining a record of each user and agency to whom a radio and associated accessories have been distributed
    - Documenting the identification number of each radio deployed
    - Documenting the channel(s) in use

- Each user and/or agency that receives a radio from the radio cache will be responsible for returning that radio and all associated accessories to the cache at the end of the incident.

### **Regional Radio Cache Equipment Deactivation**

When the radio cache is no longer required, agencies should follow these deactivation procedures:

- Coordinate the return of all cache radios to the Communications Unit through the Incident Commander or their designee.
- The Communications Unit will be responsible for inventorying all radios and accessories returned to the cache. Before leaving the incident scene, the Communications Unit will determine if any radios have not been returned to the radio cache and note the user and agency to which the radio was distributed. Provide this information to the Incident Commander or their designee.
- If the missing radios cannot be recovered at the incident scene, the Communications Unit will provide this information to the Radio Cache Agency POC for resolution.

### **Regional Radio Cache Problem ID and Resolution**

During an incident:

- Report radio cache problems to the radio cache technician or their designee who will follow established agency procedures to resolve the problem.

Following an incident, the following general problem ID and resolution processes apply to all regional radio caches:

- Report any problems with the radio cache to the appropriate POC for the owning agency. The POC will be responsible for ensuring effective resolution to problems that exist with the radio cache.
- Report unresolved radio cache problems directly to the [Region COML/designee]. The [Region COML/designee] ensures effective resolution to reported radio cache problems.

## **4.1.12 Mobile Communications Units (MCUs)**

A mobile communications Unit (MCU) (also known as a Mobile Communications Center (MCC) or Mobile EOC) refers to any vehicular asset that can be deployed to provide or supplement communications capabilities in an incident area. Examples of the types of communications devices an MCU can house are: subscriber and base station radios of various frequency bands, gateway devices, satellite phones, wireless computer networks, video broadcasting/receiving equipment, etc. Typically these communications devices are permanently [located/stored] in the MCUs when not used. The MCU should also be able to temporarily provide the electrical power required to operate the communications devices.

**Table 13 Regional Mobile Communications Unit(s)**

| <b>Owning Agency</b> | <b>Deployment Area</b> | <b>POC &amp; Contact Information</b> |
|----------------------|------------------------|--------------------------------------|
|                      |                        |                                      |
|                      |                        |                                      |

## Mobile Communications Unit Policies and Procedures

The Incident Commander, or the designee, determines when a situation exists that requires the use of an MCU and notifies the appropriate dispatch center. The dispatch center will follow internal agency procedures to contact the COML or MCU POC and relay pertinent information regarding the event. The requesting agency documents and provides the following information to the MCU POC, on request:

- Requesting agency
- Agencies requiring interoperability
- Incident/event type (e.g., wild land fire, etc.)
- Expected duration of event
- Location required/access information
- Incident POC
- User/requestor and/or servicing dispatch contact phone number
- Additional support services requested

The MCU Agency determines if the MCU is available for use and coordinates the deployment with the requesting agency Incident Commander or their designee.

### 4.1.13 Regional Emergency Resource Staffing

#### ***Emergency Resource Directory***

The Emergency Resource Directory (Table 13) establishes a list of personnel who will respond to fill the Communication Unit positions.

Identified personnel must train and exercise to a regional response level.

Job descriptions and qualified personnel for each Communications Unit position are detailed below.

#### ***Dispatch Center***

Communications Coordinator (COMC) – The COML will work with the COMC to coordinate communications with other dispatch centers and the incident communication plan. Locally, the jurisdictional dispatch center supervisor or dispatcher will act as the Communications Coordinator. Coordinators may also be located at the region/county, State, and Federal level.

#### ***At an Incident/Event***

Communications Unit Leader (COML) – Manages the technical and operational aspects of the Communications Function during an incident or event. Develops National Incident Management System (NIMS)/Incident Command System (ICS) Form 205 Incident Radio Communications Plan and supervise the communication unit.

Technical Specialist (THSP) – Allows for the incorporation of personnel who may not be formally certified in any specific NIMS/ICS position. The THSPs may include Local Agency Radio Technicians (as opposed to the COMT), Telephone Specialists, Gateway Specialists, Data/IT Specialists, and or Cache Radio Specialists.

Incident Communications Technician (COMT) – Deploys advanced equipment and keeps it operational throughout the incident/event.

Incident Communications Center Manager (INCM) – Supervises the operational aspects of the Incident Communications Center (ICC) (Mobile Unit and/or Fixed Facility). During an incident, the ICC is designed to absorb incident traffic in order to separate that traffic from

the day-to-day activities of the dispatch center. The ICC is typically located at the Incident Command Post (ICP) in a fixed site, tent, trailer, mobile communications unit.

Radio Operator (RADO) - Staffs a radio at the ICC and is responsible for documenting incoming radio and telephone messages. Incident Dispatchers or Tactical Dispatchers are used as RADOs.

The following table identifies regional COML. The form should be used at the incident site to list specific contact information of the Incident Emergency Resource Personnel.

Additional information about COML and other components of incident communications management can be found at the SAFECOM web site at <http://www.safecomprogram.gov/SAFECOM/currentprojects/comtraining/>.

**Table 6 Regional Emergency Resource Personnel**

|              | Name | Agency | Address | Phone | Email |
|--------------|------|--------|---------|-------|-------|
| COMC         |      |        |         |       |       |
|              |      |        |         |       |       |
|              |      |        |         |       |       |
| COML         |      |        |         |       |       |
|              |      |        |         |       |       |
|              |      |        |         |       |       |
| INCM         |      |        |         |       |       |
|              |      |        |         |       |       |
|              |      |        |         |       |       |
| RADO         |      |        |         |       |       |
|              |      |        |         |       |       |
|              |      |        |         |       |       |
| Cache THSP   |      |        |         |       |       |
|              |      |        |         |       |       |
|              |      |        |         |       |       |
| Gateway THSP |      |        |         |       |       |
|              |      |        |         |       |       |
|              |      |        |         |       |       |
| Other THSP   |      |        |         |       |       |
|              |      |        |         |       |       |
|              |      |        |         |       |       |

#### 4.1.14 Commercial Services Dependencies

Commercial Cellular data services are prevalent in our region. **Verizon** (*change to appropriate provider*) is our largest provider of this service. Commercial data circuits are widely used for back haul for most of the radio systems in use in the region. Plans are underway to replace these data circuits with more reliable microwave connectivity. Commercial cellular voice provided by a variety of vendors is also heavily used in our region for non-tactical communications. (Possibly add the customer representatives, then add what kind of connections and circuit numbers you have. Describe how your connections work. Identify the contact and the circuit number. Develop some sort of architecture.)

#### 4.1.15 Disaster Communications Capabilities

A Strategic Technology Reserve (STR) has been established by the DPS and TMF [ADD TMF to Acronym List] which will be used to provide and/or restore emergency communications due to natural hazards (such as hurricanes, floods, tornadoes, etc) and hazards caused by terrorist or criminal activities. DPS is the designated first responder state agency and will continue to implement and manage the Strategic Technology Reserve equipment. The STR may include:

- Command/Communications Trailers
- Primary Towing Vehicles
- P25 Compliant Portable Radios with Trunking
- Cellular on Wheels
- Trunking Site on Wheels
- Laptop Computers for each Command Trailer
- Suitcase Digital Repeaters with Trunking
- IP Gateway Devices
- FRS Radios
- Portable Generators
- Cargo Trailers
- Portable Gateway Devices
- Video Downlink for Helicopters
- Satellite Telephones and Radios
- HF Radio Equipment

When called upon to support planned events, respond to hostile events or natural disasters, the STR assets can provide augmentation to expand the area of coverage of existing systems, assist with wireless communications during planned events if necessary, or provide critical communications capabilities to local systems damaged during a hostile event or natural disaster.

To request STR assets or copies of STR Policies and Procedures contact the DPS Communications Area Manager or DPS at 512-424-2121.

#### 4.1.16 Fuel Re-Supply Plan

Each jurisdiction will be responsible for producing their own fuel re-supply plan for communications sites and equipment.

#### **4.1.17 Prioritization and Shared Use of Regional Interoperability Assets**

In response to events or incidents which cross over political jurisdictions, there will potentially be competing demands and priorities for interoperable communications assets.

Until such time as Incident Command is established, the lead agency designee (i.e., communications supervisor/command personnel), in cooperation with assisting agencies, will have the authority to designate the use of interoperable assets. Once Incident Command has been established, Command Staff or Communication Unit Leaders (when designated) direct the further coordination and delegation of the interoperable communications assets assigned to the event or incident in question.

Agencies should judiciously activate needed interoperable assets so as to both effectively respond to the event and/or incident and also minimize any negative impact on surrounding agencies or jurisdictions. Specifically, interoperable communications should be attempted with the following order of operations in mind (subject to variability based on the agencies involved and the nature of the event/incident):

1. Leverage face-to-face communications wherever appropriate. For example, the co-location of all Command and General Staff at the incident command post (ICP) provides the best direct communications and reduces the demand on interoperability resources.
2. Employ local communications assets until such time as either those assets become taxed or inadequate based on the nature and/or scope of the incident.
3. If response agencies are users of a shared system, utilize that shared system to establish interoperable communications.
4. If response agencies operate on disparate systems, utilize shared or mutual aid channels to establish interoperable communications.
5. If response agencies do not share systems or channels, utilize a gateway solution to establish interoperable communications.
6. Where interoperable communications cannot otherwise be established between response agencies, utilize swap or cache radios to establish operable communications for responders.
7. If no other method of interoperability can be established, relay communications through staff members.

When the same resources are requested for two or more incidents, resource assignments should be based on the priority levels listed below:

1. Disasters, large scale incidents, or extreme emergencies requiring mutual aid or interagency communications.
2. Incidents where imminent danger exists to life or property.
3. Incidents requiring the response of multiple agencies.
4. Pre-planned events requiring mutual aid or interagency communications.
5. Incidents involving a single agency where supplemental communications are needed for agency use.
6. Drills, tests and exercises.

In the event of multiple simultaneous incidents within the same priority level, the resources should be allocated with the following priorities in mind:

1. Incidents with the greatest level of exigency (e.g., greater threat to life or property, more immediate need, etc.) have priority over less exigent incidents.
2. Agencies with single/limited interoperable options have priority use of those options over agencies with multiple interoperable options.
3. When at all possible, agencies already using an interoperable asset during an event should not be redirected to another resource.

#### 4.1.18 Interoperability Testing Requirements

During standardized testing, the testing agency will communicate with participating public safety and public service agencies on the intra-jurisdictional interoperability channel.

**There will be two different phases of radio testing:**

##### 1. Communications Center Testing

This weekly test of interoperability channels [**insert day and time here**] will be done between the public safety and public service dispatch/radio communication centers [**insert appropriate agency names here**]. The agency radio technician will monitor the appropriate channels during testing.

##### 2. Operational Testing

Each agency will decide when testing should take place. All agency heads or designated representatives with radios programmed with interoperability channels will participate in this testing. During this test, technical support will check the accuracy and performance of various sites.

#### 4.1.19 Agency Responsibilities and Rights

Agencies will retain the following rights and responsibilities:

- Agencies are responsible for considering and, if agreeing to, complying with the MOUs and Agreements developed by the [**Name of Council/Executive Board**] in coordination with their respective jurisdictions.
- Authorized representatives of agencies participating in this plan have the authority to request the use of equipment, including systems and mobile assets, in accordance with Regional Standard Operating Procedures.
- Where applicable, agencies will be responsible for consistently maintaining, testing, and exercising connectivity to interoperable communications.
- Agencies retain the right to decide when and where to participate in interoperable communications. For example, agencies will retain the right to accept or decline a patch to a gateway system to provide interoperable communications during an incident.
- Training Requirements - Participating agencies will be responsible for ensuring that their personnel are familiar with this RSOP and are properly trained in accordance with the guiding principles.

*It is the responsibility of agency heads to ensure that these SOPs are followed as necessary.*

*It is the responsibility of all communication personnel to be familiar with and to comply with these SOPs.*

*Jurisdictions are required to adopt this document to participate in grant funding.*

## 4.2 Regional Training and Exercise Plans

Implementing effective training and exercise programs to practice communications interoperability is essential for ensuring that the technology works and responders are able to effectively communicate during emergencies<sup>4</sup>. Optimal interoperability requires regular, comprehensive, and realistic exercises that address potential problems in the region and involve the participation of all personnel. *It is the responsibility of each region/ agency/jurisdiction to ensure adequate training and exercise opportunities are available for all emergency responders, and that all responding emergency responders are adequately trained.*

Through the annual SCIP Focus Group Session, the region will identify all jurisdictional and/or individual agency training and exercise concerns. Training sessions will be identified and/or scheduled within [insert #] of months to address these specific concerns. These training sessions may range from on-site drills with an individual agency to a state sponsored exercise.

### Communications-Specific Tabletop Exercise

If the training concerns are significant throughout the region, the Interoperable Communications Sub-committee (**insert correct name of group**) will study and evaluate the benefits of using the SAFECOM guide for “Communications-Specific Tabletop Exercise (TTX) Methodology” to create a regional table-top exercise specific to their identified needs. The guide provides a detailed, step-by-step approach to effectively plan, conduct, and evaluate an interoperable communications-specific TTX. As a result of this methodology, exercises developed and executed will help localities identify interoperability capabilities and gaps within existing processes.

**How to Use the Tool:** This tool should be used with the general principles for planning and conducting effective exercises put forth by the U.S. Department of Homeland Security (DHS) and should adhere to Homeland Security Exercise and Evaluation Program guidelines.

**SAFECOM Website Link:**

<http://www.safecomprogram.gov/NR/rdonlyres/C67306E9-3C28-4654-91A5-0CDFD6D3DE55/0/CommunicationsSpecificTabletopExerciseMethodology.pdf>

### COML

Critical and unprecedented incidents require an expert at the helm of the emergency response community who can immediately adapt to the situation. Within ICS, the communications specialists are referred to as the COMLs. The role of any COML position is a critical function that requires adequate training above and beyond the basic knowledge of communications systems and prepares emergency responders to manage the communications component of larger interoperability incidents<sup>5</sup>. Individuals shall be identified to serve and be certified as COML.

The table below identifies COML trained within the region.

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<sup>4</sup> SAFECOM Continuum, [www.safecomprogram.gov](http://www.safecomprogram.gov)

<sup>5</sup> “National Summary of Statewide Communications Interoperability Plans (SCIPs)”, February 2009, DHS, [http://www.safecomprogram.gov/NR/rdonlyres/C6C0CD6A-0A15-4110-8BD4-B1D8545F0425/0/NationalSummaryofSCIPs\\_February2009.pdf](http://www.safecomprogram.gov/NR/rdonlyres/C6C0CD6A-0A15-4110-8BD4-B1D8545F0425/0/NationalSummaryofSCIPs_February2009.pdf)

**Table 7 Regional Certified COML(s)**

| COML Name | Associated with Agency/County | Phone/Pager Numbers | Email/U.S. Mail |
|-----------|-------------------------------|---------------------|-----------------|
|           |                               |                     |                 |
|           |                               |                     |                 |

The COML will be provided a complete inventory of all regional, jurisdictional and agency interoperable equipment. A current inventory list will also be available *in* CASM. All regional interoperability equipment will be exercised minimum of (insert #) times per year by multiple and various emergency responders

### 4.2.1 Availability of Training and Exercise Drills

The State of Texas conducts state-directed Homeland Security training and exercise programs. Program descriptions and schedules can be found at <https://www.preparingtexas.org/index.aspx>. This site includes upcoming national, state and regional training and exercise events as well as national, state and regional workshops, seminars, conferences, and resource materials.

The Texas Homeland Security Preparedness web site works to assist jurisdictions to transition from basic to intermediate and advanced levels of training and exercises.

### 4.3 Texas Statewide Interoperability Channel Plan (TSICP)

The Texas Statewide Interoperability Channel Plan is a strategic element of the \_\_\_\_\_ (insert region name) RSOP and the RICP. The TSICP will always accompany the RSOP when distributed. All regional communications training/exercise will include both the RSOP and the TSICP. The complete current TXICP and MOU can be found at <http://tsiec.region49.org/MOU+TSICP11-5-08final.pdf>.

*The Texas Interoperability Channel Plan was adopted April 2005, and revised April 20,2009. All jurisdictions, cities and counties, are required to execute the MOU with the Texas Department of Public Safety to be eligible for federal communications funding. Every jurisdiction must sign the TSICP MOU prior to being authorized to use the frequencies.*

This Channel Plan describes conditions and guidelines for use of state-licensed interoperability or mutual-aid radio channels by:

- Local government jurisdictions and their associated emergency response agencies
- Federal agency offices in Texas and their associated emergency response organizations
- Private emergency response organizations licensed or eligible to operate in the Public Safety Pool as defined in Part 90 of the Federal Communication Commission (FCC) Rules (47CFR subpart B paragraphs 90.15-90.20). For further information on FCC public safety radio pool eligibility for statewide use of interoperability channels within Texas, see <http://publicsafety.fcc.gov/pshs/public-safety-spectrum/index.htm>.

## Appendix A Template: High Level Timeline/Milestone/Cost Estimate

| Region [Name] Implementation Timeline & Cost Report  |                         |            |            |            |                         |              |              |              |   |  |
|--|-------------------------|------------|------------|------------|-------------------------|--------------|--------------|--------------|---|--|
| Milestones   |                         |            |            |            |                         |              |              |              | P25 Compliant Standards-based Shared Systems being used by first responders region-wide |  |
|  | 2008                    | 2009       | 2010       | 2011       | 2012                    | 2013         | 2014         | 2015         | 2016  |  |
|  | Phase 1                 | Phase 1    | Phase 1    | Phase 1    | Phase 1                 | Phase 1      | Phase 1      | Phase 1      | Phase 1   |  |
|  | Add Phase 1 information |            |            |            |                         |              |              |              |   |  |
|  | Phase 2                 | Phase 2    | Phase 2    | Phase 2    | Phase 2                 | Phase 2      | Phase 2      | Phase 2      | Phase 2   |  |
|  |                         |            |            |            |                         |              |              |              |   |  |
|  | Phase 3                 | Phase 3    | Phase 3    | Phase 3    | Phase 3                 | Phase 3      | Phase 3      | Phase 3      | Phase 3   |  |
|  |                         |            |            |            |                         |              |              |              |   |  |
|  | FUNDING                 | FUNDING    | FUNDING    | FUNDING    | FUNDING EST.            | FUNDING EST. | FUNDING EST. | FUNDING EST. | FUNDING EST.  |  |
|  | Add type of funding     |            |            |            |                         |              |              |              | O&M Funding   |  |
| Est. Funding   | \$1,390,000             | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$1,390,000   |  |
| <p>← Total Required Funding \$1,390,000 →</p> <p>Estimated Cost to Achieve Basic P25 Voice Interoperability \$????</p> |                         |            |            |            |                         |              |              |              |   |  |
| Actual Grant Funding   |                         |            |            |            | Estimated Grant Funding |              |              |              |   |  |
| Texas  | \$160,000               | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$0   |  |
| PSIC   | \$1,000,000             | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$0   |  |
| IECGP  | \$0                     | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$0   |  |
| AFG  | \$0                     | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$0   |  |
| DHS  | \$230,000               | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$0   |  |
| Other  | \$0                     | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$0   |  |
| Region   | \$0                     | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$0   |  |
| Local  | \$0                     | \$0        | \$0        | \$0        | \$0                     | \$0          | \$0          | \$0          | \$0   |  |
| <b>Funded</b>  | <b>\$1,390,000</b>      | <b>\$0</b> | <b>\$0</b> | <b>\$0</b> | <b>\$0</b>              | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>  |  |

(Link to the actual excel Funding Template: [http://txrc.region49.org/SCIP\\_documents.html](http://txrc.region49.org/SCIP_documents.html))

## **Appendix B Additional Shared Channel/Cache Radio/Gateway Information**

(Include any additional radio/communications information here in this appendix)

## **Appendix C [Other] Additional Information**

(Include any other additional information here in this appendix. Change the title per your own incorporated information)

## Appendix D Glossary

| Item/Acronym     | Definition   |
|------------------|--|
| ACU-1000         | Audio bridge used in fixed and mobile configurations. Requires radio from each connected communications system. Gateway device used to link disparate radio systems. |
| AM               | Administrative Manager   |
| Audio Bridge     | Connects four-wire audio from disparate radio systems to provide interoperability.   |
| CAM              | Communication Assets Mapping   |
| CAS              | Communication Assets Survey  |
| CASM             | Communication Assets Survey and Mapping  |
| CERT             | Community Emergency Response Team  |
| COG              | Council Of Governments   |
| COMC             | Communications Coordinator   |
| COML             | Communications Unit Leader   |
| COMT             | Incident Communications Technician   |
| Console Patching | Ability to connect channels via dispatch consoles  |
| DDC              | Disaster District Chair  |
| DHS              | Department of Homeland Security  |
| DPS              | Department of Public Safety  |
| EMA              | Emergency Management Agency  |
| EMS              | Emergency Medical Services   |
| EOC              | Emergency Operations Center  |
| ESF              | Emergency Support Function   |
| ETA              | Estimated Time of Arrival  |
| FCC              | Federal Communication Commission   |
| FEMA             | Federal Emergency Management Agency  |
| TDEM             | Texas Division of Emergency Management   |
| IC               | Incident Command   |
| ICALL            | Calling Channel for ITAC   |
| ICC              | Incident Communications Center   |
| ICP              | Incident Command Post  |
| ICS              | Incident Command System  |
| ICTAP            | Interoperable Communications Technology Assistance Program   |

| Item/Acronym  | Definition  |
|---------------|---|
| ID            | Identification  |
| INCM          | Incident Communications Center Manager                              |
| Inter-agency  | Located or occurring between two or more agencies                   |
| Interoperable | Ability of a system to use the parts or equipment of another system |
| ISSI          | Inter-RF Subsystem Interface  |
| IT            | Information Technology  |
| ITAC          | Conventional mutual aid channel 800 Mhz                             |
| JFO           | Joint Field Office  |
| LMR           | Land Mobile Radio   |
| MACS          | Multi-Agency Coordination System                                    |
| MCC           | Mobile Communicaiton Center   |
| MCU           | Mobile Communications Unit  |
| MHz           | Abbreviation for megahertz. 5 MHz = 5,000,000 Hz or 5,000 kHz.      |
| MOA           | Memorandum of Agreement   |
| MOU           | Memorandum of Understanding   |
| Mutual Aid    | Personnel, equipment, or services provided to another jurisdiction  |
| NECP          | National Emergency Communications Plan                              |
| NGO           | Nongovernmental Organizations                                       |
| NIMS          | National Incident Management System                                 |
| NPSPAC        | National Public Safety Planning Advisory Committee                  |
| NRF           | National Response Framework   |
| NSSE          | National Special Security Event                                     |
| OEC           | Office of Emergency Communications                                  |
| PD            | Police Department   |
| POC           | Point of Contact  |
| PSAP          | Public Safety Answering Point                                       |
| RACES         | Radio Amateur Civil Emergency Service                               |
| RADO          | Radio Operator  |
| RF            | Radio Frequency   |
| RFSS          | Radio Frequency Sub-System  |
| RGOV          | Regional Governance Structures                                      |
| RIC           | Regional Interoperability Coordinator                               |

| Item/Acronym | Definition  |
|--------------|---|
| RICP         | Regional Interoperable Communications Plan  |
| RIMP         | Regional Interoperable Migration Plans  |
| RLO          | Regional Liaison Officer  |
| RSOP         | Regional Standard Operating Procedures  |
| SCC          | State Coordinator for Communications  |
| SCIP         | Statewide Interoperable Communications Plan   |
| SHARES       | Shared Resources High Frequency Radio Program   |
| SOC          | State Operations Center   |
| SOP          | Standard Operating Procedure  |
| STR          | Strategic technology Reserve  |
| Talkgroup    | Term usually used with trunked radio systems. A talkgroup is a predefined list of radios/users assigned a unique ID which allows them to communicate with each other over the trunked radio system. |
| TARC         | Texas Association of Regional Councils  |
| TCL          | Target Capability List  |
| THSP         | Technical Specialist  |
| TSICP        | Texas Statewide Interoperability Channel Plan   |
| TTX          | Tabletop Exercise   |
| UASI         | Urban Areas Security Initiative   |
| UHF          | Ultra High Frequency – Range of 300 to 3,000 MHz. For public safety LMR, usually refers to two bands. 380 to 460 MHz (low) and 460 to 512 MHz (high).   |
| USCG         | United States Coast Guard   |
| VFD          | Volunteer Fire Department   |
| VHF          | Very High Frequency – For public safety LMR, usually refers to VHF High Band with a range of 136 to 164 MHz. VHF Low Band has a frequency range below 100 MHz.                                      |
| VPM          | Vendor Project Manager  |

## **Appendix E    References**

### Reference Sources:

- A Guide for Statewide Communications Interoperability Plan (SCIP) Implementation, (DHS/OEC)
- Department of Homeland Security Target Capabilities List (TCL)
- Department of Homeland Security Universal Task List (UTL)
- National Emergency Communications Plan
- National Preparedness Guidelines
- National Response Plan
- National Strategy for Homeland Security
- SAFECOM, [www.safecomprogram.gov](http://www.safecomprogram.gov)
- Texas Government Charter 421
- Texas Interoperability Channel Plan (TICP)
- Texas SCIP
- Texas SCIP Implementation Plan