

WISCONSIN

INTEROPERABILITY

CREATING SEAMLESS



STATEWIDE PUBLIC SAFETY RADIO COMMUNICATIONS

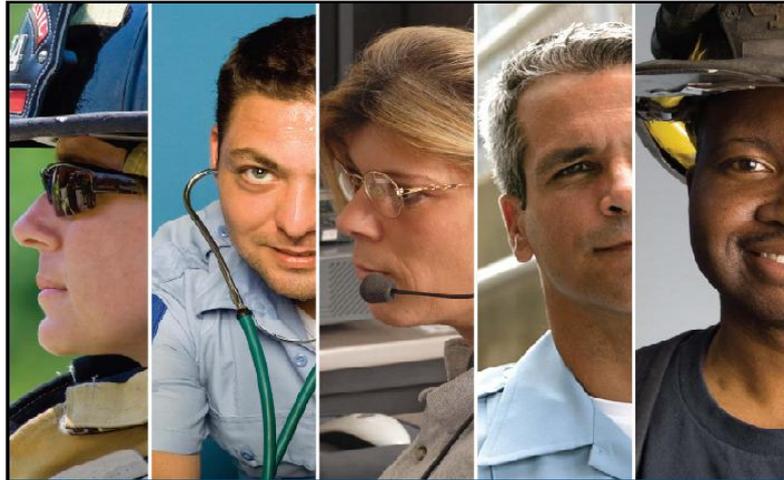
Southeast Regional SCIP Implementation Council

Organizational Meeting

Waukesha County Communications
Center

July 12, 2010

National Emergency Communications Plan



National Emergency Communications Plan

July 2008



Homeland
Security

Rev. Aug 7, 2008

Purpose of NECP

- Sets national goals and priorities for addressing deficiencies in the nation's communications posture.
- Provides recommendations and milestones to improve emergency communications capabilities.
- Guidance for coordination of emergency communications priorities and investments.

NECP Vision

To ensure operability, interoperability, and continuity of communications to allow emergency responders to communicate as needed, on demand, and as authorized at all levels of government and across all disciplines.

Elements of Emergency Communications

- **Operability**—*The ability of emergency responders to establish and sustain communications in support of mission operations.*
- **Interoperability**—*The ability of emergency responders to communicate among jurisdictions, disciplines, and levels of government, using a variety of frequency bands, as needed and as authorized. System operability is required for system interoperability.*
- **Continuity of Communications**—*The ability of emergency response agencies to maintain communications in the event of damage to or destruction of the primary infrastructure.*

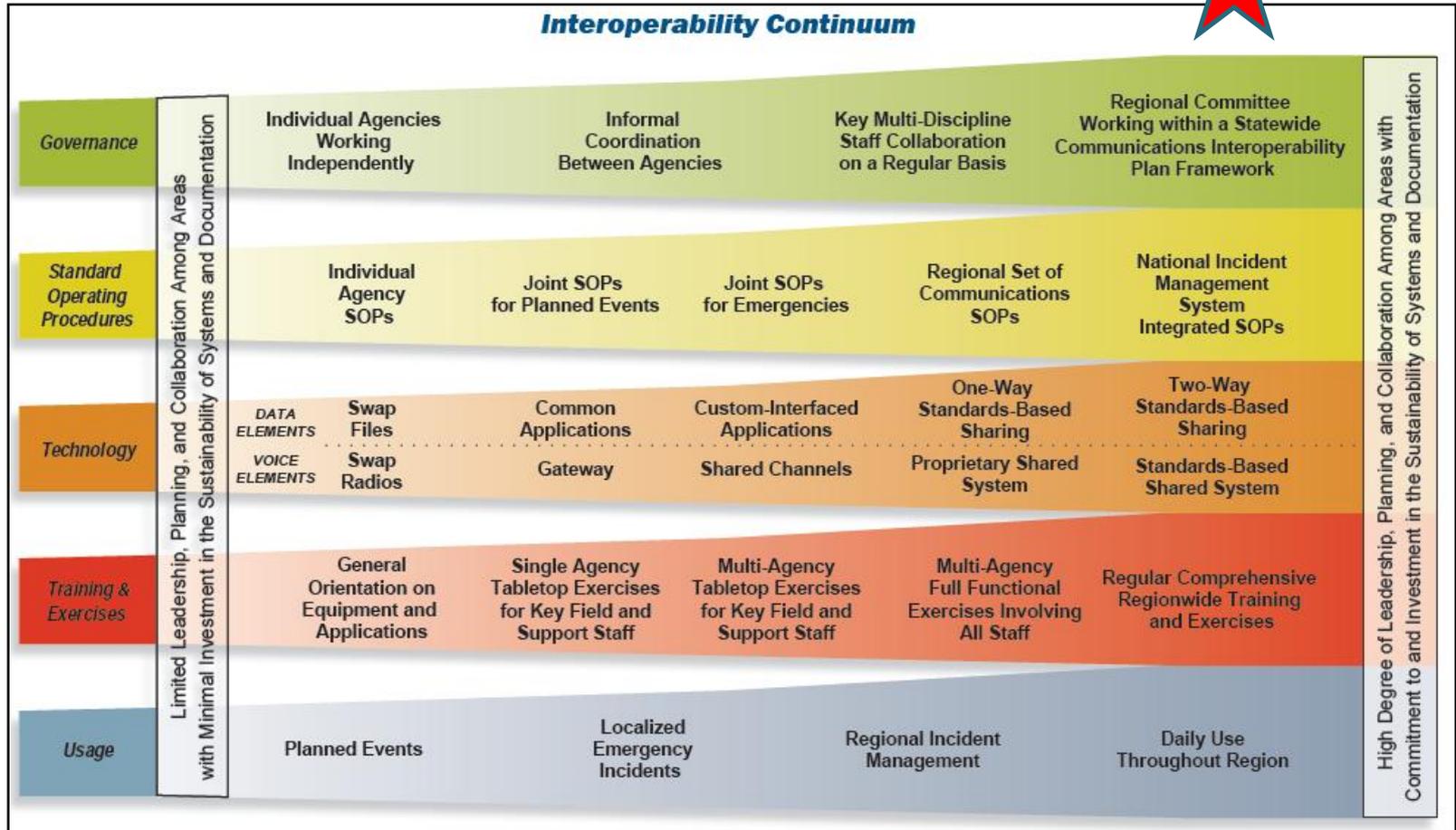
NECP Strategic Goals

Goal 1—By 2010, 90 percent of all high-risk urban areas designated within the Urban Areas Security Initiative (UASI)² are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.

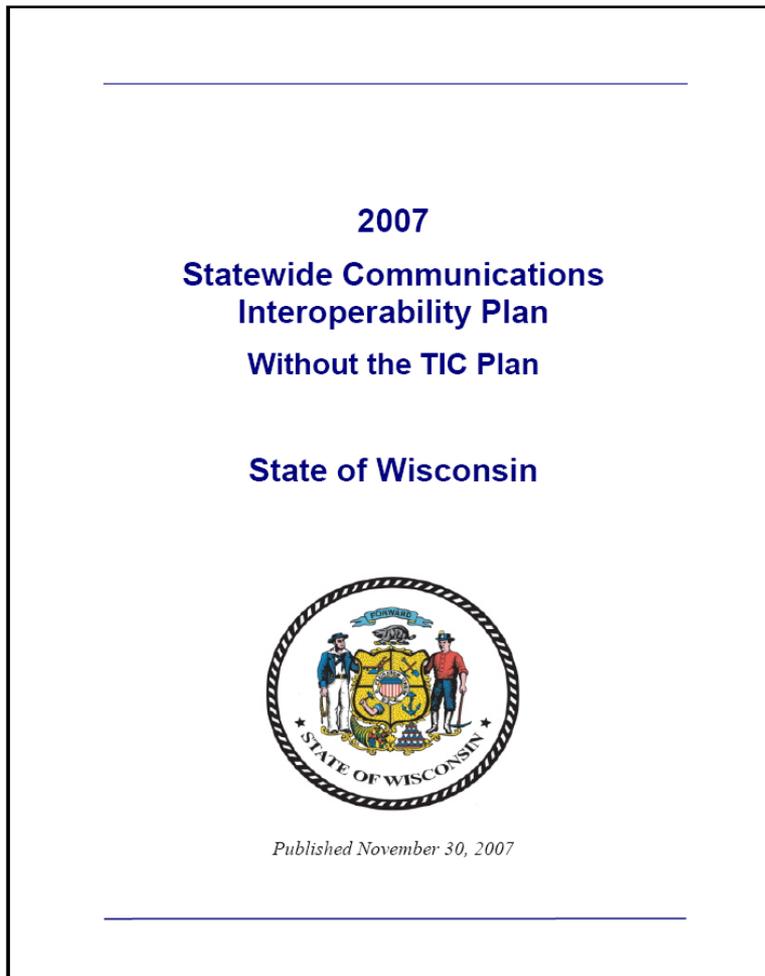
Goal 2—By 2011, 75 percent of non-UASI jurisdictions are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.

Goal 3—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.

SAFECOM Interoperability Continuum



Wisconsin's SCIP



- Adopted in 2007,
- locally driven
- multi-jurisdictional
- multi-disciplinary
- aligns local and state emergency response agency efforts
- Short and long term goals

Wisconsin's Interoperability Vision

“To create a communications infrastructure that will allow emergency responders to communicate with whom and when they need to communicate. To accomplish this, Wisconsin will create a secure system of systems, including both existing and newly installed, tied to a single backbone which will route communications. This system of systems will have the capacity to provide special characteristics to meet the needs of the public safety community.”

Wisconsin Interoperability Council

- Established March 2008
- Wis. Stats. 15.107 and 16.9645
- Develops strategies and recommend standards and guidelines for achieving statewide communications interoperability
- Advises OJA on grant allocations and other funding for the Wisconsin Interoperability Initiative

IC Legislative Directives

- Recommend short and long term goals to achieve a statewide public safety interoperable communication system
- Recommend and review a strategy and timeline for achieving the goals
- Assist OJA in obtaining funding for a statewide public safety interoperable communication system
- Advise OJA on funding allocations to achieve interoperability goals

IC Legislative Directives (cont.)

Make recommendations on:

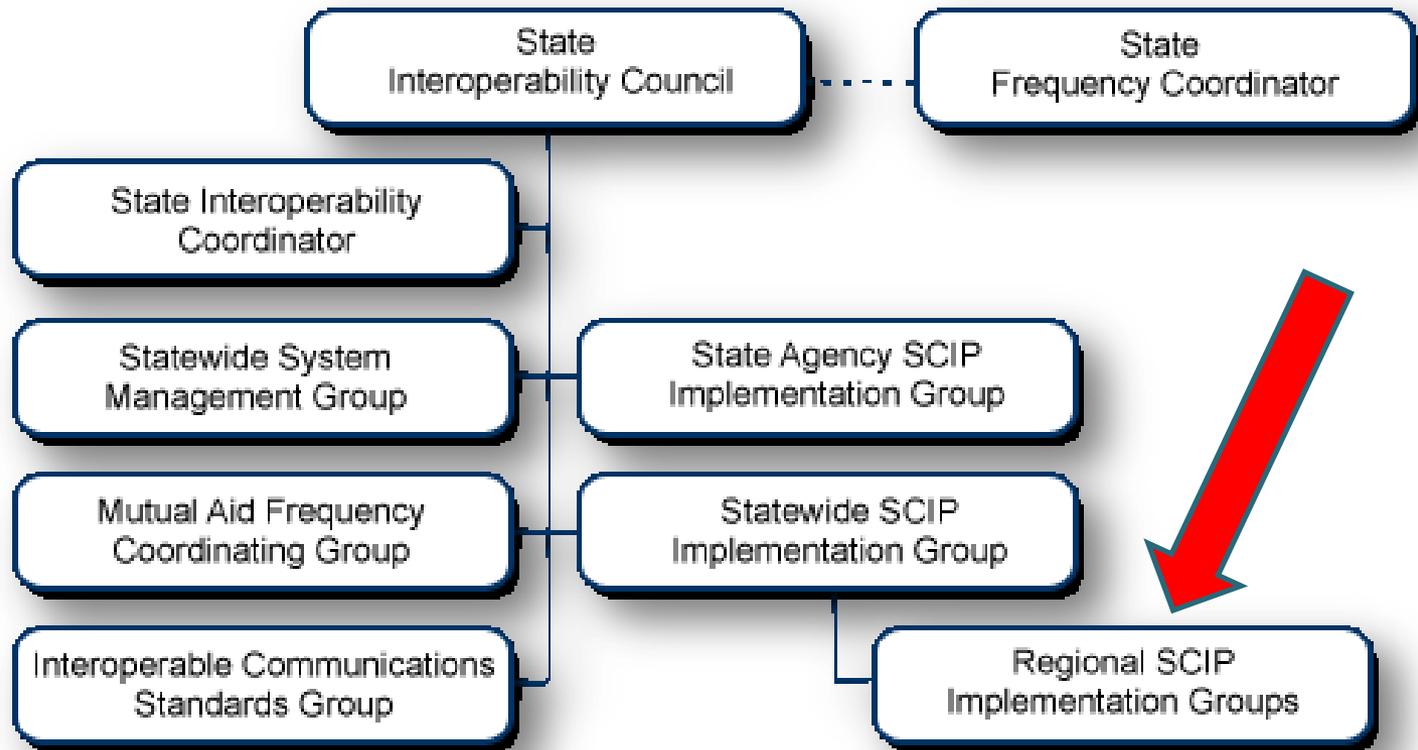
- Technical and operational standards for public safety interoperable communication systems
- Guidelines and procedures for using public safety interoperable communication systems
- Standards for public safety interoperable communication systems, facilities, and equipment used by dispatch centers
- **Certification criteria for persons who operate PSAP systems for dispatch centers**

Why Do We Need Governance?

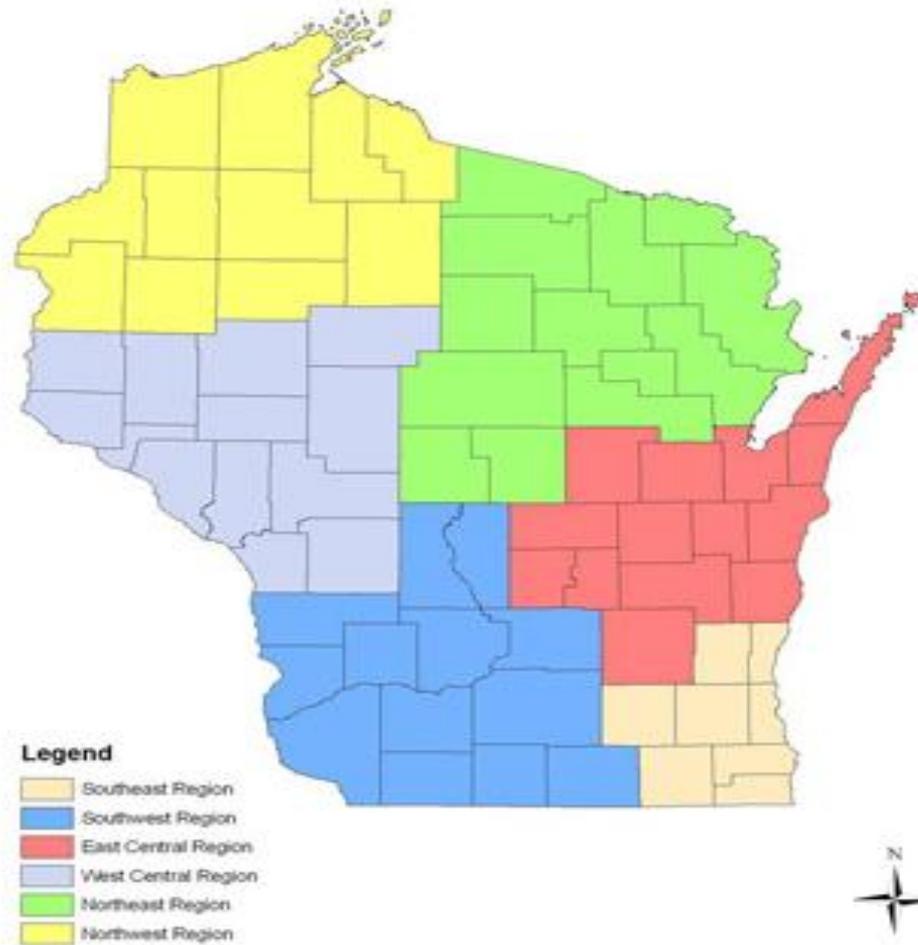
“...It does not benefit the end user to have a technically advanced system installed if no one knows how or when to use it in an emergency”.

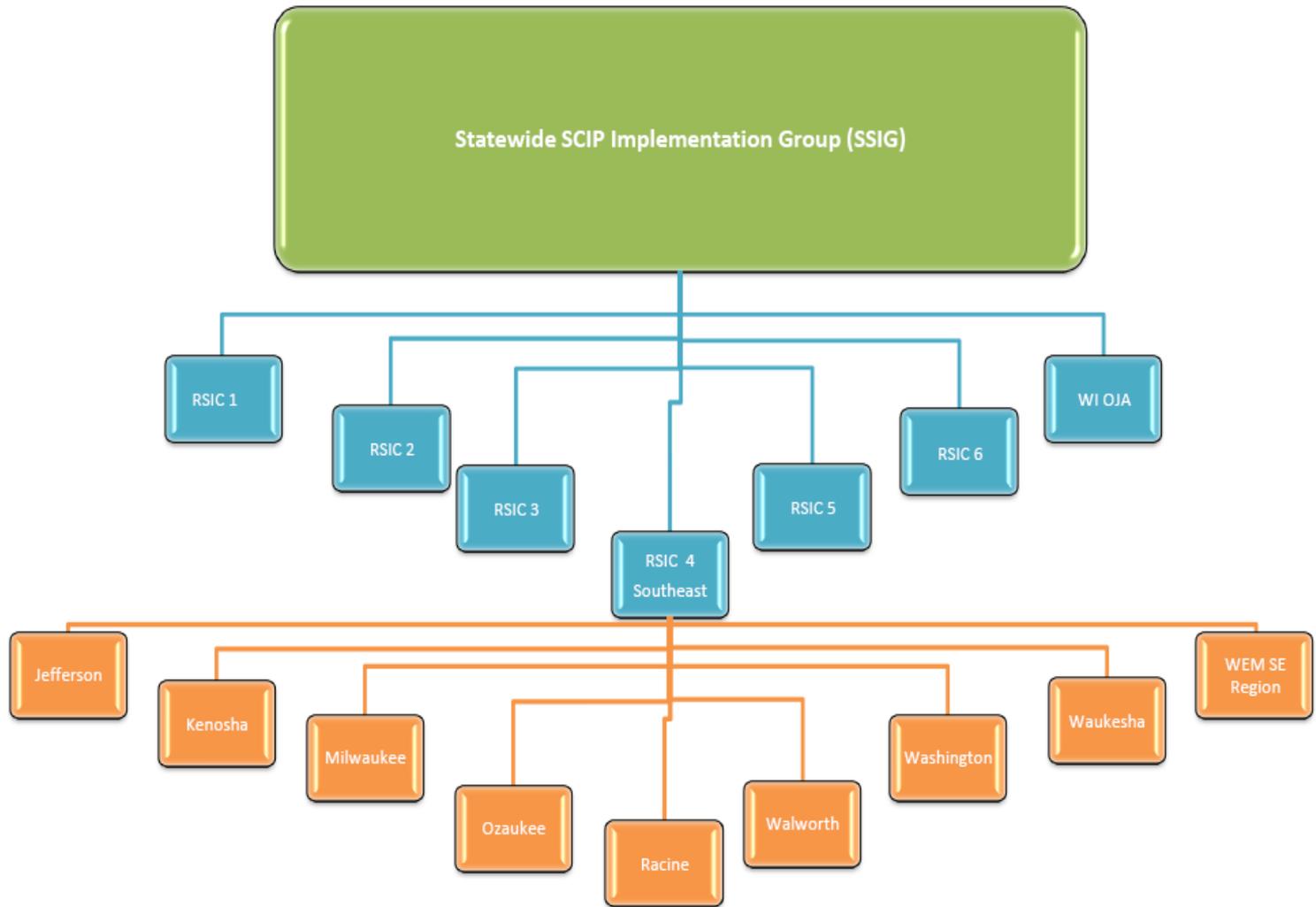
“Technology – it really takes extraordinary public safety people to make it work”,
Doug Onhalzer, Public Safety IT Magazine, January 2010.

Wisconsin Governance Structure



Six Regional SCIP Implementation Councils in Wisconsin



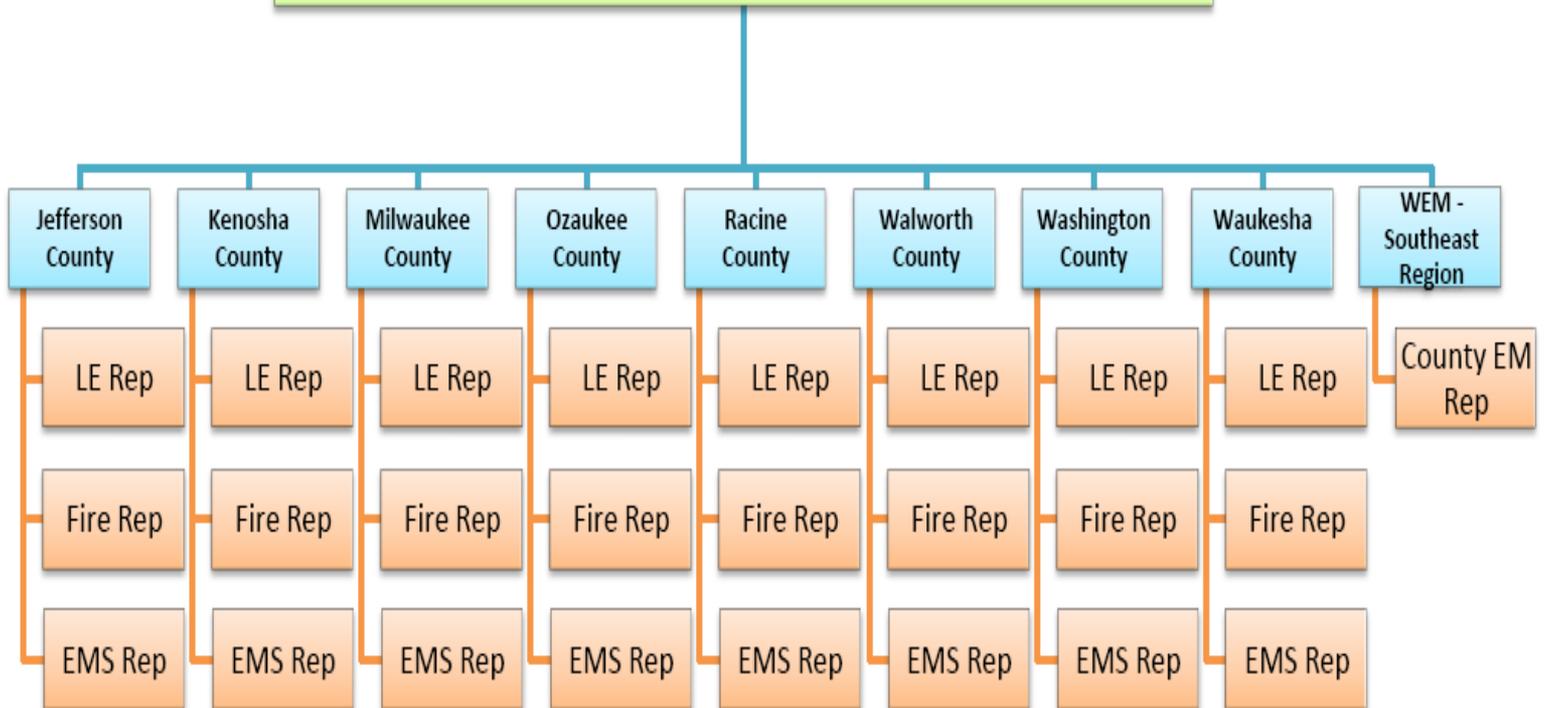


Statewide SCIP Council Mission

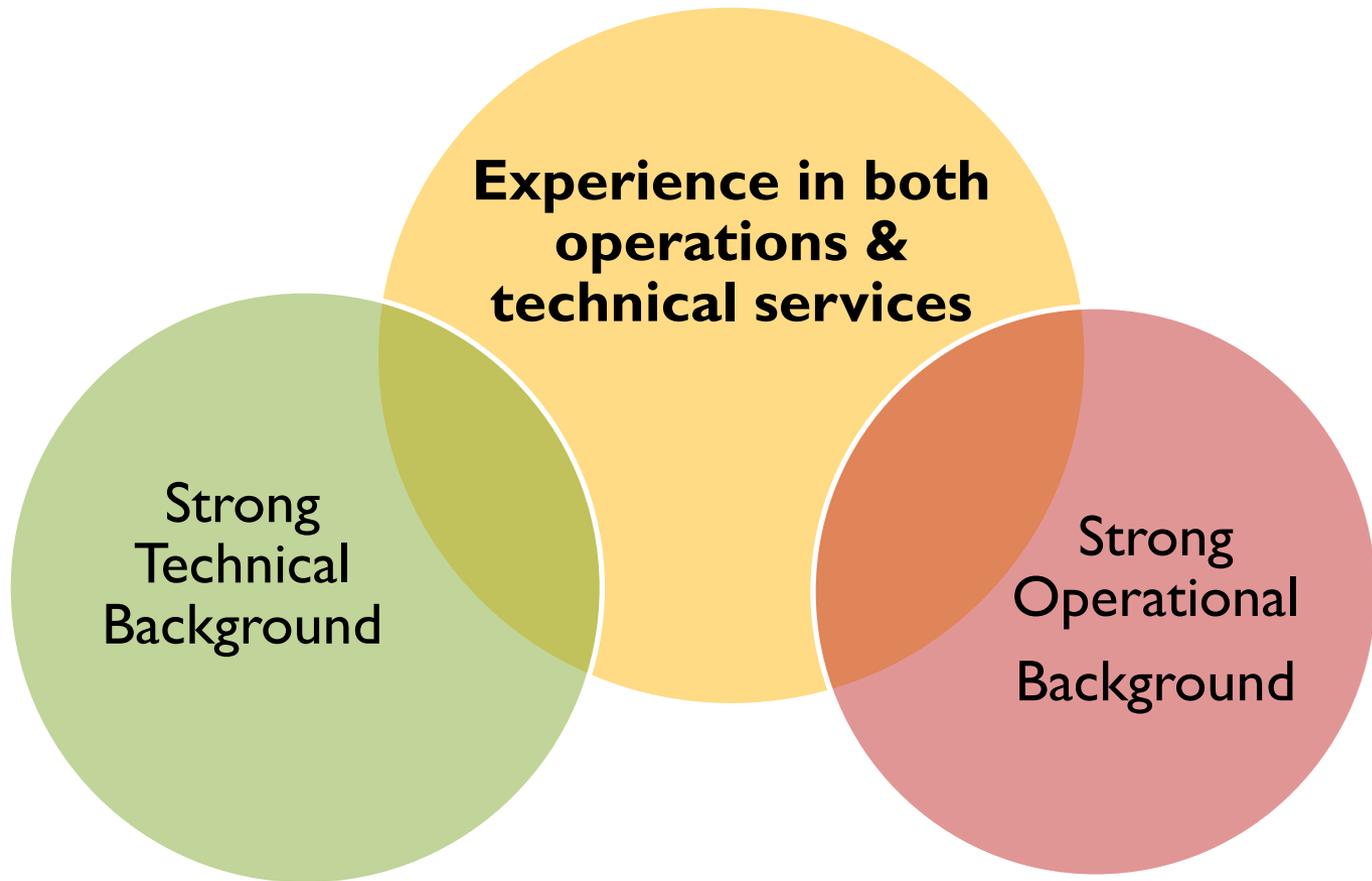
- Ensure communication and collaboration among Regional SCIP Implementation Council efforts and between the Regional Councils and the State Interoperability Council and the Office of Justice Assistance, and
- Provide guidance to local implementers and regional coordinators to ensure compliance with the goals, objectives and policies reflected in the Statewide Communication Interoperability Plan (SCIP), and
- Ensure that regional interoperability activities move the State closer to statewide interoperable public safety communications.
- Serve as a resource for, and make recommendations to, the State Interoperability Council concerning strategic issues and implementation of the SCIP Plan.

Southeast Wisconsin Regional SCIP Implementation Council

24 Members with Elected Chairperson & Vice-Chairperson
and
Regional Implementation Coordinator



Regional Council Membership Composition



Regional SCIP Council Mission

- ❑ Lead local and regional planning for and implementation of SCIP implementation efforts.
- ❑ Coordinate grant applications for OJA funding opportunities to assist regional implementation efforts.
- ❑ Assist the Regional SCIP Coordinator in the successful migration to narrow banding of radio communications in the region.
- ❑ Conduct at least one meeting of public safety officials and policy-makers in the region to communicate progress in regional SCIP implementation efforts, identify local concerns and potential resolutions, and provide opportunities for great local participation in regional interoperability activities

State/Regional Council Charter

Wisconsin

INTEROPERABILITY Initiative
Seamless Public Safety Radio Communications

Charter
Statewide/
Regional SCIP
Implementation
Groups

The Interoperability Council (IC) moves to adopt this charter authorizing a **Statewide SCIP Implementation Group (SSIG) and six subordinate Regional SCIP Implementation Councils (RSIC)**.

Whereas, Wisconsin public safety agencies have agreed in principle that interoperable voice and data communications will enhance the ability of individual agencies to accomplish their missions and purposes, and

Whereas, the Office of Justice Assistance under Wis. Stats. §16.965 is to provide oversight of the development and implementation of a statewide system for interoperable public safety communications, and

Whereas, the Interoperability Council is authorized under Wis. Stats. §15.107 (18) to assist the Office of Justice in implementing interoperable public safety communications and authorized under Wis. Stats. §16.9645 (2) (f) to develop interoperability objectives for local units of government, and

Whereas, the Office of Justice Assistance and the Interoperability Council seek to focus on their respective statutory duties and in implementing the strategic vision, goals and objectives reflected in the Statewide Communication Interoperability Plan (SCIP), and

Whereas, implementation of a seamless statewide public safety communications interoperability solution will be greatly impacted by local and regional implementation efforts, and

Whereas, the Interoperability Council has chartered other bodies to assist with various aspects of its statutory responsibilities but has not chartered a group to ensure consistent local implementations of the SCIP Plan, and

NOW, THEREFORE, the Interoperability Council hereby charters the Statewide SCIP Implementation Group and six Regional SCIP Implementation Councils for the following mission and purposes:

I. MISSION STATEMENTS

1. The mission of the Statewide SCIP Implementation Group is to:
 - Ensure communication and collaboration among Regional SCIP Implementation Council efforts and between the Regional Councils and the State Interoperability Council and the Office of Justice Assistance, and
 - Provide guidance to local implementers and regional coordinators to ensure compliance with the goals, objectives and policies reflected in the Statewide Communication Interoperability Plan (SCIP), and
 - Ensure that regional interoperability activities move the State closer to statewide interoperable public safety communications.
 - Serve as a resource for, and make recommendations to, the State Interoperability Council concerning strategic issues and implementation of the SCIP Plan.

Charter of the Statewide / Regional SCIP Implementation Groups

2. The mission of the Regional SCIP Implementation Councils is to:
 - Lead local and regional planning for and implementation of SCIP implementation efforts.
 - Coordinate grant applications for OJA funding opportunities to assist regional implementation efforts.
 - Assist the Regional SCIP Coordinator in the successful migration to narrow banding of radio communications in the region.
 - Conduct at least one meeting of public safety officials and policy-makers in the region to communicate progress in regional SCIP implementation efforts, identify local concerns and potential resolutions, and provide opportunities for great local participation in regional interoperability activities.

II. MEMBERSHIP

1. The Statewide SCIP Implementation Group (SSIG) shall consist of:
 - Two voting members from each Regional SCIP Implementation Council (this should be the Regional Chairperson and Vice Chairperson unless otherwise designated by the Regional Council).
 - The six Regional SCIP Implementation Coordinators from each Regional Council (One vote per region)
 - A voting representative from the WI Office of Justice Assistance.
2. Membership on each Regional SCIP Implementation Council (RSIG) shall consist of:
 - Three members from each county will serve on the Regional Council and will be selected from the following county-wide membership groups to ensure that a variety of perspectives are considered: Fire Association, Law Enforcement Association, and EMS Association.
 - If a county has a combined membership group (example: Fire/EMS; Public Safety, etc.), the selection of members to serve on the Regional Council should be made to include 3 individuals that can adequately represent the interests of public safety agencies, including fire, law enforcement, emergency medical services, dispatch and/or emergency management.
 - If there are no law enforcement associations present in a county, the sheriff shall designate member to serve as law enforcement representative on the regional council.
 - It is most desirable that a variety of disciplines participate on the Regional Council to ensure that all perspectives are shared and that information flows between the Regional Council and public safety professionals throughout the county.
 - Members of the Regional SCIP Implementation Council will elect a Council Chairperson and Vice-Chairperson.
 - A Regional SCIP Implementation Coordinator will assist each Regional Council in implementing the SCIP Plan regionally.

State/Regional Council Charter

Charter of the Statewide / Regional SCIP Implementation Groups

- County assignment to a particular Regional Council will be organized in the same manner as Wisconsin Emergency Management organizes counties into WEM planning regions.
- One county or tribal emergency management director from each region will be elected during a Wisconsin Emergency Management Regional Meeting to serve on the regional council. Election will take place immediately, and thereafter each year in December.

III. COMMON GOVERNANCE PROCEDURES

1. Both the SSIG and the RSIC will govern similarly. Each will elect a Chairperson and Vice-Chairperson (or alternatively, co-chairs) who will be responsible for agenda setting, maintaining management, and serve as a point of communication between the respective group and the State Interoperability Council.
2. The Office of Justice Assistance will provide staff support for the purpose of coordinating meeting logistics, taking meeting minutes and providing general office assistance to SSIG leadership.
3. Through OJA grants, the six Regional SCIP Implementation Councils will be provided staff support in the form of a Regional SCIP Implementation Coordinator. This individual will work closely with Council members and represented agencies to ensure that meeting logistics and office support functions are provided. Each Regional SCIP Interoperability Coordinator will further support Regional Councils by performing the following:
 - Plan regional migration to narrow banding of radio communications
 - Provide training to local public safety and elected officials on standard operating procedures and the Statewide Communications Interoperability Plan (SCIP)
 - Enter information about local/regional communications system assets into the Communication Assets and Survey Mapping (CASM) tool
 - Develop county-level Tactical Communications Interoperability Plans (TCIP) using the OJA TCIP template
 - Assist, when applicable, with the administration of Radio over IP for "PSAP to PSAP/BadgerNet" Project(s).
 - Assist with local implementation of WISCOM.
 - Complete other assignments provided by State Interoperability Project Coordinator
4. Meeting agenda, draft minutes, approved minutes and related documentation of the activities of the SSIG and the Regional Councils will be provided to OJA in a timely manner for posting to the Wisconsin Interoperability Council website at www.Interop.wi.gov. Each group will also provide a membership roster to OJA for website posting.
5. Each group shall establish bylaws, consistent with the charter, which will detail any needed additional rules such as voting procedures, officers and duties, procedures for filling expiring and/or vacant seats, staggered terms for all initial selections, and other procedures to allow for effective, representative governance.
6. Roberts Rules of Order (revised) will be used at meetings.

Charter of the Statewide / Regional SCIP Implementation Groups

7. Meetings will be held no less than quarterly providing there are pending action items.

IV. CHANGES TO THE CHARTER:

Each group is authorized to petition the Interoperability Council for changes to this Charter for the common good and to better implement the Wisconsin Interoperability Initiative.

This Charter has been approved by the Wisconsin Interoperability Council under the authority of Wis. Stats. §16.9645.

Adopted: January 14, 2010

Published: January 19, 2010

Regional Council Membership

Draft By-Laws Recommend:

- General membership for two year term
- Each member responsible for appointing an alternate
- Members with excessive absences can be replaced by approved alternate upon vote of Council

Regional Council Officers

Draft By-Laws Recommend:

- Elected Chairperson
- Elected Vice-Chairperson
- Charter suggests option of Co-Chairpersons
- Serve two-year term
- Will also serve on Statewide SCIP Implementation Group (SSIG)

Attachment 1: Regional SCIP Council/Coordinator Deliverables and Timelines (2010-2011)

Task	Jun-10 (This grant)	Sep-10 (Anticipated 2009 Grant)	30-Apr-11 (Anticipated 2009 Grant)
Establish regional governance	Form Regional Council and elect leadership. Establish bylaws consistent with IC charter	Conduct meetings and record actions and attendance. Submit copies to OJA	Conduct meetings and record actions and attendance. Submit copies to OJA.
Achieve migration to narrowband operation consistent with Interoperability Policy Statement #4 .	Define and gain consensus for the need for a regional coordinated effort	Document regional council progress towards timetable and plan development.	Complete regional timetable and plan for public safety radio migration to narrowband
Define agency "active participation" required in Interoperability Policy Statement #2	Define in Regional Council Bylaws	Report due September 30, 2010 to OJA	
Define and provide regional meeting schedules	Define in Bylaws and conduct meetings. Submit copies to OJA	same	same
Implement CASM software database	Develop methodology	Conduct outreach and complete input of initial data for individual agencies in at least 50% of counties in region	Outreach to and completed input of initial data of individual agencies in all of counties
Develop County Tactical Interoperability Communications Plans (TICP)	Participate in train-the-trainer workshop	Conduct county level workshops	Complete workshops in 2/3 of region's counties by 4/30/2011
WISCOM Initiative	Provide updates, briefings, and gather input for SSMG.	same	same
COML Training Initiative	Work with OJA interoperability staff to implement	same	Demonstrated effort towards achieving credentialed COML personnel in the region
BadgerNet/Radio over IP Initiative	Foster usage, skill development and drills, if applicable.	Participate in development of a statewide SOP/Testing document, if applicable.	Comply with requirements established in the SOP/Testing document, if applicable.
Interoperability Exercises Initiative			Coordinate and conduct regional interoperability exercises
After-action reporting of incidents and exercises employing communications interoperability	Region with UASI Counties will report.	Comply with policy required by DHS Office of Emergency Communications	Comply with policy required by DHS Office of Emergency Communications
SCIP Plan Update	Participate in initial planning	Participate in detailed planning	Participate in detailed planning

Narrow Banding

- FCC mandate that radios in the 150 – 512 MHz radio bands must be narrow banded or before **December 31, 2012.**
- May not be legally operated after the deadline unless narrow banded.
- Possible large daily fines

**NARROW-BANDING Of VHF and UHF Radio Frequencies by the FCC
(Revised to include companding restriction)**

It is the policy of the State Interoperability Council that all statewide VHF common mutual aid and interoperability channels be converted to narrow-band operation between the dates of April 1, 2011 and November 1, 2011.

The statewide common mutual and interoperability channels that must be converted to narrow-band operation include: EMS A, EMS B, EMS C, FG BLUE, FG RED, FG WHITE, IFERN, MARC1, MARC2, MARC3, MARC4, NATSAR, POINT, WEM CAR and WISPERN.

Revision: On October 13, 2009 this policy was revised by the Interoperability Council to restrict radios with "companding" features enabled on mutual aid frequencies. Companding methodologies vary by radio manufacturer and inconsistencies between radio brands can result in communication failures. Because Wisconsin public safety agencies are free to purchase radios from a variety of manufacturers and these radios may use incompatible companding methodologies, radios with a companding feature are not permitted on Wisconsin's mutual aid frequencies. Equipment purchased for use on mutual aid frequencies with homeland security grant funds that are programmed with the companding feature are out of compliance with grant conditions.

While this policy deals specifically with mutual aid frequencies, agencies should be aware of the potential for communication failures for any shared systems where radios with companding features manufactured by multiple vendors are used.

Background

Most current public safety radio systems use 25 kHz-wide channels. The Federal Communications Commission (FCC) has mandated that all non-Federal public safety licensees using 25 kHz radio systems migrate to narrowband 12.5 kHz channels by January 1, 2013. Agencies that do not meet the deadline face the loss of communication capabilities.

Public safety agencies need to aggressively develop a strategy to meet narrowband deadlines to avoid cancellation of existing wideband FCC authorizations. Agencies are encouraged to plan well in advance.

Establishing a limited and reasonable timeframe for narrow-band conversion by Wisconsin agencies is intended to reduce the number of times agencies will need to reprogram radios (reducing costs and effort) and will result in fewer communication system performance problems. This policy addresses the need for a coordinated statewide approach.

The State Interoperability Council was established as the coordinating body for the Wisconsin Interoperability Initiative under Wis. Stat. §16.9645.

Adopted: April 9, 2009
Published: July 21, 2009
Revised: October 13, 2009

Main CAM window

File Analysis Reports Help

Communication Assets Mapping Tool

User Name: _____
 State/Urban Area: _____

Drill down to detailed information

Agencies, towers, radio systems and other interoperability methods may be layered on the map

For Official Use Only

The screenshot shows the 'Communication Assets Mapping Tool' interface. At the top, it displays the title 'Communication Assets Mapping Tool' and a 'User Name' field. Below this is a 'State/Urban Area' dropdown menu. The main area is a map of Nevada with various locations marked by colored boxes containing letters (e.g., P, F, E, PH, PS, H, PW, G). A callout box points to a specific location on the map, and another callout box points to a detailed information window. The detailed information window is titled 'Agency Information' and contains the following data:

Agency Information
For Official Use Only

- Agency Name: Tahoe City Police
- Agency Point of Contact: None
- Service: Tahoe City
- Interoperability Methods Currently In Use
 - Proprietary Shared Systems
 - Shared Channels
 - Shared Channels, potential
 - Databases
- Radio Systems Used

System Name	Number Mobile	Number In-Service	Agency Use of System Comments
Fire Mutual Aid (CA 2007)	0	0	
Incident Support (SMDMS) System	0	0	None
Tahoe City (P) Conventional	20	20	All data in this profile is fictitious
- Dispatch Centers Used: None
- Gateway Channel: None

At the bottom of the window, there is a 'For Official Use Only' watermark.

What you can do TODAY

Here's how you can get started supporting interoperability in Wisconsin:

- Participate in the Statewide System Management Group and its subcommittees through your representatives. To get involved, contact the Statewide Interoperability Coordinator:

David Spenner
(608) 261-7535
david.spenner@wi.gov

- Secure and maintain compatible end user equipment. (See Frequently Asked Questions at Interop.wi.gov.)
- Evaluate how your local system can connect to WISCOM. If you are planning to replace or upgrade your system in the near future, think about how you can leverage WISCOM to save money and expand capacity in your area.
- Help secure funding for WISCOM enhancements and local expansion. Federal funding is available for the backbone and some radio upgrades, but state and local funding will be needed for long-term sustainability.
- Spread the word about the benefits of interoperability, and work with your fellow state and local leaders to support Wisconsin's Interoperability efforts.

WISCOM is part of Wisconsin's Interoperability Initiative. More information about WISCOM and other coordinated efforts to improve Wisconsin emergency radio communications can be found on our website:



INTEROP.WI.GOV

Any questions about implementing interoperable communications in your area can be directed to

David Spenner
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(608) 261-7535
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OJA
OFFICE OF JUSTICE ASSISTANCE

WISCOM

Seamless interoperable
radio communication
for Wisconsin's
emergency responders





Communication in a Disaster

Communication is a vital part of an effective emergency response. Yet in a number of recent disasters, the efforts of responders were hampered by communication breakdowns caused by a lack of communications interoperability.

- September 2001: Orders to evacuate the towers at the World Trade Center are received by police—343 firefighters don't hear the order and perish in the collapse.
- August 2005: Hurricane Katrina takes out cell, Internet, phone, radio and even satellite communications. Responders struggle to rescue victims using mutual aid channels that are quickly overwhelmed.
- February 2008: A winter storm strands over 2,000 vehicles on a Wisconsin highway for over 14 hours. Local responders and national guard troops are unable to communicate by radio—slowing response and rescue efforts.

Interoperable radio communication allows responders to talk to one another during an emergency. It helps responders coordinate and more fully focus their efforts on fighting fires, saving lives and managing recovery efforts. And, as we know from past experience, interoperable radios can be a lifeline to first responders who are risking everything to help others.

Most emergency radio systems can be tuned to talk with neighboring agencies for incidents involving limited mutual aid. Major disasters, however, do not heed local and regional borders. They require a variety of responders from communities throughout the state—local radio systems will be overwhelmed.

How can incident commanders control a situation when responders cannot communicate? A statewide communications interoperability solution is needed to fill the gap.

WISCOM

The Wisconsin Interoperable System for Communications (WISCOM) is a common statewide system that will allow responders across the state to seamlessly communicate during a major disaster.

The system supports up to three simultaneous conversation paths during an incident at the same site—triple the number currently available—and can be expanded to allow responders from anywhere in the state to assist without loss of communications.

The first phase of the WISCOM VHF backbone will be activated by the end of 2010. The shared system is designed to effectively operate with existing trunked radio systems using an ISSI interface.



Three short-term objectives support a long-term vision of statewide coverage for 99% of the state:

- Provide mobile coverage for 99% of the state
- Expand the coverage capability of the backbone system.
- Expand the systems to serve portables, to provide for growth to support additional users and subscribers.

Oversight

WISCOM will be controlled by its users in local, tribal, and state government. The Statewide System Management Group (SSMG), a committee of the State Interoperability Council, oversees the project. The 23 member group includes representatives from federal, tribal, state, county and local law enforcement, fire, EMS and state and local emergency management agencies.

Funding

Initial start-up costs will be covered using a \$15.3 million one-time federal Public Safety Interoperable Communications (PSIC) grant. Federal funds are also available to help communities purchase and upgrade radios to be compatible with WISCOM. To date, over \$14 million has been distributed to purchase thousands of new radios capable of using WISCOM.

Sharing a statewide infrastructure will result in long-term cost-savings for everyone. As communities replace their aging systems, they will be able to leverage the state backbone, sharing infrastructure costs and avoiding costly duplication of equipment.

Next Meeting Date

Late September, 2010

Important Agenda Items

- Elect Leadership
- By-Laws
- Narrow Banding
- CASM Entry
- TiCP Workshops



Adjournment

Thank You !