STATEWIDE RADIO BOARD
Interoperability Committee

Tuesday, January 20, 2009,
12:30 p.m. – 3:30 p.m.
Chair: Colonel mark Dunaski

League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Agenda

Call meeting to order
Approval of Agenda
Approval of Meeting Minutes of November 18, 2008

New Business

- VHF/UHF Frequency Planning Study update (Federal Engineering)

- Standard 3.32.0: (T. Johnson) Action Required
  Statewide Interoperable Plain Language Policy

Standing Reports

- Interoperability Workgroup (T. Johnson)

- Grant Workgroup (R. Whitehead)
  - Homeland Security Grants
    1. Approval of the IECGP Action Required
    2. Request for February Meeting- part of grant process Action Required

- STR Workgroup (R. Whitehead)
  - Establishment of an STR Sub-committee Action Required

Other Business

Adjourn

STATEWIDE RADIO BOARD
Interoperability Committee
Tuesday, November 18, 2008, 12:30 – 3:30 p.m.
League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Minutes

Members/alternates present:
Chair, Col. Mark Dunaski, MN State Patrol Chief
Jim Mohn, MnDOT
Bill Spence, DNR
Lance Ross, MEMA/MAA
Bob Norlen, MN EMSRB
Chris Kummer, MESB
Greg Nelson (alt), MESB
Dan Bullock, Met Council
John Sanner, MN Sheriff's Assoc.
Ulie Seal, MN Fire Chief's Assoc.
Cari Gerlicher, MN Chief's of Police Assoc.
Pat Coughlin, MN Interagency Fire Center
John Dooley, HSEM
Scott McNurlin, SE RAC
Micah Myers, CM RAC
Brett Miller, SC RAC

Members/alternates absent:
Vice Chair, Dan Fitzgerald, MN Department of Health
Jim Halstrom, AMEM
Buck McAlpin, MN Ambulance Association
Steve Pott, 700 MHz Planning Cmte.
Jon Priem, Prairie Island Tribal Police
Jeff Karel, ICE
Carl Kepper, USCG
Mike Martin, FBI
David Mercer, US Border Patrol
Tim Turnbull, UASI
Robert Graves, US Secret Service
Troy Tretter, MN National Guard
Scott Camps, HSEM NE MN
Pat Novacek, HSEM NW MN
Dan Anderson, HSEM SW MN
Gary Peterson, HSEM SE MN
Vacant, Tribal

Visitors present:
Scott Wiggins, Director DPS-DECN
Tom Johnson, DPS-DECN
Ron Whitehead, DPS-DECN
Jill Rohret, MESB
Nikia McKinney, MN National Guard
Steve Borchardt, Southern RIC
John Apitz, Motorola
Bob Schnese, Motorola
Mike Fink, Motorola

Chair Dunaski calls the meeting to order at 12:38 p.m.

Ulie Seal moves to approve the agenda. Chris Kummer seconds the motion. The Motion Prevails.

Corrections in attendance are made to the minutes of October 21, 2008

Ulie Seal moves to approve the amended SRB Interoperability Committee Meeting Minutes of October 21, 2008. The motion is seconded by Chris Kummer. The Motion Prevails.

New Business

Guest Speaker Nikia McKinney, MN National Guard

McKinney introduces himself and explains his role with Joint Operations Center

Statewide Radio Board Bylaw Change Tom Johnson, DPS-DECN

Mr. Johnson explains the changes to the Statewide Radio Board Bylaws.

Ulie Seal moves to approve the amended Bylaws and recommends that the changes be brought before the SRB. Chris Kummer seconds the motion. The Motion Prevails.

MINSEF Criteria for the Installation of Base Stations and MINSEF General Operations Tom Johnson, DPS-DECN

The committee discusses the changes outlined by Mr. Johnson's handout. Mr. Johnson also references statutes 299C.37 in regards to MINSEF criteria for use.

Ulie Seal moves to approve the MINSEF criteria for the installation of base stations and MINSEF general operations. Brett Miller seconds the motion. The Motion Prevails.

Protocol for Use of the MIMS Channel Tom Johnson, DPS-DECN

Mr. Johnson explains that adoption of the MIMS Channel is required because the previous managing committee was recently abolished. Mr. Johnson clarifies that logs will be updated at the standard time when completing an after action report.

Brett Miller moves to approve the protocol for use of the MIMS Channel. Ulie Seal seconds the motion. The Motion Prevails.

Workgroup Reports

Interoperability Workgroup Tom Johnson, DPS-DECN

Mr. Johnson indicates that the action items just passed are results of the Interoperability Workgroup. He states that they are now focusing on the plain language policy which will be looked at more closely at the upcoming meeting of December 3, 2008.

Mr. Johnson indicates that some jurisdictions are hesitant to give up using 10-codes but they were reassured that they would only be asked to use plain language when participating in a multi-jurisdiction effort.

Mr. Johnson provides a report on the State Agency Workgroup. They have adopted a policy on a statewide hailing channel called MINCOM which will be monitored by the St. Cloud State Patrol. State agencies looking for assistance will be able to call on this channel and St. Cloud will assist with setting up a patch or obtaining local assistance.

The State Agency Workgroup is also setting up a training system to assure that all entities have proper initial and ongoing training. A letter will be mailed to all agencies on the 800 MHz system.

The Phase Three Interop Committee Sub-workgroup is planning on bringing on a consultant to assist in implementing a plan on action on how to move forward with Phase Three VHF/UHF Interoperability.

The CASM workgroup will be participating in CASM training on November 23, 2008. At this time, Rick Juth, State Patrol and John Dooley, HSEM are facilitating the initial training. The refresher trainings will facilitated by the State Patrol.

Grant Workgroup

Ron Whitehead, DPS-DECN

Ron Whitehead indicates that its time to begin the application process for the 2009 Homeland Security and Interoperable Communications Grant. Mr. Whitehead gives an estimate of what will be received in 2009.

Mr. Whitehead indicates that they have began asking the regions to provide some input and proposals and coordinating that input through the SCIP to ensure there is consistent strategy.

Steve Borchardt requests that examples of grant use are provided to the regions. Mr. Borchardt indicates that some of the Regional Radio Boards are still in the developmental stage and wouldn't know where to begin in submitting suggestions or proposals. Mr. Whitehead agrees and indicates that they are attempting to reach both the RRBs and the RACs but the assistance of the RICs is imperative.

The IECGP is due by January 13, 2009
The Homeland Security Grant is due in March 2009

Strategic Technology Reserve Ron Whitehead, DPS-DECN

The STR developed out of the Public Safety Interoperable Communications (PSIC) Grant Program. A proposal was developed which called for three levels of interoperability.

1. the ability to deploy VHF deployable repeaters
2. Cell on Wheels
3. Typing in with the National Guard and their capabilities

Mr. Whitehead provides details to each level. He continues to explain how this workgroup will develop and the benefits that will come of this group's work.

Mr. Whitehead hopes to have a governance structure developed by their meeting in January.

ARMER Update Scott Wiggins, Director, DPS-DECN

Mr. Wiggins reports that after a six week delay, the bond sale of $42 million sold in full.

Chair Dunaski thanks the group for their efforts and participation. He explains how the involvement of each person makes Minnesota a model of how to implement this new system effectively.

Cari Gerlicher motions to adjourn; motion is seconded by Ulie Seal. The motion prevails

The meeting was adjourned at 1:32 p.m.

Meeting Minutes recorded by Jennifer DiOttaviano

Allied Radio Matrix for Emergency Response (ARMER)
Standards, Protocols, Procedures

Document Section:	**3 – Interoperability Standards**	Status: Interoperability Committee
Sub-Section:	**State 3.32.0**	Recommendation: 01/20/09
Procedure Title:	**Statewide Interoperable Plain Language Policy**	
Date Established:		Statewide Radio Board Approval:
Replaces Document Dated:	**N/A**	
Date Revised:	**01/06/09**	

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1. Purpose or Objective:

Common Terminology, Plain Language (Clear Text), Compatibility:

The ability of emergency management/response personnel from different disciplines, jurisdictions, organizations and agencies to work together depends greatly on their ability to communicate with each other. The use of common terminology is about the ability of emergency management/response personnel to communicate clearly with one another and effectively coordinate activities, no matter what the size, scope, location, or complexity of the incident.

The use of plain language (clear text) in emergency management and incident response is a matter of public safety, especially the safety of emergency management/response personnel and those affected by the incident. It is critical that all those involved with an incident know and utilize commonly established operational structures, terminology, policies, and procedures. This will facilitate the achievement of interoperability across agencies/organizations, jurisdictions, and disciplines, which is exactly what NIMS and the Incident Command System (ICS) is seeking to achieve.

2. Technical Background:

Integrated Communications:

Incident communications are facilitated through the development and use of a common communications plan and interoperable communications processes and architectures. The ICS 205 Form is available to assist in developing a common communications plan. This integrated approach links the operational and support units of the various agencies involved, and is necessary to maintain communications connectivity and discipline and enable common situational awareness and interaction. Preparedness planning should address the equipment, systems, and protocols necessary to achieve integrated voice and data incident management communications

3. Operational Context:

All communications, whether oral or written, between organizational elements during an incident should be in plain language in order to ensure that information dissemination is timely, clear, acknowledged, and understood by all intended recipients. Codes should not be used, and all communications should be confined to essential messages. The use of acronyms should be avoided during incidents requiring the participation of multiple agencies or organizations. Policies and procedures that foster compatibility should be defined to allow information sharing among all emergency management/response personnel and their affiliated organizations to the greatest extent possible.

Encryption or Tactical Language:

When necessary, emergency management/response personnel and their affiliated organizations need to have a methodology and the systems in place to encrypt information so that security can be maintained. Although plain language may be appropriate during response to most incidents, tactical language is

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occasionally warranted due to the nature of the incident (e.g., during an ongoing terrorist event). The use of specialized encryption and tactical language should be incorporated into any comprehensive IAP or incident management communications plan.

The principal objection to the use of plain English by Law Enforcement is the possibility that sensitive information could be revealed to a suspect within hearing range of the responder, possibly endangering the safety of the responder. To address these concerns on a multi-agency response, tactical codes should be recognized and be a part of the incident action plan and incident communications plan to maintain responder safety. Examples may include the following:

- Immediate danger
- Backup/assistance
- Take subject into custody
- Hold for sensitive information

4. Standardized Policy

The use of common terminology is about the ability of area commanders, state and local EOC personnel, federal operational coordinators, and responders to communicate clearly with each other and effectively coordinate response activities, no matter what the size, scope or complexity of the incident. The ability of responders from different jurisdictions and different disciplines to work together depends greatly on their ability to communicate with each other.

It is required that plain English be used for multi-agency, multi-jurisdiction and multi-discipline events, such as major disasters and exercises. Beginning in the fiscal year that starts on Oct. 1, 2006, federal preparedness grant funding is contingent on the use of plain English in incidents requiring assistance from responders from other agencies, jurisdictions and functional disciplines.

Primary Intended Use

Any multi-agency or multi-jurisdictional emergency response or exercise.

Best Practices Encouraged

The use of plain language in emergency response is matter of public safety, especially the safety of first responders and those affected by the incident. It is critical that all local responders, as well as those coming into the impacted area from other jurisdictions and other states as well as the federal government, know and utilize commonly established operational structures, terminology, policies and procedures.

Incident Scope and Geographic Area

The shared statewide incident response talkgroups are available for use in incidents anywhere the ARMER system provides geographic coverage regardless of incident size or scale. Interoperability incidents may be localized or dispersed in area. Participating incident personnel and resources may be localized, regional, statewide or national. Incidents may be pre-planned or emergent in nature.

Implementation Deadline (insert date)

5. Standardized Procedure:

While the NIMS Integration Center doesn't require plain English for internal operations, we strongly encourage it. We believe it is important to practice everyday terminology and procedures that will need to be used in emergency incidents and disasters. NIMS implementation is a long-term effort and it's probably not possible to persuade everyone to change ingrained habits overnight. But we do hope that over time, everyone will understand the importance of using plain language for day to day operations.

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Unit Identification

When operating on the shared statewide incident response talkgroups, users should initially identify in the following manner using plain English: Agency name, followed by service branch or function designation, followed by call sign or unit number. Examples: "North EMS 512", "Elk River Police 512", "Washington County Public Works 512", "State Patrol 512", etc. Once established, ongoing communications between the same units may be shortened.

Use of 10-Codes and Acronyms

The use of 10-codes, signals, unique acronyms, and other codes must not be used on the statewide incident response talkgroups because there is no standardized set of codes. Plain English must be used in all cases.

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6. Management

Violations (Non compliance)

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A violation or non compliance to the Statewide Interoperable Plain Language Policy should be documented and sent to the Regional Radio Board (RRB) for review and if deemed necessary by the RRB for follow up by the Sustem Administrator where the non compliant entity is located.

The System Administrator will report back their findings to the RRB. This may be done in person at a RRB meeting or via letter to the RRB Chair.

Repeated violations by any one entity will require a representative of that entity to appear before the Regional Radio Board where the Board will determine the aapropriate action to be taken.

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Variances and Exceptions

Encryption or Tactical Language

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Emergency Communication Networks
444 Cedar Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.282.6565 • Fax: 651.296.2665 • TTY: 651.282.6555

Alcohol and Gambling Enforcement

ARMER/911 Program

Bureau of Criminal Apprehension

Driver and Vehicle Services

Homeland Security and Emergency Management

Minnesota State Patrol

Office of Communications

Office of Justice Programs

Office of Traffic Safety

State Fire Marshal and Pipeline Safety

MEMO

To: **Colonel Mark Dunaski, Chair**
SRB- Interoperability Committee

From: Ron Whitehead, Chair
Interoperability Committee- Grant Workgroup

Date: January 12, 2009

Subject: Interoperable Emergency Communication Grant Program

In November, the Department of Homeland Security (DHS) released information about the 2009 DHS grant process. The following two grants are particularly applicable to interoperable communications:

- Interoperable Emergency Communication Grant Program (IECGP)

$716, 462 was allocated to Minnesota under the IECGP. The articulated priorities for the IECGP are:

1. Leadership and Governance and Common Planning and Operational Protocols
2. Emergency Responder Skills and Capabilities

Funds available under the IECGP can be used for interoperable communications equipment where the State Authorized Agent certifies that the state has adequately addressed the two listed priorities. Where funds are used for equipment, there is a 25% matching funds requirement. The application is due January 23, 2009.

- State Homeland Security Grant Program (SHSP)

$11,647,000 was allocated to Minnesota under the 2009 SHSP grant. This is an annual grant program and Minnesota has traditionally allocated a significant portion of the annual SHSP grant funds to interoperable communications. For this years process, the Division of Homeland Security and Emergency Management (HSEM) has determined that $5,821,425 will be allocated to interoperable communication. HSEM has also determined that the Division of Emergency Communication Networks and thusly the Grant Workgroup will be responsible for evaluating all interoperable communication proposals and consolidating them into a single Investment Justification which is due February 13, 2009.

Information concerning these two grants was forwarded to the Regional Advisory Committees and to members of the Interoperability Committee Grant Workgroup

when it was received in November. More detail information was forwarded to interested parties (Regional Advisory Committees, HSEM Regions, Border Counties) following the HSEM announcement of the process to be applied to the SHSP grant funds.

IECGP Recommendation

Based upon the short application period, the Grant Workgroup proceeded to develop proposals for the IECGP funds. The Grant Workgroup met by conference call on the following dates:

December 10, 2008
January 7, 2009

Based upon those meetings, the Grant Workgroup makes the following recommendation for the allocation of IECGP funds:

Portfolio Budget		Total Cost
State M&A (up to 3%)		$4,298.00
State supported projects		$138,994.00
Project Name: Web based training delivery	Project Cost: $67,900	
Project Name: Interoperable Equipment	Project Cost: $71,094	
Local pass-through projects (80%)		$573,170.00
Project Name: Web based training delivery	Project Cost: $271,600	
	M&A $8,400	
Project Name: Interoperable Equipment	Project Cost: $284,375	
	M&A $8,795	
Total IECGP Funds		$716,462.00

This allocation reflects Grant Workgroups proposal to address two specific investments, as follows:

1. Web Based Interoperability Training Delivery- This investment proposal addresses the need to adapt existing and future educational outreach and interoperable communication training for web based delivery. Under this investment, DPS would coordinate the acquisition of a basic learning management system (LMS) and fund the adaptation of appropriate training to web based delivery. The two basic formats for such training are interactive e-learning and webinar (web based lectures) type training. The League of Cities, which provides web based interactive e-learning training and the Minnesota Sheriff's Association and Minnesota Chiefs of Police Association, which provide webinar training were consulted for approaches to this investment.

Funds allocated to this purpose: $350,000.00

2. Interoperable Equipment (Portable and Mobile Radios)-This investment relies upon a determination that Minnesota is or will address the IECGP funding priorities with existing programs and funds. With that determination, we may use IECGP funds for interoperable communication equipment. Under this investment, remaining funds will be allocated to the each of the Regional Radio Boards and to the State (20%) to be used for portable or mobile radios. The investment is focused upon developing interoperability within the region as determined by the regions. Funds may be used for ARMER radios, cross spectrum radios or VHF digital radios as determined appropriate by the Regional Radio Boards.

   Funds allocated to this purpose: $293,170 to Regional Radio Boards
   $73,292 to State for State Agencies

   These amounts include the 3% M&A allocation. As previously indicated, there is a 25% match requirement with respect to this allocation (33.3% of grant amount, 25% of grant plus matching funds). The Regional Radio Board funds would be allocated to the regions in accordance with the standard allocation formula. Regions would be required to consider the needs of non-governmental public safety agencies and tribal governments within their regions.

With respect to the web based interoperability training delivery investment. The Central Minnesota region has begun work upon an approach to delivering such training. The local share of those funds will be nominally allocated to the Central Minnesota Regional Radio Board, but will be re-directed to the Division of Emergency Communication Networks under a Memorandum of Understanding where it will be allocated in accordance with the direction of a core training committee currently under development (SRB- Legislative Committee).

Recommendation

The Interoperability Workgroup- Grant Workgroup recommends approval of the above described investment proposals which must be submitted to DHS on or before January 23, 2009.

Emergency Communication Networks
444 Cedar Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.282.6565 • Fax: 651.296.2665 • TTY: 651.282.6555

MEMO

To: **Colonel Mark Dunaski, Chair**
SRB- Interoperability Committee

From: Ron Whitehead, Chair
Interoperability Committee- Grant Workgroup

Date: January 12, 2009

Subject: Need for a February meeting

In November, the Department of Homeland Security (DHS) released information about the 2009 DHS grant process. As part of the State Homeland Security Grant Program (SHSP) $11,647,000 has been allocated to Minnesota. For this years process, the Division of Homeland Security and Emergency Management (HSEM) has determined that $5,821,425 will be allocated to interoperable communication. HSEM has also determined that the Division of Emergency Communication Networks and thusly the Grant Workgroup will be responsible for evaluating all interoperable communication proposals and consolidating them into a single Investment Justification must be submitted to HSEM by February 13, 2009.

The following timeline has been established for our review and development of the 2009 SHSP grant process:

Due Date	Required Action
Feb. 2, 2009	Submission of proposals to DECN
Feb. 4, 2009	Review of proposals by SRB-Interoperability Committee, Grant Workgroup
Feb. 13, 2009	Completed IC Investment Justification (IJ) must be submitted to HSEM
Feb. 17, 2009	Proposed IJ presented and reviewed by the SRB- Interoperability Committee
Feb. 23-27, 2009	All IJ reviewed by the HSEM Strategic Allocation Committee
Feb. 26,2009	SRB review and final approval of IC IJ.

March 10,2009	All IJ's submitted to Homeland Security Advisory Council (HSAC) for approval
March 20, 2009	2009 grant application must be submitted to DHS

The Statewide Radio Board, as Minnesota's State Interoperability Executive Committee must ultimately approve the Interoperable Communication Investment proposal. A principle role of the Interoperability Committee is to provide a broad review of the proposals and to make recommendation to the SRB. As a February meeting is necessary to accomplish this activity in a timely manner, I would request you schedule a meeting to accommodate this process.

I will note that given the new process, there is a distinct possibility that we will be required to determine which proposals most closely support Minnesota's Interoperable Communication Strategy. We may ask certain groups to make presentations to the Interoperability Committee to support their proposals.

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State Fire Marshal and Pipeline Safety

MEMO

To: **Colonel Mark Dunaski, Chair**
SRB- Interoperability Committee

From: Ron Whitehead, Chair
Interoperability Committee- STR Workgroup

Date: January 12, 2009

Subject: Strategic Technology Reserve (STR)

As part of the Public Safety Interoperable Communication (PSIC) grant process and the State Communication Interoperability Plan (SCIP) development, we were required to commit funds and develop a proposal for a Strategic Technology Reserve. A workgroup was assembled to develop that proposal.

The STR Workgroup has discussed the continued development of Minnesota's Strategic Technology Reserve and there was a consensus that there was a need to establish a sustaining structure to the process. The first proposal was to integrate the Division of Homeland Security and Emergency Management (HSEM) and the local emergency managers into a governance structure and into the continued development of the STR capability.

In discussions with HSEM, they indicated they did not have the capacity to take on the leadership of the initiative at this point in time and recommended we focus upon the short term objectives of developing the STR capability at the regional level.

Following the discussion with the HSEM, we are proposing the following actions:

- A STR Sub-Committee should be established under the SRB-Interoperability Committee.
- The STR Sub-Committee should be chaired by an Emergency Manager, who is a designated member of the Interoperability Committee.
- The STR Sub-Committee membership should include members appointed by each of the Regional Radio Boards, designated by each of the HSEM Regions and the following state members: DPS-DECN Interoperability Program Manager, MSP representative, DPS-HSEM representative, DNR representative, National Guard.
- The initial focus of the STR Sub-Committee should be upon resource development.

- DECN will provide administrative and technical support (RFP for technical consultants) to the Sub-Committee in these activities.

We would consider this the first step in this process of developing and maintaining this STR process.

Dan Anderson, who is the Emergency Manager from Nobles County, is a member of this committee. He is an Amateur Radio operator and has worked with the HSEM Region 5 in developing a regional capability. He has indicated he would be willing to chair an STR Sub-committee of the Interoperability Committee.

STR Workgroup Recommendation:

The chair of the Interoperability Committee should establish a permanent STR Sub-committee with broad regional and organizational representation, as indicated above. Upon formulating the STR Sub-committee, the sub-committee should proceed with a review of the basic STR proposal, acquisition of equipment necessary to establish the capability, development of standard operating procedures and other organizational matters.

STATEWIDE RADIO BOARD
Interoperability Committee

Tuesday, February 17, 2009,
12:30 p.m. – 3:30 p.m.
Chair: Colonel mark Dunaski

League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Agenda

Call meeting to order
Approval of Agenda
Approval of Meeting Minutes of January 20, 2009

New Business

- FY2009 State Homeland Security Program grant proposals Action Required

1:00 p.m.	HSEM Region One
1:15 p.m.	HSEM Region Two
1:30 p.m.	HSEM Region Three
1:45 p.m.	HSEM Region Four
2:00 p.m.	HSEM Region Five
2:15 p.m.	HSEM Region Six
2:30 p.m.	Border County Proposal
2:45 p.m.	Metropolitan Emergency Services Board
3:00 p.m.	DECN Proposals- Consolidated RRB proposals

- Training workgroup/sub-committee

Adjourn

STATEWIDE RADIO BOARD

Interoperability Committee

Tuesday, January 20, 2009, 12:30 – 3:30 p.m.
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Meeting Minutes

Members/alternates present:
Chair, Col. Mark Dunaski, MN State Patrol Chief
Tim Lee, MnDOT
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Lance Ross, MEMA/MAA
Steve Pott, 700 MHz Planning Committee
Chris Kummer, MESB
Dan Bullock, Met Council
John Sanner, MN Sheriff's Assoc.
Jon Priem, Prairie Island Tribal Police
Cari Gerlicher, MN Chief's of Police Assoc.
Pat Coughlin, MN Interagency Fire Center
Gena Wong, MNNG
John Dooley, HSEM
Scott Camps, HSEM NE MN
Micah Myers, CM RAC
Brett Miller, SC RAC

Members/alternates absent:
Vice Chair, Dan Fitzgerald, MN Department of Health
Jim Halstrom, AMEM
Jeff Karel, ICE
Carl Kepper, USCG
Mike Martin, FBI
David Mercer, US Border Patrol
Tim Turnbull, UASI
Robert Graves, US Secret Service
Pat Novacek, HSEM NW MN
Dan Anderson, HSEM SW MN
Gary Peterson, HSEM SE MN
Bob Norlen, MN EMSRB
John Sanner, MN Sheriff's Assoc.
Ulie Seal, MN Fire Chief's Assoc.
Scott McNurlin, SE RAC
Vacant, Tribal

Visitors present:
Scott Wiggins, Director DPS-DECN
Tom Johnson, DPS-DECN
Ron Whitehead, DPS-DECN
Jill Rohret, MESB
Nikia McKinney, MN National Guard
Steve Borchardt, Southern RIC
John Apitz, Motorola
Bob Schnese, Motorola
Mike Fink, Motorola

Chair Dunaski calls the meeting to order at 12:34 p.m.

Chair Dunaski moves the Strategic Technology Reserve (STR) Workgroup report to the front of the agenda.

Dan Bullock moves to approve the agenda as amended. John Dooley seconds the motion. The Motion Prevails.

Chris Kummer moves to approve the amended SRB Interoperability Committee Meeting Minutes of November 18, 2008. The motion is seconded by Dan Bullock. The Motion Prevails.

Standing Reports

STR

Ron Whitehead explains that the STR came out of the SCIP planning process and is funded by PSIC funds. He indicates that the STR is an emergency management tool to aid in disaster response planning. Mr. Whitehead states that Homeland Security was asked to take on responsibility for administering the STR. At this time HSEM does not have the resources available to administrate the STR but remain very interested in continuing their participation. Mr. Whitehead talks more about the goals of the STR. He explains that it was recommended that the STR be a sub-committee of the SRB Interoperability Committee. Mr. Whitehead announces that Dan Anderson, Emergency Manager of Nobles County and ham radio operator has agreed to be the chair of the STR sub-committee. Mr. Whitehead asks for volunteers to join this sub-committee to aid in the important decisions that will be made.

Chair Dunaski asks Mr. Whitehead who should be members of the STR. Mr. Whitehead indicates that current members of the Interoperability Committee would be appropriate.

Scott Wiggins states the importance of the participation of particular entities on the STR but would not recommend limiting the membership to that amount.

John Dooley moves to approve that establishment of the Strategic Technology Reserve as a sub-committee under the Interoperability Committee with Dan Anderson as the chair of the STR. Cari Gerlicher seconds the motion. The Motion Prevails.

New Business

Federal Engineering Presentation

Chuck Hnot from Federal Engineering presents a PowerPoint regarding an update on the VHF/UHF frequency planning study.

Standard 3.32.0 Tom Johnson, DPS-DECN

Tom Johnson explains Standard 3.32.0 regarding plain language. Chair Dunaski stresses the importance of encouraging use of this practice on a regular basis so it becomes second nature to radio users.

Lance Ross moves to approve Standard 3.32.0. Micah Myers seconds the motion. The Motion Prevails.

Workgroup Reports

Interoperability Workgroup Tom Johnson, DPS-DECN

Mr. Johnson announces upcoming trainings:

- TICP Training
  - Thief River Falls: January 27, 2009
  - Marshall: January 29, 2009
- COML Training
  - St. Cloud: February 17-19, 2009

Mr. Johnson explains who should be represented and the prerequisites needed.

Grant Workgroup Ron Whitehead, DPS-DECN

1. IECGP – Allocation of $716,462 to be used for
   a. Web-based training
   b. Equipment Acquisition

Mr. Whitehead reminds the committee of what last year's grant was used for. Mr. Whitehead indicates that the grant proposal will be due on January 23, 2009 so a decision needs to be made.

A discussion ensues regarding the plans for the allocated funds.

Scott Camps moves to approve the investment proposal. John Dooley seconds the motion. The Motion Prevails.

Mr. Whitehead indicates a need to meet on February 17, 2009 to hear proposals from various counties, HSEM regions and other groups across the state regarding the Interoperability Communication Grants from across the state.

Mr. Johnson indicates that Rick Juth has developed, with the State workgroup, a state hailing channel to be called MINCOM. This channel will be used across the state, answered by the St. Cloud dispatch center to be directed to the appropriate dispatch center. Mr. Johnson indicates the importance of training and announces the development of a training program.

The meeting was adjourned at 2:06 p.m.

Meeting Minutes recorded by Jennifer DiOttaviano

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Minnesota State Patrol

Office of Communications

Office of Justice Programs

Office of Traffic Safety

State Fire Marshal and Pipeline Safety

MEMO

To: **Colonel Mark Dunaski, Chair**
SRB- Interoperability Committee

From: Ron Whitehead, Chair
Interoperability Committee- Grant Workgroup

Date: January 12, 2009

Subject: FY2009 State Homeland Security Program (SHSP) Grant Process

With the designation of the Statewide Radio Board (SRB) as Minnesota's State Interoperability Executive Committee (SIEC) and the development of a State Communication Interoperability Plan (SCIP), the SRB assumed a much broader responsibility for coordinating Minnesota's Interoperable Communications planning. One element of that planning process is to assure that Interoperable Communications funds from all sources are used to develop specific strategies and capabilities based upon Minnesota's SCIP.

The responsibilities of the SRB Interoperability Committee, with its broad multi-disciplinary and geographical representation and similar broad interoperability perspective, include developing recommendations for the SRB upon the various grant proposals. To accomplish this objective, the Division of Homeland Security and Emergency Management (HSEM) designated the Division of Emergency Communication Networks (DECN) as the Investment Lead for all Interoperable Communication grant initiatives in the FY2009 SHSP grant process. More importantly, HSEM has specified the following:

Minnesota's Total Allocation SHSP grant:	$11,647,000
Interoperable Communications Allocation:	$5,821,425

As part of this years process, HSEM indicated that the FY2009 SHSP grant process should focus upon existing initiatives and priorities and that new multi-year or multi-phased proposals should be submitted for consideration as one of the three available competitive proposals.

<u>FY2009 SHSP Processing</u>

Part One

All regions (HSEM, Regional Radio Boards and others) were required to submit their proposals to DECN by February 2, 2009. The Grant Workgroup reviewed those proposals on February 4, 2009 and developed the attached list of proposals that will be considered for consolidated into a single Investment Justification consistent with Minnesota's SCIP.

At the February 17, 2009 meeting of the Interoperability Committee, each of the regions submitting proposals will be asked to present their proposals and answer questions about their proposals according to the following schedule:

1:00 p.m.	HSEM Region One
1:15 p.m.	HSEM Region Two
1:30 p.m.	HSEM Region Three
1:45 p.m.	HSEM Region Four
2:00 p.m.	HSEM Region Five
2:15 p.m.	HSEM Region Six
2:30 p.m.	Border County Proposal
2:45 p.m.	Metropolitan Emergency Services Board
3:00 p.m.	DECN Proposals- Consolidated RRB proposals

Following the presentation of proposals, the Interoperability Committee will be asked to approve the recommendation of the Grant Workgroup. Regions may ask the Interoperability Committee to reconsider the elimination of any proposals.

Part Two

Part two of this process will be to determine how the $5,821,425 should be allocated among the various proposals. In this process, there is no assumption any of the proposal will receive funds and the Grant Workgroup will be looking for some direction from the Interoperability Committee on February 17, 2009 following the regional presentations of their proposals.

Discussion of this issue should be anticipated at the next two meetings of the Interoperability Committee, as follows:

March 17, 2009	Committee review and comments
April 21, 2009	Final recommendation to SRB

Final approval of an allocations will be presented to the SRB on April 23, 2009.

Emergency Communication Networks
444 Cedar Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.282.6565 • Fax: 651.296.2665 • TTY: 651.282.6555

Alcohol and Gambling Enforcement

ARMER/911 Program

Bureau of Criminal Apprehension

Driver and Vehicle Services

Homeland Security and Emergency Management

Minnesota State Patrol

Office of Communications

Office of Justice Programs

Office of Traffic Safety

State Fire Marshal and Pipeline Safety

MEMO

To: **Public Safety Response Agencies, including**
Regional Radio Board/Regional Advisory Committee
HSEM Regional Committees- Regions 1,2,3,4,5 and 6
Border Counties

From: Tom Johnson/Ron Whitehead, ECN
2009 Interoperable Communications Investment Coordinators

Statewide Radio Board, Interoperability Committee
Grant Workgroup

Date: December 27, 2009

Subject: 2009 State Homeland Security Grant Program (SHSP)
Interoperable Communications (IC) Investments

As part of the 2009 Department of Homeland Security (DHS) grant process, we are required to coordinate all Interoperable Communications (IC) proposals with the State Interoperable Communication Plan (SCIP) and to consolidate those proposals into a single investment. Tom Johnson, the State Interoperable Public Safety Communication Program Manager, and Ron Whitehead who works with the Division of Emergency Communication Networks will be developing the 2009 SHSP IC Investment Justification.

The Division of Homeland Security and Emergency Management, as State Administrative Agency (SAA) has indicated that the 2009 SHSP process should build upon investments developed over the preceding few years. The focus of these investments has been upon establishing interoperable communications "capabilities" essential to Minnesota's preparedness efforts.

<u>2009 SHSP Grant Process Timeline</u>

The following timelines are necessary to assure timely submission of the 2009 SHSP grant application:

Due Date	Required Action
Feb. 2, 2009	Submission of IC proposals to DECN
Feb. 10, 2009	Review of IC proposals by SRB- Interop Committee, Grant Workgroup

Feb. 13, 2009	Completed IC Investment Justification (IJ) must be submitted to HSEM
Feb. 18, 2009	Proposed IJ presented and reviewed by the SRB- Interoperability Committee
Feb. 23-27, 2009	All IJ reviewed by the HSEM Strategic Allocation Committee
Feb. 27, 2009	SRB review and final approval of IC IJ
March 10, 2009	All IJ's submitted to Homeland Security Advisory Council (HSAC) for approval.
March 20, 2009	2009 grant application (All IJ) must be submitted to DHS

2009 SHSP Funding

Minnesota continues to make a significant commitment to IC from DHS grant programs. The following amount has been allocated to IC from the state's total SHSP allocation of $11,647,000:

Interoperable Communications $5,821,425

The IC IJ will not exceed this amount and based upon standard practices, it should be assume that allowance must be made for Management and Administrative (M&A) costs of 3%, which will reduce the amount available for projects by $174,643.

Interoperable Communication Background

The following summary documents provided you with some the necessary background to coordinate your proposals with Minnesota's SCIP, the Public Safety Interoperable Communications (PSIC) grant and with the 2007 & 2008 SHSP grant investments:

Exhibit	Description
A	Minnesota SCIP- Goals and Objectives[1]
B	Summary of PSIC Grant Investments
C	Summary of 2007 SHSP IC Investments
D	Summary of 2008 SHSP IC Investments
E	Review of IC Initiatives (ARMER & Interoperable Communications)

[1] Minnesota's State Communications Interoperability Plan was completed and submitted to the Department of Homeland Security on December 3, 2007. It has been approved by DHS in May of 2008. A complete copy of Minnesota's SCIP is available at the Statewide Radio Board website at www.srb.state.mn.us under SRB Documents.

5 Strategy

Minnesota has developed a clear strategy for achieving its public safety communications interoperability vision. It combines broadly inclusive, bottom-up, user-driven local and regional governance (local planning and regional radio boards/committees) coordinated and overseen by the Statewide Radio Board which has been designated as the Statewide Interoperability Executive Committee and supported by the Department of Public Safety's Statewide Communications Interoperability Program and HSEM and technical options including the ARMER backbone for establishing a system of systems that supports operational interoperability through interoperable communications. The third leg of this strategy is the development and implementation of TIC plans that include training, exercises and regular application of the interoperable elements of public safety communications to ensure optimal, NIMS/NRP compliant response during crisis events.

It is based on governance and technology methods that have been tested and proven at the local and regional levels and are scalable to the state and interstate level.

While voice interoperability is the first priority, technology designs are being built with data in mind and data interoperability solutions will be incorporated as federal strategies and initiatives are clarified.

The following describes this strategy in detail.

The goals and objectives for the SCIP directly support achievement of the mission and vision for communications interoperability in Minnesota and address the gaps identified between the current situation and that vision.

Collectively achievement of these goals results in completion of the mission. Each goal is supported by corresponding outcome-based and time-sensitive objectives. Specific accomplishments established for the goals and objectives include:

- Regional radio boards operating across the State to ensure effective local governance structures that can achieve the interoperability objectives, goals and mission
- Documentation of the technical, cost and operational options for each county/local entity enabling them to make informed business decisions as to how their county, its political subdivisions, tribal governments and non-governmental organizations are going to move forward to achieve interoperability solutions within and outside their areas of jurisdiction or responsibility
- The technical design and construction of the ARMER system statewide are complete and agreed upon
- The highest levels of each element of the interoperability continuum are achieved and continuously exercised with the communications resources available within a county or region
- The ARMER system is complete and interoperability gateways for legacy systems are in place, operational and part of daily usage, training, exercises and standard operating procedures and common language

VISION

All agencies supporting public safety in the State of Minnesota (local, regional, tribal and non-governmental, military and federal) will have routine access to a voice and data communication infrastructure (system of systems) and participate in a governance structure supporting that infrastructure that is able to provide seamless communication interoperability between jurisdictions and across public safety disciplines necessary to support day to day operations, regional operations, statewide operations and across state and national borders, when necessary, and that is capable of supporting National Incident Management System.

MISSION

To provide a communication backbone throughout the State of Minnesota that supports a system of systems and the appropriate organizational and governance structure needed to achieve the highest level of interoperability between all agencies supporting public safety in Minnesota through the sharing of resources, the integration and coordination of local systems where appropriate and through routine planning, training and usage of all communication resources within the State.

STRATEGIC INITIATIVES

Strategic Initiative One

Fund and construct the backbone for a 700/800 MHz scalable statewide shared public safety communication backbone that can support present and future needs of state and local public safety communication within the State of Minnesota.

Strategic Initiative Two

Leverage state, federal and local funding opportunities to encourage the greatest degree of participation by local units of governments, tribal governments and non-governmental public safety entities in the shared public safety communication backbone.

Strategic Initiative Three

Develop a collaborative governance structure that supports the partnerships, shared planning and resources for public safety and public service communication needs among all entities supporting public safety in the State of Minnesota and provide for regional differences and autonomy, wherever possible.

Strategic Initiative Four

Identify and implement comprehensive public safety communication interoperability strategies and solutions that strike an appropriate balance between the present and future needs to address all levels of interoperability (local operability, regional interoperability and statewide interoperability) with all public safety responders (including tribal and non-governmental, military, federal and neighboring states/Canada), including public safety entities that do not elect to participate in the State's core strategy.

Strategic Initiative Five

Maintain and further develop high-level elected official support (state and local) for interoperable communications and its expanding role in the public safety response to routine activities, regional incidents and major statewide incidents.

Strategic Initiative Six

Identify opportunities to leverage resources and seek more efficient ways to deliver public safety services through the use of advanced technologies; improved spectrum efficiency and seamless interoperability (look at the public safety communication network more broadly).

GOALS

1. Complete the construction of the shared public safety communication system (ARMER).

Objectives:

- Complete preliminary design (finalize tower sites and backbone coverage) for the ARMER backbone by December 31, 2007.
- Complete the detailed design and backbone cost evaluation by April 30, 2008.
- Develop detailed implementation plan and timeline for the ARMER backbone by May 1, 2008.
- Substantially complete (95% of base radio sites operational) the construction of the ARMER backbone by December 31, 2012.
- Develop a preliminary plan for VHF and/or UHF interoperability for the ARMER backbone by December 31, 2008 (Integrates with broader interoperability initiatives Goal #4).
- Develop and document potential alternatives to integrate interoperable data into the ARMER backbone as part of the core RF infrastructure or as a separate system by December 31, 2008 (Integrates with a broader data interoperability initiative Goal #4).

2. Support the planning and integration of local units of governments, tribal governments and non-governmental public safety entities onto the shared public safety communication backbone.

- Engage consultants necessary to begin regionally based local enhancement studies and begin the process of conducting local studies and evaluations by December 31, 2008.
- Complete local enhancement studies by December 31, 2008 (note: vendors will assist in collecting baseline capability and resources for TIC plans as part of this process).
- Determine the extent to which existing funding streams might be utilized to fund a portion of local infrastructure enhancements by March 31, 20078
- Determine the cost and potential funding sources to provide subscriber radios (portable and mobile radios) for public safety responders throughout the State by December 31, 2008.
- Develop a comprehensive plan to articulate how DHS grant funds, PSIC grant funds and other potential funding sources will be leveraged to encourage the

acquisition of subscriber units for first responders by December 31, 2008 (Note: At least one PSIC investment justification will address this issue)

3. **Develop regional public safety interoperable communication governance structures that provide the opportunity for appropriate and timely input from all agencies supporting public safety in Minnesota (including tribal governments and non-governmental agencies) into the integration and coordination of resources, standard operating procedures and all TIC plan development, planning, exercising and evaluation.**

   Objectives:

   - Establish regional interoperable communication governance structures provided for in Minn. Stat. §403.39 & 403.40 (Regional advisory committees or regional radio boards) across the State by December 31, 2008.
   - Engage regional radio governance structures and emergency management personnel in regional TIC plan development, training and exercising by June 30, 2008.
   - Develop templates for regionally based SOPs for the use of interoperability resources within each region including shared channels, shared systems, gateways and swap radios by December 31, 2008.
   - Provide initial and for ongoing communication unit leader training programs for selected regional representatives by December 31, 2008.
   - Conduct at least one regional tactical interoperable communication exercise in each regional and provide for formal evaluation of the exercise by June 30, 2009.
   - Establish the Statewide Radio Board as Minnesota's Statewide Interoperability Executive Committee and fully integrate an interoperability committee that represents all disciplines and regions (including tribal and non-governmental agencies) of the State to broadly address public safety communications interoperation procedures and resources in all spectrums by December 31, 2007.

4. **Complete a blended (regionally based) statewide tactical interoperable communication "TIC" plan for the State of Minnesota.**

   Objectives:

   - To collect communication infrastructure information from all local and county agencies supporting public safety in Minnesota needed as part of the TIC plan development and enter that information into the CASM tool by December 31, 2008.
   - Develop preliminary TIC plans for each region of the State (HSEM regions or other appropriate regions as regional radio boards are developed) by December 31, 2008.
   - Coordinate and blend regional TIC plans into a broader statewide strategy and where possible, factor in approaches of bordering states and countries by June 30, 2009.

- Identify resources to integrate and maintain communication interoperability planning and to coordinate training and exercises with the Division of Homeland Security and Emergency Management broader emergency operations planning responsibilities throughout the State by December 31, 2008.

5. **Develop a plan to provide the highest practical level of interoperability between the ARMER backbone and independent public safety communication systems, between other existing public safety communication systems within the State (local, regional, state, tribal, military and federal) and with appropriate public safety agencies bordering states and countries.**

   Objectives:

   - Fully staff the Statewide Public Safety Interoperability Program within the department of public safety, ARMER/911 division (Administrator and up to three regional coordinators) by January 31, 2008.
   - Establish routine contact with key interoperable communication networks in bordering states and countries and thoroughly document interoperable communication strategies and resources from those bordering states and country by March 31, 2008.
   - Establish routine contact and maintain a dialog with regional and national efforts to coordinate public safety interoperable communications and report the status of interoperable communications regionally and nationally to the appropriate agencies and organizations by June 30, 2008.
   - Investigate, develop and test specific technical and operational plans on how existing VHF and UHF interoperable resources might be organized and integrated into public safety communication systems (ARMER and independent systems) by December 31, 2009.
   - Articulate a set of standards and criteria for new communication equipment and systems (P25, narrowband, digital or analog) that support the highest level of interoperability and determine the extent to which those standards should be applied to PSIC funding, DHS funding and other federal and state funding sources by March 31, 2008.
   - Develop specific plans identifying how deployable resources (transportable trunked systems, portable repeaters, mobile gateways, satellite communications and other deployable technologies) might be integrated into Minnesota's public safety communication network to provide enhanced interoperability by December 31, 2008.
   - Develop a plan for the implementation and maintenance of a strategic technology reserve (STR) to pre-position or secure interoperable communications equipment in advance for immediate deployment in an emergency situation or major disaster by June 30, 2008. (Note: At least one PSIC investment justification will address this issue.)

- Broadly engage the public safety community in the formulation of a plan to adopt and implement public safety communication protocols, such as “plain language” and “standardized naming conventions” by December 31, 2008.

6. **Investigate and determine the most appropriate way to address the expanding need for interoperable wireless data between all agencies supporting public safety.**

   Objectives:

   - Investigate and document the current status of public safety data interoperability by June 30, 2008, including the following issues:
     - Status of the adoption of a national protocol for wireless data communications.
     - Status of any FCC Docket related to a national public safety data network (FCC Docket# 96-86 related to 700 MHz spectrum) and the implications upon local system development.
     - Current status of wireless public safety data communications in Minnesota.

   - Investigate and document how expanded interoperable data (access to databases and information) will enhance and support public safety operations and interoperability by June 30, 2008.

Public Safety Interoperable Communications (PSIC) Grant
Summary of Investment Justifications

Investment Justification #1

Title: Strategic Technology Reserve- State Component

Funds	Planning Funds	$150,000.00
	Equipment	$318,200.00
	Matching Funds (Equipment)	$79,550.00

The Statewide Radio Board will fund the match requirement.

Description:

This investment provides an element of the Strategic Technology Reserve that will be maintained by the State. It builds upon existing deployable interoperability capabilities and provides additional resources directed toward catastrophic communication failures.

This proposed investment in combination with Investment #2 will provide funding for Minnesota to develop the following capabilities:
• Develop regional deployable communications capabilities using deployable VHF repeaters, towers, generators and appropriate radio cache (note: will require coordination of VHF frequencies).
• Expand upon the capability of a deployable statewide communication capability to establish an independent 700/800 MHz trunked communication capability (deployable intelli-repeater).
• Develop or expand upon existing resources to provide a deployable satellite communication capability.
• Develop standard operating procedures and agreements for the activation and deployment of these resources.

Investment Justification #2

Title: Strategic Technology Reserve- Local Component

Funds:	Equipment	$636,377.00
	Matching Funds (Equipment)	$159,094.25

The Statewide Radio Board will fund the match requirement.

Description:

See Investment Justification #1, as this investment is the coordinated local component of the Strategic Technology Reserve.

Investment Justification #3

Title: Radio Control Stations- ARMER System to provide cross spectrum interoperability to all PSAP's & EOC's (75 non-metro counties of the state)

Funds:	Equipment	$1,400,000.00
	Matching Funds (Equipment)	$350,000.00

The Statewide Radio Board will fund the match requirement.

Description:

Minnesota is in the process of completing the statewide implementation of a standards based shared infrastructure operating in the 700/800 MHz spectrum. That infrastructure is capable of supporting local needs. However, it is anticipated that local integration on to the shared system will take many years to occur as local governments continue to utilize their existing systems throughout their useful life with some local entities electing to update their conventional systems based upon local needs. Conventional VHF communication systems dominate the public safety communications environment at the present time throughout Minnesota.

This investment provides the basic level of interoperability between existing public safety communication systems operating conventional VHF and UHF systems, as follows:
• It allows Public Safety Answering Points (PSAP's) or Emergency Operation Centers (EOC) to monitor a predetermined talk group assigned to them and regional or statewide interoperability talk groups.
• Radio control station can be linked to dispatch consoles providing a selectable gateway between any conventional public safety communication systems monitored at the location that can be selectively linked into talkgroups.
This investment would place two radio control stations in every PSAP (local and tribal) in the state and would place at least one radio control station (or other fixed mobile units) in EOC thus assuring each county and tribal government has a basic ability to communication through the statewide backbone. Note: State agency PSAP's and EOC's are addressed in Investment #9.

Investment Justification #4

Title: Local/County/Regional comprehensive public safety communication assessment (Current infrastructure, alternative solutions and alternative selection-55 counties of the state)

Funds:	Planning	$1,200,000.00

Description:

This investment provides for a thorough assessment of the current status of the infrastructure to the lowest level in each region of the state and for all public safety providers, including non-governmental and tribal governments within each particular region. The assessment will be followed by an evaluation of potential solutions to equipment obsolescence. It will engage elected officials in the discussion of communications and provide them with the information they need. The basic planning level will be at the county level, which would include all municipalities and public safety entities operating in the county, but will be coordinated by regional advisory committees or regional radio boards to foster a broader discussion and resolution of the regional interoperability issues. Solutions include analog and digital VHF systems and integration onto the shared statewide backbone. Similarly, solution to regional interoperability issues are directly tied to the solutions selected by local officials. The objective is to engage all stakeholders in the broad discussion of public safety communication, to provide local officials with the information they need to make sound decisions related to renewing communication infrastructure, support regional planning for the best approaches to maximize public safety interoperability and to provide the Statewide Radio Board with a comprehensive assessment of the communication interoperability throughout the state.

Investment Justification #5

Title: VHF/UHF Interoperability- ARMER Backbone (78 Counties- effecting all Public Safety services and tribal governments in those counties)

Funds	Planning	$300,000.00
	Equipment	$3,000,000.00
	Matching Funds (Equipment)	$750,000.00

Description:

This investment addresses the need to design VHF and/or UHF interoperability into the ARMER platform (Minnesota's 700/800 MHz trunked communication system) and to utilize the backbone of the ARMER system as the "system of systems" to coordinate VHF and/or UHF interoperability among all public safety entities in the state. Its primary focus is to assure that both legacy and newer standards based system users operating in the VHF or UHF spectrum are always able to talk into the system, be linked into a talk group (via hard patch or soft patch) and thusly maintain at least a minimum acceptable level of cross spectrum interoperability between systems.

The statewide implementation of the ARMER project by the 2007 legislature provided the opportunity to utilize the backbone of the ARMER system to enhance interoperability. Although the ARMER backbone will be capable of supporting local needs, virtually all public safety entities operating in the 78 effected counties currently operate conventional VHF systems and will continue to do so for many years.

Investment Justification #6

Title: Planning and Training for Equipment and Communications Interoperability- State Component to develop statewide curricula and learning objectives

Funds:	Planning	$330,000.00
	Training	$200,000.00

Description:

This investment addresses the need to aggressively address communication training for broad range of equipment and public safety personnel and elected officials throughout the state. As the state continues to make a substantial investment in communication infrastructure, the need for training upon equipment use, standard operating procedures and incident management principles must be addressed. As the SCIP was developed, the lack of basic education and training upon all aspects of communication and interoperability (basic radio principles, equipment based training and interoperable procedures and standards) was identified as a substantial gap in the process.

Through this investment, the department of public safety (DPS) will take the lead to develop training curricula and learning objectives. The process would require broad involvement of stakeholders in assessing the training needs and would be coordinated with the assessment of equipment and capabilities provided for in other investment to make sure equipment capabilities and attributes are incorporated into the training. Equipment based and procedural based resources, such as radio caches, shared channel use, gateways and the interoperability accessible in the ARMER backbone would be incorporated into the training. The SRB Interoperability Committee (broadly representing all regions, disciplines, tribal governments and federal agencies) would be an essential stakeholder in this process. However, it would also require substantial engagement with the various regional advisory committees and regional radio boards within the state. DPS would contract with a vendor to develop a core group of instructional courses that will address the gap. The qualifications and certification of trainers, who will generally be recruited from the public safety community, would also be addressed. Of particular import is the need to provide Communication Leader training throughout the state (DHS standards and requirements already exist) and the necessity to provide equipment related training for interoperable equipment, such as ACU-1000 and other gateway devices.

Investment Justification #7

Title: Training for Equipment and Communications Interoperability- Local component to fund regional costs of training

Funds:	Training	$600,000.00

Description:

See description of Investment Justification #6.

Investment Justification #8

Title: Subscriber Equipment- Statewide Shared Infrastructure-Local Component (Throughout state- local governments, tribal governments and non-governmental public safety entities)

Funds:	Equipment	$4,500,000.00
	Matching Funds (Equipment)	$1,125,000.00

Description:

This investment is specifically directed at getting subscriber units (portable and mobile radios and radio control stations) into the hands of public safety personnel giving them access to the statewide standards based shared infrastructure. It addresses a specific gap identified in Minnesota's SCIP and specific goals and objectives in that plan. This investment provides funding at the local level for subscriber radios which will include all potential ARMER backbone participants (statewide coverage) including local governments, tribal governments and non-governmental public safety entities.

This investment addresses the gap between implementing the backbone, which has been funded by the legislature, and subscriber equipment needed by local users and state agencies (Investment# 9) to communicate upon the system.

Investment Justification #9

Title: Subscriber Equipment- Statewide Shared Infrastructure-State Component (Throughout state- State agencies and other partners)

Funds:	Equipment	$1,050,000.00
	Matching Funds (Equipment)	$262,500.00

Description:

This investment is specifically directed at getting subscriber units (portable and mobile radios and radio control stations) in the hands of state agency public safety personnel giving them access to the statewide standards based shared infrastructure. This investment includes radio control stations for state operated PSAP', (10 Minnesota State Patrol PSAP's) and various state agency Emergency Operation Centers where deemed appropriate. It addresses a specific gap identified in Minnesota's SCIP and specific goals and objectives in that plan. This investment provides funding at the state agency level for subscriber radios which will include all potential ARMER backbone participants (statewide coverage) including but not limited to state agencies and units, such as the departments of health, human services, corrections and Metropolitan Council, which operates the Metropolitan Transit System.

Review of Interoperable Communication Priorities- 2007 DHS Grant Process

The following interoperable communication priorities were established in the 2007 DHS process:

1. Local and Regional Public Safety Communication Interoperability Planning

2. Enhanced I.P. based connectivity between Public Safety Answering Points and Emergency Operation Centers and other critical infrastructure

3. Development of regional and statewide VHF interoperability resources

4. Communication equipment (local infrastructure)

5. Interoperable communication equipment (portables/mobiles)

6. Interoperability planning, training and exercising

It is noted that much of this work was incorporated into the State Communication Interoperability Plan (SCIP). More specifically, the following items were specifically incorporated into the 2007 DHS Investment Justifications:

Investment Justification #1 - 2007 DHS Grant

This Investment Justification was the general Interoperable Communication Investment Justification.

1. Develop regional Tactical Interoperable Communication Plans (TICP) and consolidation of those regional TICP into a statewide plan.
2. Develop common VHF interoperability resources.
3. Partial funding of VHF (digital) and ARMER compatible 700/800 MHz equipment.

Investment Justification #2 – 2007 DHS Grant

This Investment Justification was derived from a regional proposal, where each of the regions had presented proposals related to communications equipment.

1. Comprehensive communication needs assessment (local planning funds).
2. Interoperable communication planning, education and outreach.
3. Partial funding of VHF (digital) and ARMER compatible 700/800 MHz equipment

Investment Justification #6- 2007 DHS Grant

This Investment Justification was presented by the Northern Border Counties related to Interoperable Communications.

1. Enhancement of current VHF interoperability capabilities.
2. Interoperable data communications build out.
3. Enhanced Internet Protocol I.P. capability between PSAP's along the border.

2007 DHS Grant Allocation

The following table demonstrates how the 2007 DHS grant funds assigned to Interoperable Communication were allocated:

Statewide Interoperable Communications Investment- IJ #1

HSEM Region	Planning	Equipment	Training	Exercise	Total
Region One	$60,000	$183,904	$20,000	$20,000	$283,904
Region Two	$60,000	$126,434	$20,000	$20,000	$226,434
Region Three	$60,000	$232,916	$20,000	$20,000	$332,916
Region Four	$60,000	$206,892	$20,000	$20,000	$306,892
Region Five	$60,000	$206,892	$20,000	$20,000	$306,892
Region Six		$114,000			$114,962

Total Investment: $1,572,000

Urban Area Security Initiative (UASI) Funding

HSEM Region	Planning	Equipment	Training	Exercise	Total
Region 6- MESB	$140,000		$20,000	$20,000	$180,000

Portion of UASI Allocation: $180,000

Local and Regional Public Safety Communication Infrastructure Planning- IJ #2

HSEM Region	Planning	Equipment	Training	Exercise	Total
Region One	$100,000	$294,500			$394,500
Region Two	$100,000	$194,500			$294,500
Region Three	$100,000	$254,500			$354,500
Region Four	$100,000	$343,500			$434,500
Region Five	$100,000	$343,500			$434,500

Total Investment: $1,912,500

Northern Border Interoperable Communications- IJ #6

HSEM Region	Planning	Equipment	Training	Exercise	Total
Border Region	$60,000	$1,000,000	$20,000	$20,000	$1,100,000

Total Investment: $1,100,000

More specifically, the following discussion will relate the allocation and use of those funds to the 2007 DHS grant investment justification:

Statewide Interoperable Communications Investment

This investment was designated as Investment #1- Statewide Interoperable Communications. This investment was funded from the LETPP portion of the 2007 DHS. The three elements of that proposed investment were as follows:

- Investment Task 1- Tactical Interoperability Planning
- Investment Task 2- Development of VHF Interoperability Resources
- Investment Task 3- Local Communication Infrastructure

$4,697,000 was requested with a funding plan allocated to the following categories: Planning: $800,000; Equipment: $3,000,000; Training: $500,000; Exercises: $337,000; M&A: $60,000. Only $1,572,000 was allocated to this investment. As there was only partial funding of this proposed investment, there were no funds allocated to Investment Task 2.

The following additional adjustments are reflected in the **Urban Area Security Initiative (UASI) Funding and the Northern Border Interoperable Communications**:

- Investment Task 1, Tactical Interoperability Planning, for the metropolitan region was funded with UASI funds allocated to the state, with the approval of the UASI committee/board. Those funds were to be allocated to the Metropolitan Emergency Services Board (MESB) for continued development of the metropolitan TIC-P.

- $100,000 in funding was specifically allocated to the border counties to address Investment Task 1, Tactical Interoperability Planning. This allocated was made to address the unique challenges of interoperability along the United States/Canadian border.

Local and Regional Public Safety Communication Infrastructure Planning

This investment was designated as Investment #2- Local and Regional Public Safety Communication Infrastructure Planning. This investment was funded from the SHSP

portion of the 2007 DHS. As noted, this investment was developed as a consolidation of five distinct regional proposals (Region 6 metropolitan area was not included). The three elements of that proposed investment were as follows:

- Investment Task 1- Assessing local communication capabilities and needs; planning
- Investment Task 2- Interoperable Communication Planning, Education and Outreach
- Investment Task 3- Local Communication Equipment acquisition (portables, mobiles, control stations, dispatch console, etc.)

$5,838,050 was requested with a funding plan allocated to the following categories: Planning: $2,394,000; Equipment: $3,444,050. Only $1,912,500 was allocated to this investment. $100,000 of each regions allocation was subsequently directed to Investment Task 1 & 2 with the remaining funds allocated to Investment Task 3.

Exhibit D

Review of Interoperable Communication Priorities- 2008 DHS Grant Process

Refer to Minnesota SCIP for Interoperable Communication Priorities. The SCIP was submitted to DHS on December 3, 2007 as Minnesota's comprehensive Interoperable Communication Strategy.

2008 DHS Grant

Investment Justification #2, Statewide Interoperable Communications

1. Tactical Interoperable Communication Planning (including exercise development)- This portion of the proposal was designed to provide funding for the continued development of regional Tactical Interoperable Communication plans and for tactical interoperable communication exercise planning. Amount requested: $600,000 planning; $250,000 exercise.

Note: Funds were not subsequently allocated to this portion of the investment because the 2007 allocation to this purpose had not yet been expended.

2. VHF/UHF Interoperability Infrastructure for the ARMER Backbone- This portion of the proposal was designed to continue the implementation the VHF/UHF interoperability network in conjunction with the ARMER backbone implementation. The basic concept is to provide a layer of VHF and possibly UHF interoperability throughout the ARMER backbone, to coordinate that layer of communication throughout the state and with neighboring states and federal agencies. Amount Requested: $3,000,000 equipment

Note: With respect to this portion of the investment, we anticipate the formulation of comprehensive strategy for this VHF/UHF interoperability layer over the next nine months. It will be coordinated with the current local and regional planning, VHF/UHF frequency planning underway in the SRB- Interoperability Committee, Interoperability Workgroup and among the regional radio boards.

3. Mobile/Portable Radios for Cross Spectrum Interoperability- This portion of the proposal is focused upon addressing those unique interoperability situations where public safety entities (law enforcement, fire, emergency medical services and others) operate in a service area between VHF and 800 MHz systems. The proposal was designed to address circumstances where the only practical way to address these cross spectrum situations in the public safety agencies service area will be to maintain two separate radios.

Funding/Approval

2008 DHS Grant- $13,161,494 was allocated to Minnesota under the State Homeland Security Program. Of that amount, the following sums were allocated to Interoperable Communications:

Regional Radio Boards	$3,000,000.00
HSEM Region 1	$500,000.00
HSEM Region 2	$500,000.00
HSEM Region 3	$500,000.00
HSEM Region 4	$500,000.00
HSEM Region 5	$500,000.00
Northern Border Counties	$1,000,000.00

2008 DHS Grant/Regional Radio Boards $3 million

Funds must be applied consistent with the investment justification. Of those proposed investments, funds were allocated to each proposed investment and among the regional radio boards, as follows:

1. Mobile/Portable Radios for Cross Spectrum Interoperability
   Amount: $1,000,000.00

The funds should be allocated among the regional radio boards consistent with the formula used to allocate portable and mobile radios provided in the Public Safety Interoperable Communication (PSIC) grant. That formula specifies that 1/3 of the funds will be allocated to each region based upon the proportion of the states population within the region and 2/3 of the funds will be allocated to each region based upon the number of counties in the region. Based upon that formula funds would be allocated as follows:

Northwest Region	$86,958.00
Northeast Region	$102,564.00
Central Region	$157,418.00
Southwest Region	$72,996.00
South Central Region	$73,235.00
Southeast Region	$104,497.00
MESB	$402,332.00
Total	$1,000,000.00

It should be noted that the investment justification is directed at unique cross spectrum interoperability situations where the public safety agency (local government, tribal government or tribal government) operates in a cross spectrum environment. To implement this intent, final recipients will not be able to use the funds to acquire mobile or portable radios for their basic communication systems. They will be able to use the funds to acquire cross spectrum radios (VHF user to acquire ARMER radios or ARMER users to acquire VHF radios) or VHF/700/800 multi-band radios.

2. VHF/UHF Interoperability Infrastructure for the ARMER Backbone
   Amount: $2,000,000.00

The funds were allocated to regions within the Phase Three development area based upon the number of ARMER system towers within each region. This investment is focused upon developing the VHF interoperability infrastructure, including consideration of RF and VoIP networking, within this Phase Three region as the portion of the network is implemented. Based upon this approach the funds were allocated as follows:

Region	Towers	Amount
Northeast MN	11	$282.051.00
Central MN	31	$794,872.00
Southeast MN	36	$923,077.00

It is noted that the Interoperability Committee- Interoperability Workgroup is currently working upon defining this VHF interoperability infrastructure. It is anticipated that a comprehensive plan for VHF interoperability infrastructure will be developed by June 30, 2009. The fact that we are focusing upon Phase Three in this recommendation clearly requires that future DHS funds allocated to Interoperable Communications for this purpose will be give a similar priority to the other regions as the ARMER implementations proceed (Northwest, Southwest, South Central and remaining portions of Northeast will be give a similar priority in the future). Similarly, it is anticipated that the regions will coordinate the implementation of this VHF interoperability infrastructure with the comprehensive plan, with the SRB and with MnDOT.

Division of Emergency Communication Networks
Interoperable Communication Initiatives
Exhibit E

The following initiatives are being pursued by the Division of Emergency Communication Networks.

ARMER Project

1. Phase Three- Implementation of the ARMER backbone in Phase Three (Central and Southeastern MN) was funded in 2005 and will be completed in the second quarter of 2009.
2. Phase Four, Five and Six- Implementation of the ARMER backbone in the remain 55 counties of the state was funded in 2007 and is proceeding as follows:
   - Detail design work providing 95% mobile coverage in each county has been completed (see attached site map).
   - Implementation in remaining regions of the state (Phases 4,5 & 6) has been initiated with substantial completion planned for the end of 2012.
   - Initial statewide coverage will be established upon existing towers (75% mobile coverage) in 2010.

VHF/UHF Interoperability Planning

1. Statewide Radio Board (SRB) has established an Interoperability Committee (SRB-IC) with broad local, regional, state and federal representation.
2. SRB-IC recommends procedures dealing with traditional VHF interoperability frequencies (MINSEF, Statewide Fire Mutual Aid, EMS-HEARS & MIMS).
3. ARMER VHF/UHF Interoperability Infrastructure
   - Developing a VHF/UHF interoperability frequency plan- Contractor hired to provide frequency planning and coordination, including coordination with neighboring states and Canada. (Funding: 2007 DHS Grants)
   - Developing a VHF/UHF interoperability infrastructure plan- Contractor hired to develop technical solutions and present them to regions and to the Statewide Radio Board. (Funding: PSIC)
4. Developing interoperable communication training (Funding: PSIC)
5. ARMER Radio Control stations to be placed in PSAP's and EOC's to provide cross spectrum interoperability with legacy communication systems- DPS to hire contractor to acquire and install radio control stations (Funding: PSIC)

Local Communication Planning

1. Regional Radio Boards (RRB) established in all regions of the state.
2. Local assessment completed in central MN and portions of NE & SE MN. (Funding: 2005/2006 DHS Grants)
3. Local assessment underway in remaining 46 counties of state- Contractor hired to conduct local assessments; Federal Engineering (Funding: ARMER & PSIC Funds)
4. Tactical Interoperable Communication Plan- CASM database information required as part of regional TICP is being collected as part of local assessments.

Tactical Interoperability Planning

1. Twin City UASI TICP developed.
2. UASI TICP exercise conducted and evaluated.
3. UASI TICP expanded to include entire metropolitan area.
4. Regional TICP Communication Asset Survey & Management (CASM) information is being collected as part of local assessments.
5. Technical assistance will be provided for development of regional TICP.
6. Funding made available for TICP development and exercise development (Funding: 2007 DHS Grants, $100,000 per HSEM region)

Other Initiatives- PSIC Funds

1. Strategic Technology Reserve (STR)- As part of the PSIC grant, we were required to fund the development of a STR capable of providing communication resources in case of catastrophic failure of public safety communications. Current Status:
   - Establishing an STR governance committee under the SRB-IC.
   - Retain technical consultant to assess existing equipment, assess any gaps and develop technical requirements.
   - Acquire STR equipment and establish STR procedures.
2. Local & Regional Assessments- See local planning above.
3. Radio Control Stations for PSAP's and EOC's- See VHF/UHF Interoperability Planning
4. Interoperability Training- Funding will provide for the development and conduct of equipment based interoperability training. Current Status:
   - Contractor engaged as a program manager to develop training curriculum.
   - Begin coordinating the provision of Communication Leader (COM-L) training within the state.
   - Portion of training funds made available to Regional Radio Boards
5. Funding of ARMER portables and mobiles- Funds allocated to Regional Radio Boards.

Other Imitative- ARMER Program

1. State Agency Assessment- A contractor is currently conducting an assessment of the role and need to integrate state agencies (excluding, DPS and MnDOT) into the ARMER system as part of the state's comprehensive disaster response capability.
2. Network Integration- A contractor will be evaluating the potential to leverage I.P. networks (ARMER backbone and MNET land line network) to provide greater redundancy and reliability for public safety networks, including the 911 network.
3. Wireless Data- A contractor will be hired to assist the SRB in developing a strategy for interoperable public safety data. The process anticipates local participation in the developing the strategy through presentations to Regional Radio Boards.

4. Review of Governance Structure (SRB and RRB)- The Department of Administration, Management Analysis Division is conducting a review of Minnesota's IC governance structure.

FY2009 State Homeland Security Program Grant
Interoperable Communications Proposals

Introduction

The Division of Homeland Security and Emergency Management articulated that the focus of the FY2009 SHSP grants process will be to complete initiatives previously funded in 2007 and 2008. Investment Justifications 12, 13 and 14 were left open for new initiatives.

Based upon that perspective, the following Investments Justifications and funding amounts were specified:

1. **Strengthen Chemical, Biological, Radiological/Nuclear, and Explosive (CBRNE) Detection, Response and Decontamination Capabilities.**

Investment Lead:	Ulie Seal
2009 Target Investment Amount:	$900,000.00

2. **Strengthen Interoperable Communications Systems**

Investment Lead:	Tom Johnson
2009 Target Investment Amount:	$5,821,425.00

3. **Strengthen State Teams**

Investment Lead:	Ulie Seal
2009 Target Investment Amount:	$1,200,000.00

4. **Strengthen Preparedness Planning**

Investment Lead:	Kristi Rollwagen/Regional RPC's
2009 Target Investment Amount:	$1,800,000.00

5. **Strengthen Medical Surge and Mass Prophlaxis**

Investment Lead:	Lucy Angelis
2009 Target Investment Amount:	$800,000.00

6. **MN Metropolitan Medical Response System**

Investment Lead:	Kristi Rollwagen
2009 Target Investment Amount:	$642,442.00

7. **Citizen Corps Program**

Investment Lead:	Dennis Walter
2009 Target Investment Amount:	$257,808.00

8. **Strengthen Agricultural Readiness**

Investment Lead:	Mike Starkey
2009 Target Investment Amount:	$200,000.00

9. **Critical Infrastructure and Key Resources**

Investment Lead:	Gary Lokken
2009 Target Investment Amount:	$500,000.00

10. **Strengthen Information Sharing and Collaboration Capabilities**

Investment Lead:	Mike Bosacker
2009 Target Investment Amount:	$100,000.00
Note: 2009 UASI Target Amount	$1,160,920.00

11. **Common Operating Picture**

Investment Lead:	Kari Goelz
2009 Target Investment Amount:	$500,000.00

12. **Open: Competitive Investment**

Investment Lead:	Kristi Rollwagen
2009 Target Investment Amount:	Not Specified

13. **Open: Competitive Investment**

Investment Lead:	Kristi Rollwagen
2009 Target Investment Amount:	Not Specified

14. **Open: Competitive Investment**

Investment Lead:	Kristi Rollwagen
2009 Target Investment Amount:	Not Specified

FY2009 State Homeland Security Program Grant
Interoperable Communications Proposals

Proposals

HSEM Region One (SE Minnesota)-

Grant Yr & IJ#	Planning	Equipment	Training	Exercise	Total
FY2007 IJ#1	$60,000	$183,904	$20,000	$20,000	$283,904
FY2007 IJ#2	$100,000	$294,500			$394,500
FY2008 IJ#1					$500,000

Project 1 Amount Requested: $1,200,000.00
Project Lead: Captain Terry Waletzki
507-287-7811

Previous Investment Amounts: FY2006 $500,000.00
FY2007 $678,404.00
FY2008 $600,000.00

Project Description: "Funds will continue to build the interoperable communications within the region. As the ARMER backbone system reaches completion in MN, this will allow us to use the 800 MHz radios to enhance communications interoperability. A cache of radios will be built to be used by agencies during a disaster. Additional radios will be purchased and used to supplement first responders within the counties. Gateways and other radio equipment will be purchased to increase interoperability throughout the region."

HSEM Region 2 (NE Minnesota)

Grant Yr & IJ#	Planning	Equipment	Training	Exercise	Total
FY2007 IJ#1	$60,000	$126,434	$20,000	$20,000	$226,904
FY2007 IJ#2	$100,000	$194,500			$294,500
FY2008 IJ#1					$500,000

Project 1 Amount Requested: $937.300.00
Project Lead: Lt. Scott Camps
218-625-3967

Previous Investment Amounts: New Investment Proposal

Project Description: "The Homeland Security and Emergency Management Region 2 include 11 counties and the City of Duluth; of which 4 of those counties also have the added distinction of sharing an international border with Canada. In 2005 these 4 border counties, along with the 3 remaining border counties in Northern Minnesota were allocated grant funds to begin the process of building a secure

interoperable communications microwave link that would not only link these counties but also provide a link into the state system. This first phase allowed for a microwave link from each Public Safety Answering Point (PSAP) into the state communication system. In 2007 these 7 counties received additional grant funds to begin work on the next phase of this project, which would provide the necessary links between each of these PSAP's with a dedicated amount of bandwidth guaranteed. The border counties have worked with the Office of Emergency Communications and MN DOT to obtain the necessary support of this project.

The remaining 7 counties in HSEM Region 2 would like to begin a similar project that would allow connectivity into the state system from each of the PSAP's, and eventually be able to link them together utilizing dedicated bandwidth that would essentially ensure capacity not only for existing voice interoperable communications, but also allow for future developments including video, mobile data systems, record sharing, and Voice Over IP initiatives.

The first phase of this project would be the secure microwave link from each PSAP in the remaining 7 counties to the state system. The cost for this initiative is estimated at approximately $130,000 for each of the 7 PSAP links to the state system, totaling $910,000. In addition, $27,300 for Management and Administration (3%) for this project would be requested. The total requested for phase of the project is $937,300.

The next phase of this project would be the linking of each of the PSAP's together to complete the entire region with a secure, dedicated microwave system that would serve as a model for other regions. This completed link will not only provide interoperable voice communications but will also enable the secure sharing of data including projects already in place. One of these projects is the North Eastern Minnesota Enforcement and Safety Information System (NEMESIS) which includes a six county shared Records Management System, and a shared Computer Aided Dispatch System with four counties."

Referral:

Michael Bosacker-Investment Lead for Strength Information Sharing and Collaboration Capabilities
Kristi Rollwagen-Investment Lead for Competitive Investment 12-14

HSEM Region Three (NW Minnesota)

Grant Yr & IJ#	Planning	Equipment	Training	Exercise	Total
FY2007 IJ#1	$60,000	$232,916	$20,000	$20,000	$332,916
FY2007 IJ#2	$100,000	$254,500			$354,500
FY2008 IJ#1					$500,000

Project 1 Amount Requested: $600,000.00
Project Lead: Mary Hilbrandt/Jennifer Olson

218-634-3356/218-745-6733

Previous Investment Amounts:	FY2006	$500,000.00
	FY2007	$354,500.00
	FY2008	$500,000.00

Project Description: "This regional investment is part of a multi-year dedication to upgrade communication in the 14 county region & represents a continuation of the implementation phase. In addition to ensuring compliance with the state plan, this investment will increase interoperability with response disciplines, emergency management, ND, Canada, MN, US & other private entities & specifically addresses the communications system analysis results from the FY07 HSGP that were not funded by FY08's grant budget. A Grant/Project Coordinator will also be funded.

When completed, this investment will raise the overall average of the communications section in the Regional Capability Assessment Report. Communication was given a 1.47 out of 10 in 2007, denoting very limited progress. It was noted within the report that low score contributing factors includes not receiving adequate local funding to purchase P25 communication equipment or to create, maintain, train for & exercise disaster (communication) plans."

In subsequent discussion of the HSEM Region Three proposal the following investment details were identified:

Equipment $500,000.00

The region has not yet expended funds from the FY2007 or FY2008 grant. They are currently in the process of completing assessments of local needs and anticipate using funds consistent those assessments to address interoperable communication equipment needs. It is noted that in a 2007 preliminary assessment radio consoles were cited as a deficiency and it is likely that radio consoles will require replacement to provide for interoperability. Similarly, additional funds will probably be allocated to interoperable (P25 digital) portables and mobiles to assure the highest level of interoperability. Also noted is funding for Amateur radios, which are currently an essential part of the regions overall communication plan, was a $1,200 upgrade to each of the 14 Emergency Operations Centers for a total cost of $16,800.

Planning $90,000.00

The region indicated this portion of the requested funds will be used to continue funding the communication planning position connected with the

Region Radio Board ($75,000) and to fund tactical interoperable communication exercise evaluations ($10-15,000).

Training and Exercise $10,000.00

The region indicated this portion of the requested funds will be used to continue the development of Tactical Interoperable Communication plans and exercises.

HSEM Region Four (Central Minnesota)

Grant Yr & IJ#	Planning	Equipment	Training	Exercise	Total
FY2007 IJ#1	$60,000	$206,892	$20,000	$20,000	$306,892
FY2007 IJ#2	$100,000	$343,500			$434,500
FY2008 IJ#1					$500,000

Project 1 Amount Requested: $17,807,600.00
Project Lead: Sheriff Tom Larson
320-634-5411

Previous Investment Amounts: FY2006 Not Specified
FY2007 Not Specified
FY2008 Not Specified

Project Description: "Region 4 EM has taken a position of working with the Central Minnesota Regional Radio Board as a partner in Interop radio. Using information from the Studies that were done on behalf the 18 counties in region four by the radio board, Region 4 has determined that subscriber units in the hands of emergency services responders is very important in building this system of systems known as the ARMER System. We are unique in that all 18 counties and one Tribe are serviced by the same RRB with the exception of Sherburne county. Having said such we have a need in Region Four due to the build out of the Phase Three ARMER for radios both mobile and portable. All 18 counties are working on and planning for new interoperable radio systems of one flavor or another to fit into a regional plan. Region Four Emergency Management is funding implementation/participation plans for the CMRRB to help with the process. It has been determined that Region Four is in need of APCO project 25 compliant Portable radios, a count of 2964 is needed in this region with an averaged price applied we are requesting $8,447,400.00 We also have a need in relation to Mobiles radios, we in region 4 have a need for 2753 APCO project 25 compliant models with an averaged price applied we are requesting $9,360,200.00. A total need in region 4 of $17, 837,600.00 for APCO project 25 compliant radios. This amount is what is needed at this point in the planning process to implement interoperable radio in Region 4. Thank You, if you need

further information from me please feel free to contact me. Sincerely Tom Larson Pope County Emergency Manager

HSEM Region Five (SW Minnesota)

Grant Yr & IJ#	Planning	Equipment	Training	Exercise	Total
FY2007 IJ#1	$60,000	$206,892	$20,000	$20,000	$306,892
FY2007 IJ#2	$100,000	$343,500			$434,500
FY2008 IJ#1					$500,000

Project 1 Amount Requested: $270,000.00
Project Lead: Jim Reinert
507-836-6148

Previous Investment Amounts: New Proposal

Project Description: "With this investment, we will purchase 40 All In One (VHF/800) portable radios. Two radios for each county and the two tribes. These radios will be for the Emergency Managers in each of these locations. These radios transmit on both VHF and 800 so they will be able to communicate no matter what there neighbor system may be."

HSEM Region Six (Twin City Metro Region)

Grant Yr & IJ#	Planning	Equipment	Training	Exercise	Total
FY2007 IJ#1		$114,000			$114,000
FY2007 IJ#2					
FY2008 IJ#1					$500,000

Note: In FY2007 Region 6 $140,000 was allocated to the Metropolitan Emergency Services Board from UASI funds to cover the cost of regional TICP development.

Project 1 Amount Requested: $430,000.00
Project Lead: Jennifer Callahan
763-241-4561

Previous Investment Amounts: FY2006 Not Specified
FY2007 Not Specified
FY2008 Not Specified

Project Description:

- "Close the communication gaps between regional first responders.
- Build a robust communication infrastructure through the use of equipment which will allow for the improvement of radio towers, fiber optics, and 800MHz radios.
- Regional training and exercises that will incorporate the TICP.

Planning: $25,000.00
Equipment: $325,000.00
Training: $25,000.00
Exercise: $60,000.00"

In subsequent discussion with the regional contact, we were not able to obtain much additional information. Except to note the regions overall strategy is to bring Isanti and Chisago Counties up to the same standard for the ARMER implementation that exists throughout the remainder of the metro region. The reference to "improvement of radio towers" captures that point, the "fiber optics" reference apparently relates to a fiber optic path Carver County needs between a tower site and a building and any remaining equipment funds would be used to acquire 800 MHz portable and mobile radios. Finally the $85,000 allocated to Training and Exercise would be used to develop a "regional training and exercises that will incorporate the TICP."

Metropolitan Emergency Services Board (MESB- Metro Regional Radio Board)

Project 1 Amount Requested: $1,135.350.00
Project Contact: Jill Rohret, MESB Regional Radio Coord. 651-643-8394

Bearkdown by county subsystems

Dakota County	$343,605.00
Anoka County	$378,450.00
Scott/Carver	$413,295.00

Previous Investment Amounts: New Investment

Project Description: "The Metropolitan Emergency Services Board (MESB) continues to evaluate the need for additional channels on subsystems to the ARMER system. Current system loading is often greater than subsystem owners would like due to itinerant use of subsystems. Itinerant users consume up to 40% of subsystem capacity on a day to day basis. Adding capacity to local subsystems will benefit all users in the metropolitan region.

As evidence by traffic studies done for the I-35W bridge collapse, it is imperative that surge capacity be built into the ARMER system. At present, there is very little surge capacity. Surge capacity is vital during emergency/disaster responses.

During such responses, traffic on the ARMER system greatly exceeds normal peak loading.

MnDOT has established a preliminary listing of sites which need channel additions. Their plan is to utilize frequencies which Nextel has relinquished. These channels will become available in two waves; these waves occur in March 2009 and June 2009. The requested one channel addition to the Dakota County subsystem, the Anoka County subsystem and the Carver/Scott County subsystem is included in MnDOT's plan.

Northern Border Counties

Project 1	Amount Requested:	$875,000.00
	Project Contact:	Lt. Scott Camps St. Louis County 218-625-3967

Previous Investment Amounts:	FY2006	None
	FY2007	$1,500,000.00
	FY2008	$1,000,000.00

Project Description: "The Target Hazard area of the Northern Border includes Cook, Lake, St. Louis, Koochiching, Lake of the Woods, Roseau, and Kittson Counties which share approximately 607 miles of international border with Canada. The population of this area is approximately 253,000 residents, and covers an area of almost 17,000 square miles, or 21% of the state land area.

The project we are proposing for the Northern Border is the completion of our Interoperable Communications Microwave link that was started in 2005. This project has been a multiple phase project beginning with the 2005 Homeland Security funds being allocated to the Target Hazard Northern Border to improve the Interoperable Communications Systems along the international border with Canada. In 2007 the Border region was again funded to begin a phased approach to complete a secure interoperable communications microwave link between the 7 border counties. The first phase was a microwave link from each Public Safety Answering Point in the 7 counties into the State communications system.

The second phase was proposed to complete a dedicated microwave linking of each of these PSAP links that would connect all 7 counties. In 2008 $1 million of the requested $1.9 million was funded, leaving the project short of completion.

The request for 2009 Homeland Security funds of $875,500 will complete the system, providing a secure, dedicated microwave link between all 7 of the border counties in conjunction with the statewide communications system. This amount includes 3% Management and Administrative funds of $25,500 on a project cost

of $850,000. The project cost would purchase equipment and services to complete required links between each Public Safety Answering Point within the border region."

Consolidated Regional Radio Board Proposals- 2007/2008 Initiatives

Project 1	Amount Requested:	$500,000.00
	Project Contact:	Scott Wiggins, Director DPS-DECN 651-201-7546

Previous Investment Amounts:	FY2005	$238,000.00
	FY2006	$400,000.00
	FY2007	$100,000.00
	FY2008	None

Project Description: This portion of the proposal provides funds to counties to complete their detail design work for the implementation of communication system replacements. In FY2006 funds were allocated to Central MN and to SE Minnesota for preliminary county planning. Similarly, Public Safety Interoperable Communication (PSIC) funds and state funds (ARMER detail design funds) have been allocated to complete local assessments in the remaining 46 counties of the state not previously assessed. As the various counties continue to evaluate their alternatives and elect to proceed with the required replacement of their public safety communication systems a follow up details design upon which final funding plans (bonding or cash flow) and implementation plan is required. Funds were allocated in FY2006 and FY2007 for this purpose. However, there is a continuing need to address this requirement.

Project 2	Amount Requested:	$3,000,000.00
	Project Contact:	Scott Wiggins, Director DPS-DECN 651-201-7546

Previous Investment Amounts:	FY2003	$14,284,725.00
	FY2004	$17,533,207.00
	FY2005	$6,062,000.00
	FY2006	$757,000.00
	FY2007	State Funded
	FY2008	State Funded

Project Description: This portion of the proposal provides funds to counties and of local governments to offset the costs for those local units of government to transition to the ARMER system. This proposal is predicated upon the fact that

the ARMER system as a "standards based common communication system" facilitates the highest level of public safety communication interoperability based upon the SAFECOM Interoperability Matrix. DHS funds have been allocated to this purpose in FY2003 through FY2006. Funding was provided by the Minnesota legislature in 2005 for this purpose in the metro area ($8 million) and in a number of counties in the Phase Three implementation ($9.5 million), but not all counties. This proposal would provide funds for counties that are not eligible for local enhancement funds under the 2005 legislation and would continue the practice of supporting the transition of counties to a communication infrastructure that supports the highest level of interoperability.

Eliminated Proposals

The following SHSP proposals submitted by the regions were eliminated as Interoperable Communication proposals for FY2009 SHSP grant process for the reasons indicated. In certain instances they were referred to other investment leads for consideration as indicated.

HSEM Region One

Project 2	Amount Requested:	$873,000.00
	Project Lead:	Captain Terry Waletzki 507-287-7811

Previous Investment Amounts: New Investment

Project Description: "Invest in a regional video conferencing system that will provide each EOC a video conference system that has the capability to utilize multipoint video conferring of up to 17 concurrent connections. While the users are connected, viewing of documents will be possible by using the attached document camera. The system will also allow connections to a VCR/DVD player and also a personal computer which will allow the sharing of computerized documents such as PowerPoint slides, spreadsheets, GIC maps, etc. A remote camera system interface is also included so the ability to share video/audio of the incident with the other stations is possible.

This system will allow boarder involvement within all regional disciplines to participate in meetings and committees by saving travel time and expenses involved. Examples include Regional Radio Boards, Regional Advisory Committees, User committees, and potential conferencing throughout the state."

Referral:

Kristi Rollwagen-Investment Lead for Strengthen Preparedness Planning
Michael Bosacker-Investment Lead for Strength Information Sharing and Collaboration Capabilities
Kristi Rollwagen-Investment Lead for Competitive Investment 12-14

Basis for elimination: This proposal did not address Interoperable Communication priorities.

HSEM Region Five

Project 1	Amount Requested:	$160,000.00
	Project Lead:	Jim Reinert 507-836-6148

Previous Investment Amounts: New Proposal

Project Description: "Communication is essential during a disaster. Communication Go-Kits are mobile and can be used to bring communication equipment to the scene of the disaster. These go-kits are equipped with tough book computers, printers, GPS units and a carrying case."

Referral:

Kristi Rollwagen-Investment Lead for Strengthen Preparedness Planning
Kristi Rollwagen-Investment Lead for Competitive Investment 12-14

Basis for elimination: This proposal did not address Interoperable Communication priorities.

Project 2	Amount Requested:	$18,000.00
	Project Lead:	Eric Weller 507-389-7319

Note: Joint proposal between HSEM Region 1 & 5.

Previous Investment Amounts: New Proposal

Project Description: "The Southwest and Southeast HSEM regions in collobration with the Southeast, Southwest, and South Central Healthcare Systems Preparedness Program (HSPP) are requesting funding assistance for the purpose of implementing and testing of a pilot Email Server System to be used at a County EOC or other Command Center. This standalone server will host the communication components of a Mutli-Agency Coordination Center (MAC) which the HSPP has been developing with other partners including HSEM, EMS, Public Health and others. This project will link communication between County Emergency Operation Centers and Hospital Command Centers and other disciplines that are identified in emergency preparedness.

This Server Project will be the basis of a Southwest and Southeast regional communication exercise. If successfully funded this request will pay for the technology piece while the individual regions will underwrite the exercise."

Referral:

Kristi Rollwagen-Investment Lead for Strengthen Preparedness Planning
Michael Bosacker-Investment Lead for Strength Information Sharing and Collaboration Capabilities
Kristi Rollwagen-Investment Lead for Competitive Investment 12-14

Basis for elimination: This proposal did not address Interoperable Communication priorities.

Consolidated Regional Radio Board Proposals- based upon 2007/2008 SHSP applications

Project 1	Amount Requested:	$1,000,000.00
	Project Contact:	Scott Wiggins, Director DPS-DECN 651-201-7546

Previous Investment Amounts:	FY2006	Planning funds
	FY2007	None to RRB
	FY2008	$2,000,000.00

Project Description: "VHF/UHF Interoperability Infrastructure for the ARMER Backbone- This portion of the proposal was designed to continue implementation of the VHF/UHF interoperability network in conjunction with the ARMER backbone implementation. The basic concept is to provide a layer of VHF and possibly UHF interoperability throughout the ARMER backbone, to coordinate that layer of communications throughout the state and with neighboring states and federal agencies. In FY2008, $2,000,000 was allocated as follows based upon the number of ARMER towers in each region:

Northeast MN RRB	$282,051.00
Central MN RRB	$794,872.00
Southeast MN RRB	$923,077.00

These allocations represent a commitment of approximately $25,000 per tower for radio equipment and interoperability equipment for each tower in Phase Three and in Itasca County's implementation.

There are 212 additional towers to be completed over the next three years. The cost to provide for interoperability equipment in those towers is $5,300,000. The next phase of this implementation to coincide with the ARMER implementation would be $1,000,000. DPS is currently completing a VHF/UHF Interoperable Frequency Study and has selected a vendor to develop the final plan for the implementation of the infrastructure needed to proceed with this initiative."

Basis for elimination: This proposal clearly addresses Interoperable Communication priorities. However, DECN recommends no further allocation of funds to this priority until the VHF/UHF Interoperability Infrastructure Planning project is completed in August (contract with selected vendor currently being finalized).

Project 2	Amount Requested:	$1,000,000.00
	Project Contact:	Scott Wiggins, Director DPS-DECN 651-201-7546

Previous Investment Amounts:	FY2006	Planning funds
	FY2007	None to RRB
	FY2008	$1,000,000.00

Project Description: Mobile/Portable Radios for Cross Spectrum Interoperability-This portion of the proposal is focused upon addressing those unique interoperability situations where public safety entities (law enforcement, fire, emergency medical services and others) operate in a service area between VHF and 800 MHz systems. The proposal was designed to address circumstances where the only practical way to address these cross spectrum situations in the public safety agencies service area will be to maintain two separate radios. In FY2008, $1,000,000 was allocated as follows based upon the formula adopted by the Grant Workgroup:

Northwest MN RRB	$86,958.00
Northeast MN RRB	$102,564.00
Central MN RRB	$157,418.00
Southwest MN RRB	$72,996.00
South Central MN RRB	$73,235.00
Southeast MN RRB	$104,497.00
MESB	$402,332.00

Basis for elimination: This proposal clearly addresses Interoperable Communication priorities. However, DECN requested integration of this proposal with the ARMER infrastructure grants used to facilitate the transition of local units of governments on to the ARMER system. The Grant Workgroup recommended the consolidation of this proposal.

Project 3	Amount Requested:	$750,000.00
	Project Contact:	Scott Wiggins, Director DPS-DECN 651-201-7546

Previous Investment Amounts:	FY2006	None
	FY2007	$700,000.00*
	FY2008	None

* Funds were actually allocated to the HSEM Regions ($100,000 each region) and to the Border Counties ($100,000) for this purpose.

Project Description: Tactical Interoperable Communication Planning (including exercise development)-This portion of the proposal was designed to provide funding for the continued development of regional Tactical Interoperable Communication plans and for tactical interoperable communication exercise planning. Based upon the fact funds allocated to the HSEM Regions and Border Counties for this purpose in the FY2007 SHSP grant had not been used, there was no allocation of funds for this purpose in the FY2008 grant.

Basis for elimination: This proposal clearly addresses Interoperable Communication priorities and will require continued funding. However, DECN recommends no further allocation of funds to this priority until 2007 DHS funds allocated to this purpose are expended by the regions.

5 Strategy

Minnesota has developed a clear strategy for achieving its public safety communications interoperability vision. It combines broadly inclusive, bottom-up, user-driven local and regional governance (local planning and regional radio boards/committees) coordinated and overseen by the Statewide Radio Board which has been designated as the Statewide Interoperability Executive Committee and supported by the Department of Public Safety's Statewide Communications Interoperability Program and HSEM and technical options including the ARMER backbone for establishing a system of systems that supports operational interoperability through interoperable communications. The third leg of this strategy is the development and implementation of TIC plans that include training, exercises and regular application of the interoperable elements of public safety communications to ensure optimal, NIMS/NRP compliant response during crisis events.

It is based on governance and technology methods that have been tested and proven at the local and regional levels and are scalable to the state and interstate level.

While voice interoperability is the first priority, technology designs are being built with data in mind and data interoperability solutions will be incorporated as federal strategies and initiatives are clarified.

The following describes this strategy in detail.

The goals and objectives for the SCIP directly support achievement of the mission and vision for communications interoperability in Minnesota and address the gaps identified between the current situation and that vision.

Collectively achievement of these goals results in completion of the mission. Each goal is supported by corresponding outcome-based and time-sensitive objectives. Specific accomplishments established for the goals and objectives include:

- Regional radio boards operating across the State to ensure effective local governance structures that can achieve the interoperability objectives, goals and mission
- Documentation of the technical, cost and operational options for each county/local entity enabling them to make informed business decisions as to how their county, its political subdivisions, tribal governments and non-governmental organizations are going to move forward to achieve interoperability solutions within and outside their areas of jurisdiction or responsibility
- The technical design and construction of the ARMER system statewide are complete and agreed upon
- The highest levels of each element of the interoperability continuum are achieved and continuously exercised with the communications resources available within a county or region
- The ARMER system is complete and interoperability gateways for legacy systems are in place, operational and part of daily usage, training, exercises and standard operating procedures and common language

VISION

All agencies supporting public safety in the State of Minnesota (local, regional, tribal and non-governmental, military and federal) will have routine access to a voice and data communication infrastructure (system of systems) and participate in a governance structure supporting that infrastructure that is able to provide seamless communication interoperability between jurisdictions and across public safety disciplines necessary to support day to day operations, regional operations, statewide operations and across state and national borders, when necessary, and that is capable of supporting National Incident Management System.

MISSION

To provide a communication backbone throughout the State of Minnesota that supports a system of systems and the appropriate organizational and governance structure needed to achieve the highest level of interoperability between all agencies supporting public safety in Minnesota through the sharing of resources, the integration and coordination of local systems where appropriate and through routine planning, training and usage of all communication resources within the State.

STRATEGIC INITIATIVES

Strategic Initiative One

Fund and construct the backbone for a 700/800 MHz scalable statewide shared public safety communication backbone that can support present and future needs of state and local public safety communication within the State of Minnesota.

Strategic Initiative Two

Leverage state, federal and local funding opportunities to encourage the greatest degree of participation by local units of governments, tribal governments and non-governmental public safety entities in the shared public safety communication backbone.

Strategic Initiative Three

Develop a collaborative governance structure that supports the partnerships, shared planning and resources for public safety and public service communication needs among all entities supporting public safety in the State of Minnesota and provide for regional differences and autonomy, wherever possible.

Strategic Initiative Four

Identify and implement comprehensive public safety communication interoperability strategies and solutions that strike an appropriate balance between the present and future needs to address all levels of interoperability (local operability, regional interoperability and statewide interoperability) with all public safety responders (including tribal and non-governmental, military, federal and neighboring states/Canada), including public safety entities that do not elect to participate in the State's core strategy.

Strategic Initiative Five

Maintain and further develop high-level elected official support (state and local) for interoperable communications and its expanding role in the public safety response to routine activities, regional incidents and major statewide incidents.

Strategic Initiative Six

Identify opportunities to leverage resources and seek more efficient ways to deliver public safety services through the use of advanced technologies; improved spectrum efficiency and seamless interoperability (look at the public safety communication network more broadly).

GOALS

1. Complete the construction of the shared public safety communication system (ARMER).

Objectives:

- Complete preliminary design (finalize tower sites and backbone coverage) for the ARMER backbone by December 31, 2007.
- Complete the detailed design and backbone cost evaluation by April 30, 2008.
- Develop detailed implementation plan and timeline for the ARMER backbone by May 1, 2008.
- Substantially complete (95% of base radio sites operational) the construction of the ARMER backbone by December 31, 2012.
- Develop a preliminary plan for VHF and/or UHF interoperability for the ARMER backbone by December 31, 2008 (Integrates with broader interoperability initiatives Goal #4).
- Develop and document potential alternatives to integrate interoperable data into the ARMER backbone as part of the core RF infrastructure or as a separate system by December 31, 2008 (Integrates with a broader data interoperability initiative Goal #4).

2. Support the planning and integration of local units of governments, tribal governments and non-governmental public safety entities onto the shared public safety communication backbone.

- Engage consultants necessary to begin regionally based local enhancement studies and begin the process of conducting local studies and evaluations by December 31, 2008.
- Complete local enhancement studies by December 31, 2008 (note: vendors will assist in collecting baseline capability and resources for TIC plans as part of this process).
- Determine the extent to which existing funding streams might be utilized to fund a portion of local infrastructure enhancements by March 31, 20078
- Determine the cost and potential funding sources to provide subscriber radios (portable and mobile radios) for public safety responders throughout the State by December 31, 2008.
- Develop a comprehensive plan to articulate how DHS grant funds, PSIC grant funds and other potential funding sources will be leveraged to encourage the

acquisition of subscriber units for first responders by December 31, 2008 (Note: At least one PSIC investment justification will address this issue)

3. **Develop regional public safety interoperable communication governance structures that provide the opportunity for appropriate and timely input from all agencies supporting public safety in Minnesota (including tribal governments and non-governmental agencies) into the integration and coordination of resources, standard operating procedures and all TIC plan development, planning, exercising and evaluation.**

   Objectives:

   - Establish regional interoperable communication governance structures provided for in Minn. Stat. §403.39 & 403.40 (Regional advisory committees or regional radio boards) across the State by December 31, 2008.
   - Engage regional radio governance structures and emergency management personnel in regional TIC plan development, training and exercising by June 30, 2008.
   - Develop templates for regionally based SOPs for the use of interoperability resources within each region including shared channels, shared systems, gateways and swap radios by December 31, 2008.
   - Provide initial and for ongoing communication unit leader training programs for selected regional representatives by December 31, 2008.
   - Conduct at least one regional tactical interoperable communication exercise in each regional and provide for formal evaluation of the exercise by June 30, 2009.
   - Establish the Statewide Radio Board as Minnesota's Statewide Interoperability Executive Committee and fully integrate an interoperability committee that represents all disciplines and regions (including tribal and non-governmental agencies) of the State to broadly address public safety communications interoperation procedures and resources in all spectrums by December 31, 2007.

4. **Complete a blended (regionally based) statewide tactical interoperable communication "TIC" plan for the State of Minnesota.**

   Objectives:

   - To collect communication infrastructure information from all local and county agencies supporting public safety in Minnesota needed as part of the TIC plan development and enter that information into the CASM tool by December 31, 2008.
   - Develop preliminary TIC plans for each region of the State (HSEM regions or other appropriate regions as regional radio boards are developed) by December 31, 2008.
   - Coordinate and blend regional TIC plans into a broader statewide strategy and where possible, factor in approaches of bordering states and countries by June 30, 2009.

- Identify resources to integrate and maintain communication interoperability planning and to coordinate training and exercises with the Division of Homeland Security and Emergency Management broader emergency operations planning responsibilities throughout the State by December 31, 2008.

5. **Develop a plan to provide the highest practical level of interoperability between the ARMER backbone and independent public safety communication systems, between other existing public safety communication systems within the State (local, regional, state, tribal, military and federal) and with appropriate public safety agencies bordering states and countries.**

   Objectives:

   - Fully staff the Statewide Public Safety Interoperability Program within the department of public safety, ARMER/911 division (Administrator and up to three regional coordinators) by January 31, 2008.
   - Establish routine contact with key interoperable communication networks in bordering states and countries and thoroughly document interoperable communication strategies and resources from those bordering states and country by March 31, 2008.
   - Establish routine contact and maintain a dialog with regional and national efforts to coordinate public safety interoperable communications and report the status of interoperable communications regionally and nationally to the appropriate agencies and organizations by June 30, 2008.
   - Investigate, develop and test specific technical and operational plans on how existing VHF and UHF interoperable resources might be organized and integrated into public safety communication systems (ARMER and independent systems) by December 31, 2009.
   - Articulate a set of standards and criteria for new communication equipment and systems (P25, narrowband, digital or analog) that support the highest level of interoperability and determine the extent to which those standards should be applied to PSIC funding, DHS funding and other federal and state funding sources by March 31, 2008.
   - Develop specific plans identifying how deployable resources (transportable trunked systems, portable repeaters, mobile gateways, satellite communications and other deployable technologies) might be integrated into Minnesota's public safety communication network to provide enhanced interoperability by December 31, 2008.
   - Develop a plan for the implementation and maintenance of a strategic technology reserve (STR) to pre-position or secure interoperable communications equipment in advance for immediate deployment in an emergency situation or major disaster by June 30, 2008. (Note: At least one PSIC investment justification will address this issue.)

- Broadly engage the public safety community in the formulation of a plan to adopt and implement public safety communication protocols, such as “plain language” and “standardized naming conventions” by December 31, 2008.

6. **Investigate and determine the most appropriate way to address the expanding need for interoperable wireless data between all agencies supporting public safety.**

   Objectives:

   - Investigate and document the current status of public safety data interoperability by June 30, 2008, including the following issues:
     - Status of the adoption of a national protocol for wireless data communications.
     - Status of any FCC Docket related to a national public safety data network (FCC Docket# 96-86 related to 700 MHz spectrum) and the implications upon local system development.
     - Current status of wireless public safety data communications in Minnesota.

   - Investigate and document how expanded interoperable data (access to databases and information) will enhance and support public safety operations and interoperability by June 30, 2008.

National Priority 5: Strengthen Communications Capabilities

A. Accomplishments

Communication resources are regularly exercised as part of all emergency response exercises. Learning the capability of resources is part of the initial training in equipment use and that training is reinforced in routine exercises.

We routinely exercise interoperability within Minnesota. All exercises conducted through HSEM include a communications element where interoperability is evaluated. The performance was measured through the Twin Cities UASI TICP. Minnesota received a perfect a score. The Tactical Interoperable Communications Plan (TICP) has been expanded to incorporate all 10 counties within the metro area. Additionally, the TIC plan was tested through the MMRS exercise Snowball III.

Twin Cities Urban Area TIC Plan: A TIC plan was developed and exercised in the Twin Cities UASI of Hennepin County and the City of Minneapolis. The TIC plan now includes all ten counties of the Minneapolis/St. Paul metropolitan area. The Department of Public Safety is coordinating the collection of data and development of TIC plans throughout the remaining five homeland security regions of the state, including an emphasis upon the five counties of Minnesota that are along the United States/Canadian border and those counties with bordering states (Wisconsin, North Dakota, South Dakota and Iowa).

Statewide Radio Board: The Statewide Radio Board (SRB) was created by the Minnesota legislature in 2004 to implement the Statewide Interoperable Public Safety Radio and Communication System Plan. At the time the Statewide Radio Board was created the Statewide Interoperable Public Safety Radio and communication System was given the name of Allied Radio Matrix for Emergency Response (ARMER). At that time, the ARMER system existed in the nine county metropolitan area, but in 2005 the legislature funded the expansion of the ARMER backbone into 23 counties outside the metropolitan area. The Legislature approved full build out of the ARMER backbone in 2007. The statute creating the SRB also provided for the creation of regional radio boards throughout the state, with broad authority to adopt regional operational standards consistent with the technical and operational standards of the SRB. That plan evolved out of the creation of a region wide interoperable radio system in the Minneapolis/St. Paul metropolitan area in 2001. The

ARMER system is a major element of Minnesota's long term interoperable communication planning, but not the only element. There is an immediate and pressing need for interoperable public safety communication planning among all emergency responders and the Statewide Radio Board is a broad forum representing all public safety disciplines from across the state.

The membership of the Statewide Radio Board is provided for in statute as follows:

- State Representatives
- Commissioner of Public Safety , Chair
- Commissioner of Transportation
- Commissioner of Natural Resources
- State Chief Information Officer
- Commissioner of Finance
- Chief of Minnesota State Patrol
- Chair- Metropolitan Council (Metro area transit authority)
- Local Representatives (one metropolitan area one from outside the metropolitan area)
- 2 - Local elected official
- 2 - County elected official
- 2 - County Sheriff
- 2 - Chief of Police
- 2 - Fire Chief
- 2 – Emergency Medical Service providers
- Chair of Metropolitan Area- Regional Radio Board
- Representative- Regional Radio Boards outside the metropolitan area

The SRB has responsibility for all technical and operational standards related to the ARMER system. In that capacity, the SRB is able to establish operational standards and procedures related to interoperability. Although the SRB was originally established to oversee the implementation of the ARMER system, the role of the SRB is being expanded in the following manner:

- Bylaw change to incorporate a broader role in statewide interoperability.

- An executive order established the SRB as Minnesota's Statewide Interoperability Executive Committee (SIEC) in October 2007.
- Creation of a SIEC Advisory Committee with broad representation of all regions of the state, tribal entities, federal public safety agencies and non-profit agencies related to public safety response. The SIEC advisory committee had their first meeting in January 2008.
- Broader responsibility for planning and standards for interoperable resources on VHF, UHF and 700/800 MHz spectrum.
- Three regions in the state now have a regional radio board while the remaining regions have regional radio advisory committees.

One of the basic criteria for our regional interoperable planners, funded by the legislature, will be the continued development and exercise of interoperable communications plans, and SOPs that incorporate NIMS. Over the last year, DPS Emergency Communication Networks Division developed and received approval from DHS for a training program for the usage of communication equipment (portable and mobile radios). This training program includes exercises and training while incorporating NIMS.

B. Current Capabilities

Communications Capability:

- Allied Radio Matrix for Emergency Response (ARMER) is a standards-based shared infrastructure providing a trunked radio system operating in the 700/800 MHz spectrum with the capability to provide interoperable talk groups throughout all jurisdictions where it has been and will be implemented.
- The backbone of the ARMER System is currently in place in 11 of 87 counties of the state and is the primary communication system for Hennepin, Ramsey, Carver, Anoka, Dakota, Washington, Olmsted, and Stearns. These counties are home to half of the state's population.
- The metro area counties work under a DHS-approved Tactical Interoperable Communications Plan (TICP) which provides governance, technical information, regional inventory, and the Communications Assets Survey and Mapping (CASM) tool, allowing communications staff to preplan, coordinate and map out communications assets in real time.

- The TICP and ARMER system were used successfully during the response to the I35W bridge collapse. Communications were seamless, even considering that a fiber optic link went down with the bridge. The system was redundant enough to sustain twice the normal traffic that it would take in a complete day without any degradation of capacity in the five hour period immediately following the collapse. The ARMER system provided the connectivity when cell phone systems were overloaded, including EOC communications support.
- Metro jurisdictions have access to mobile remote broadband video capabilities.
- Completion of the ARMER backbone in 23 counties of the state was authorized and funded in 2005 and will be completed in 2008. Funding for the completion of the ARMER backbone in the remaining 55 counties of the state was provided in 2007. Detail design for the completion of the backbone in all counties of the state is underway with substantial completion of the backbone planned by the end of 2012.
- Some counties have already converted to analog and digital VHF narrow band systems and will be linked into the ARMER backbone through gateways and control stations as the backbone is implemented.
- State-wide, counties are organized into regional radio boards to address interoperability issues on a regional level.
- The Public Safety Interoperable Communications (PSIC) grant will be used to complete local and regional communication planning, acquire data for statewide tactical interoperability planning, and provide enhanced interoperability for legacy systems with the ARMER backbone and to further develop regional governance structures and planning.
- HSGP money is used to enhance interoperable communication through the ARMER system.
- SAFECOM continuum
    - Governance - 100% Regional committees work with Statewide committee
    - SOPs - 25% All use joint SOPs for planned events but not all are using the ARMER system
    - Technology 70% - ARMER is a standards-based shared system
    - Training & exercises - All regions have multi-agency full functional exercises. Not all are ARMER
    - Usage - Each region uses its system daily.

ECHO Program: ECHO (Emergency and Community Health Outreach) is a collaborative that includes public health and safety agencies across Minnesota, ethnic advisory organizations and non-profit groups such as the American Red Cross (Twin Cities Chapter). ECHO is spearheaded by Saint Paul-Ramsey County Public Health, Hennepin County Public Health Protection, the Minnesota Department of Health and other agencies charged with public health emergency preparedness.

ECHO provides health and safety information in multiple languages by fax, phone, on television and on the web during emergency and non-emergency times to people with limited English language skills. Organizations charged with public health and emergency preparedness created ECHO in 2004. They saw that new systems were needed to help all Minnesotans stay safe and healthy as hundreds of thousands of immigrants and refugees from vastly different cultures and climates made this state home. These new residents need information on specific health and safety issues that occur here. Plus, better methods were needed to reach limited-English speakers in a statewide emergency such as the outbreak of a highly contagious disease like SARS, or a man-made attack such as a bomb explosion.

ECHO helps to bridge the gap while Minnesota's newest residents learn English as a second language. It benefits all Minnesotans because when a serious disease outbreak happens, no one can be fully protected unless everyone is first fully informed. In an emergency, the goal of ECHO is to make sure that no Minnesotans are left out because of barriers of language or culture.

Emergency Public Information and Warning Capability:

The federal government is responsible for disseminating notifications and warnings of national security events and other disasters to federal military and civilian authorities, to affected states and, in some instances, to the public.

Federal Emergency Management Agency (FEMA): is responsible for ensuring the operational capability of the National Warning System (NAWAS) on a 24-hour basis at the national, regional and state levels, so that warnings of a national security nature are disseminated to all NAWAS points. This system is also used in support of natural or technological incidents at the state level.

National Oceanic and Atmospheric Administration (NOAA) National Weather Service:

All National Weather Service Offices located in Minnesota and the Grand Forks, North Dakota; Sioux Falls and Aberdeen, South Dakota; and LaCrosse, Wisconsin Forecast Offices are responsible for:

- Disseminating (via NAWAS, the National Weather Service Weather Wire and the NOAA Weather Radio - All Hazards) all weather *watches* issued by the Storm Prediction Center in Norman, Oklahoma.

- Disseminating (via NAWAS, National Weather Service Weather Wire and NOAA Weather Radio - All Hazards) all weather *warnings* affecting its area of responsibility within the State of Minnesota.

- Serving as a backup for disseminating information relative to protective actions to be taken by the public, due to but not limited to the following events:

  a) Release of toxic substance or radioactive material that requires immediate evacuation.
  b) Possible detonation of explosive material that requires immediate evacuation.

The Chanhassen National Weather Service Forecast Office is responsible for:

- Serving as a backup for disseminating information relative to protective actions to be taken by the public, due to but not limited to an incident at the Monticello or Prairie Island Nuclear Generating Plant which may affect areas within the State of Minnesota and which would require protective action on the part of the public.

State Government: The State of Minnesota is responsible for disseminating notifications and warnings of disasters/emergencies to all counties and, in some instances, to the general public. The State also issues Amber Alerts (pull info off BCA website)

Local governments are generally responsible for providing warnings directly to the public.

Emergency communications systems available to the public and private sectors include:

- EAS (Emergency Alert System) (also used for Amber Alerts)
- Outdoor warning sirens
- ECHO (Emergency Communication and Health Outreach)
- Notification systems such as CityWatch, Reverse 9-1-1, Dialogic, etc.
- National Weather Service
- Internet
- MNDOT Weather Channel

C. Three-Year Targets

Communications Capability:

Target Description	Projected Completion Year	Status
ARMER backbone build out is 75% complete with a basic level of coverage in all counties of the state.	2010	Open
Advanced training on interoperable radio equipment, including COML training	2010	Open
100% of counties have completed communications plan	2010	Open
Incident commanders, first responders, first receivers, and EOCs have access to interoperable communications	2010	Open
Every region has an interoperable communications plan	2010	Open
Access to mobile remote broadband video capabilities is available to all metro jurisdictions	2010	Open
Metro counties have access to remote data capability using 700 MHz	2010	Open
ARMER backbone build out is 75% complete with a basic level of coverage in all counties of the state.	2010	Open

Emergency Public Information and Warning Capability:

Target Description	Projected Completion Year	Status
Develop a strategy to upgrade and modernize outdoor warning systems is identified	2010	Open
Develop a strategy for alternative notification modes is identified statewide	2010	Open
Public warning siren systems will be evaluated for effectiveness. Battery backup sirens will be emphasized.	2010	Open
FEMA standards for sirens will be reviewed.	2010	Open

D. Initiatives

Communications Capability:

To achieve strengthened communications capabilities for the state of Minnesota we will continue to build out the ARMER backbone. In its current configuration, the ARMER plan does not provide for a data component. However, Phase three (23 counties outside the metropolitan area) is being implemented on a RF platform which can be upgraded to provide wireless data over the common RF components of the ARMER system. Future phases for the remaining 55 counties will also take data into account.

Three distinct approaches to interoperable public safety data have been identified:

Regional Enhancements: Hennepin County is working with the Metropolitan Emergency Services Board (subordinate regional radio board covering the metropolitan area) to implement a region-wide wireless public safety data network over the ARMER backbone. Hennepin County was the recipient of a COPS grant and a UASI grant which provided funding for this regional enhancement to the ARMER backbone. The RF component of the data network is distinctly separate from the RF component of the voice network but they are

compatible systems that might be integrated into one voice and data network at some future point.

Minnesota State Patrol Data System: The Minnesota State Patrol has a mobile data system across major portions of the state utilizing towers and microwave capacity that are or will be part of the ARMER infrastructure. The current system is not capable of providing significant wireless I.P. connectivity but it may provide a foundation for wireless data as part of Minnesota's broader wireless interoperable data initiatives.

Local Data Systems: A number of counties have implemented local wireless data systems. As part of the Statewide Radio Board's strategy for wireless data, the ARMER backbone provides an opportunity to coordinate and enhance interoperable data.

To achieve strengthened Communications capabilities for the state of Minnesota we will provide advanced training on interoperable radio equipment (COML training)

In order for this to be implemented:

- DHS/FEMA will design all hazard COML training
- Jurisdictions will identify appropriate staff to be trained
- Staff is trained as all hazard COML
- COMLs participate in communications exercises statewide

Program Management: HSEM and ARMER staff will arrange for the initial COML training and ongoing training. Each appropriate agency will be responsible for providing a staff person to be trained as a COML. HSEM and ARMER will coordinate a schedule whereby a COML would be available 24/7 to any jurisdiction that has the need but not the capability. These initiatives support Minnesota's long-term strategy and the immediate need to address interoperability among public safety officials at different levels, including federal, state, military resources, regional, local and international. Interoperable communications provides the technical resources to expand regional cooperation, and to implement the National Incident Management System (NIMS), National Response Plan (NRP) and National Infrastructure Protection Plan (NIPP).

The Department of Public Safety is responsible for overall program management. Those responsibilities have been assigned to the ARMER/911 Program Director. Minnesota has appointed a Statewide Interoperability Coordinator and three part-time regional interoperability coordinators.

To achieve strengthened Communications capabilities for the state of Minnesota, 75% of counties who are on VHF are narrow-band and/or digital compliant by 2010.
In order for this to be implemented:

- As the frequency licenses are renewed, the FCC and the MNDOT frequency coordinator will ensure that migration takes place. Cost of equipment is the responsibility of the jurisdiction.
- To achieve strengthened Communications capabilities for the state of Minnesota, 100% of counties will complete a communications plan by 2010.
- In order for this to be implemented:
  - HSEM will arrange for Interoperable Communications Technical Assistance Program assistance for those who need it
  - ARMER will provide technical assistance
  - Regional communications plans are encouraged

E. Resources

Resources Expended:

Fiscal Year	Project	Amount
FY 2004	Strengthen Communications Capabilities	$35,568,101.99
FY 2005	Strengthen Communications Capabilities	$14,563,639.24
FY 2006	Strengthen Communications Capabilities	$4,089,821.51
FY 2007	Strengthen Communications Capabilities	
	Total	

Future Resources Required

Funding for subscriber units for communities that cannot afford them

Cost of data overlay

Upgrade of dispatch consoles

STATEWIDE RADIO BOARD
Interoperability Committee

Tuesday, April 21, 2009,
12:30 p.m. – 3:30 p.m.
Chair: Colonel mark Dunaski

League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Agenda

Call meeting to order
Approval of Agenda
Approval of Meeting Minutes of February 17, 2009

New Business

- DNR Forestry Division Mobiles on MINSEF Action Required

Standing Reports

- Grant Workgroup
  - Summary of proposals
  - FY2009 SHSP grant workgroup recommendations

- Interoperability Workgroup

Adjourn

STATEWIDE RADIO BOARD

Interoperability Committee

Tuesday, February 17, 2009, 12:30 – 3:30 p.m.
League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Minutes

Members/alternates present:
Chair, Col. Mark Dunaski, MN State Patrol Chief
Mark Gieseke (alt), MnDOT
Lance Ross, MAA
Kim Thon (alt), MN EMSRB
Chris Kummer, MESB
Dan Bullock (alt), Met Council
Bill Hughes, MEMA
John Sanner, MN Sheriff's Assoc.
Jon Priem, Prairie Island Tribal Police
Cari Gerlicher, MN Chief's of Police Assoc.
Pat Coughlin, MN Interagency Fire Center
Carl Kepper, U.S. Coast Guard
Roger Laurence (alt), UASI
Nikia, McKinney (alt), MN National Guard
John Dooley, HSEM
Scott Camps, HSEM NE MN

Members/alternates absent:
Myrlah Olson, MN Department of Health
Jim Halstrom, AMEM
Bill Spence, DNR
Steve Pott, 700 MHz Planning Committee
Ulie Seal, MN Fire Chief's Association
Jeff Karel, ICE
Mike Martin, FBI
David Mercer, US Border Patrol
Robert Graves, US Secret Service
Pat Novacek, HSEM NW MN
Dan Anderson, HSEM SW MN
Gary Peterson, HSEM SE MN
Scott McNurlin, SE RAC
Micah Myers, CM RAC
Brett Miller, SC RAC
Vacant, Tribal

Chair Dunaski calls the meeting to order at 12:38 p.m.

Lance Ross moves to approve the agenda as amended. Chris Kummer seconds the motion. The Motion Prevails.

Dan Bullock moves to approve the amended SRB Interoperability Committee Meeting Minutes of January 20, 2009. The motion is seconded by Chris Kummer. The Motion Prevails.

New Business

FY2009 State Homeland Security Program Grant Proposals

Ron Whitehead gives a brief introduction and explains what type of information was requested from the HSEM Regions and other applicants throughout the state. Mr. Whitehead indicates that this is one of the bigger grants available. He explains that the grants and grant process need to align with state strategies. He explains the SCIP is a frame of reference used in the process. The grant program continually seeks participation from a wide array of entities.

Mr. Whitehead explains that the purpose of this process if for each entity who submitted a proposal to come forward and present before the Interoperability Committee. He reminds the committee that the purpose of this meeting is not to allocate the funds, but rather to validate that the regions' investments proposals are appropriate.

Mr. Whitehead reminds the committee of the primary SCIP goals and objectives:

- Complete construction of ARMER backbone
- Support the planning and integration of local units of government, tribal government, non-governmental public safety entities in their planning process
- Develop regional public safety interoperable communication governance
- Complete regional and statewide tactical interoperability plans
- Develop a plan for the highest practical level of Interop between the ARMER backbone and the legacy systems that are independent systems operating on VHF
- Investigate and determine the most appropriate way to address data.

The following entities present:

HSEM Region One - Terry Waletzki
HSEM Region Two - Scott Camps
HSEM Region Three - Mary Hildebrand
HSEM Region Four - Tom Larson
HSEM Region Five - Ron Whitehead
HSEM Region Six - Ron Whitehead
Border County Proposal - Scott Camps
Metropolitan Emergency Services Board - Jill Rohret

DECN Proposals- Consolidated RRB proposals - Ron Whitehead

Each group was directed to answer the following questions within their proposals:

1. Describe how the interoperable communications funds were used by your region or group in FY 2007/2008
2. Describe the proposal with as much detail as possible
3. Describe any issues or items affecting the proposal
4. Describe whether you consider the proposal an initiative that must be funded to the extent requested to accomplish the outcomes and capabilities (in other words, what would be the outcome if the proposal were only partially funded)
5. Does your proposal seek multi-year funding to achieve the desired outcome?
6. Specify the categories of equipment you would acquire
7. Describe how it enhances interoperability within your region

The above listed individuals presented on behalf of the indicated entity. Mr. Whitehead clarifies that 80% of the grant must be used for local entities and 20% may be used for state.

Chair Dunaski indicates that Mr. Attila of the MN State Patrol will also be presenting. Chair Dunaski provides the background information regarding Capitol Security and how grant funding could aid in Interoperability improvements.

Mr. Whitehead inquires if the committee agrees with the workgroups recommendation regarding what should be included in the grant workgroup recommendation.

Mr. Whitehead summarizes the proposals.

Cari Gerlicher moves to approve the Grant Workgroups recommendations on the grant proposals. John Dooley seconds the motion. The Motion Prevails.

Mr. Whitehead asks for any feedback that the committee has to offer. He reminds the committee that the grant will allow for $5.8 million to be dispersed. Look at projects that will be completed.

Chair Dunaski suggests that rather than the entities going through the work of putting together their proposals, indicate what would be a more reasonable potential allocation so the entities can work with that information instead.

Training Workgroup

Mr. Wiggins explains the inception of the training committee. He announces that Pam Biladeau, ECN Training Coordinator has been hired. Mr. Wiggins indicates that the Training Workgroup fits as an extension of the Interoperability Committee much like the Grant Workgroup led by Ron Whitehead and the Interoperability Workgroup led by Tom Johnson. Mr. Wiggins indicates that the Training Workgroup will be requesting participation from members of the Interoperability Committee in addition to individuals

throughout the state. He explains that the Workgroup will meet via conference calls and reports will be provided at the Interoperability Committee as a standing report.

Chair Dunaski requests Pam Biladeau be at the next meeting to give a brief explanation of her goals and objectives.

The meeting was adjourned at 2:50 p.m.

Meeting Minutes recorded by Jennifer DiOttaviano

STATEWIDE RADIO BOARD

Interoperability Committee

Tuesday, March 17, 2009, 12:30 – 3:30 p.m.

League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Summary

Presentation

VHF/UHF Frequency Planning

Federal Engineering was in attendance and gave a presentation regarding the Interoperability frequency planning project. They advised the committee on identified frequencies. There are currently seven frequencies available in the VHF area. Once narrowbanding occurs there will be 36 available for statewide interoperability. Federal Engineering also looked at the Border States and Canada to identify interoperable frequency plans. They spoke to the committee regarding the narrowbanding frequencies which will take place and the best potential for licensing on a statewide basis. They advised how to put together a frequency plan and will move forward at upcoming Interoperability Committee meetings

Emergency Communication Networks
445 Minnesota Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.201.7547 • Fax: 651.296.2665 • TTY: 651.282.6555
www.ecn.state.mn.us

Alcohol and Gambling Enforcement

Bureau of Criminal Apprehension

Driver and Vehicle Services

Emergency Communication Networks

Homeland Security and Emergency Management

Minnesota State Patrol

Office of Communications

Office of Justice Programs

Office of Traffic Safety

State Fire Marshal

MEMO

Date: March 31, 2009

To: Colonel Mark Dunaski, Chair, SRB Interoperability Committee

From: Thomas M. Johnson, Statewide Interoperability Program Manager

Subject: Recommendation to Allow Department of Natural Resources Forestry Division Mobiles and Portables to use MINSEF Statewide

BACKGROUND:

In 2008 the Statewide Radio Board Interoperability Committee recommended to the Statewide Radio Board (SRB) that the MINSEF, MIMS, Statewide Fire, and Statewide Emergency Medical Services (EMS) channels be placed under the purview of the SRB and the Interoperability Committee. In early 2008 the MINSEF and MIMS Advisory Boards were abolished by the SRB and their responsibilities placed with the SRB and the Interoperability Committee. At this same time through a change in the SRB Bylaws the State Fire Chiefs and the EMS Associations agreed to allow the SRB and the Interoperability Committee to oversee the use of the Statewide Fire Channel, the Statewide EMS channel, MINSEF, and MIMS. This brought the four main statewide Interoperability channels under the control of the SRB and the Interoperability Committee.

In November of 2008 the Interoperability Committee approved and recommended approval to the SRB a protocol for the use of the MINSEF channel, Standard number 1.1.2, and the MIMS Channel, Standard number 1.1.0. Both of the Standards were passed by the SRB on January 22, 2009.

In the MINSEF Standard 1.1.2 under section 3 the third bullet it states in part that "Other Public Safety Agencies as defined in M.S.S.403.02 shall be eligible to use MINSEF as specified in M.S.S. 299C.37 Subd 3. When we initially submitted this language we thought that 299C.37 Subd. 3 included both "transmit and receive" permissions for "Public Safety Agencies" we have since found that this is a "receive" only statute. At this time we are working on verbiage that will allow us to change this statute during the 2010 legislature.

In the meantime the Department of Natural Resources Forestry Division based on MINSEF Standard 1.1.2 that was passed by the SRB on the recommendation of the Interoperability Committee had the MINSEF channel installed on 500 mobile and 500 portable radios and do not want to incur the cost of having these radios re programmed to remove MINSEF until the statute is changed.

We are requesting that the Statewide Radio Board grant permission to the Department of Natural Resources Forestry Division to use the MINSEF Channel "both transmit and receive" for "Emergency messages or Law Enforcement assisted activities" as per MINSEF Standard 1.1.2 Section 3 bullet 4 "Other Applications". This bullet states in part "The Statewide Radio Board will consider properly submitted authorization requests which do not meet the requirements listed above on a case by case basis and make appropriate recommendations to the Commissioner regarding what action he or she should take in those matters".

Recommended Motion:

Move that the Department of Natural Resources Forestry Division be allowed to install the MINSEF channel on their portable and mobile radios, (with the ability to transmit and receive) for the purpose of "Emergency messages or Law Enforcement assisted activities". That all Department of Natural Resources Forestry personnel will have initial and annual training per SRB Standards to insure proper use of the MINSEF channel.

NA-02194B-02

REQUEST AND AUTHORIZATION FOR USE OF OTHER AGENCY RADIO FREQUENCY

Permission is requested to use the following other agency radio frequencies during joint operations for communications as listed below. All operations shall be in compliance with FCC Rules and Regulations. Any unauthorized operations shall be grounds for revocation of this authorization.

Other Agency	Address, City, State, Zip Code
Minnesota Stwd Radio Board	St. Paul, Mn.

Other Agency Call Sign: _____

Other Agency Frequencies-

TRANSMIT FREQUENCY	TONE	RECEIVE FREQUENCY	TONE	LOCATION/USE
155.475	open	155.475	open	Dept. of Natural Resources portables & Mobiles only - Statewide

NUMBER OF DNR RADIOS: VEHICULAR 500 PORTABLES 500

The above named other agency, under provisions of 47CFR90.421, authorizes the use of the above frequency(s) licensed to it for mobile radios. This authorization must accompany any request to install these frequencies in a DNR mobile radio.

Authorized Signature for Other Agency	Title	Date

The DNR agrees that this authorization will be for official communications and that a copy shall be kept in each DNR vehicle where these frequencies will be used. Authorization is given to install the above mobile frequencies licensed to the other agency in DNR mobiles and portables.

Department of Natural Resources Approval

Area	Date
Region	Date
Division	Date

DISTRIBUTION: Original-Applicant, Copies-Area Office, Regional Office, St. Paul (appropriate division program manager)

2008 Minnesota Statutes

299C.37 POLICE COMMUNICATION EQUIPMENT; USE, SALE.

Subdivision 1. **Use regulated.** (a) No person other than peace officers within the state, the members of the State Patrol, and persons who hold an amateur radio license issued by the Federal Communications Commission, shall equip any motor vehicle with any radio equipment or combination of equipment, capable of receiving any radio signal, message, or information from any police emergency frequency, or install, use, or possess the equipment in a motor vehicle without permission from the superintendent of the bureau upon a form prescribed by the superintendent. An amateur radio license holder is not entitled to exercise the privilege granted by this paragraph if the license holder has been convicted in this state or elsewhere of a crime of violence, as defined in section 624.712, subdivision 5, unless ten years have elapsed since the person has been restored to civil rights or the sentence has expired, whichever occurs first, and during that time the person has not been convicted of any other crime of violence. For purposes of this section, "crime of violence" includes a crime in another state or jurisdiction that would have been a crime of violence if it had been committed in this state. Radio equipment installed, used, or possessed as permitted by this paragraph must be under the direct control of the license holder whenever it is used. A person who is designated in writing by the chief law enforcement officer of a political subdivision issued a permit under subdivision 3 may use and possess radio equipment while in the course and scope of duties or employment without also having to obtain an individual permit.

(b) Except as provided in paragraph (c), any person who is convicted of a violation of this subdivision shall, upon conviction for the first offense, be guilty of a misdemeanor, and for the second and subsequent offenses shall be guilty of a gross misdemeanor.

(c) An amateur radio license holder who exercises the privilege granted by paragraph (a) shall carry the amateur radio license in the motor vehicle at all times and shall present the license to a peace officer on request. A violation of this paragraph is a petty misdemeanor. A second or subsequent violation is a misdemeanor.

Subd. 2.[Repealed, 1971 c 71 s 2]

Subd. 3. **Permit.** (a) The superintendent of the bureau shall, upon written application, issue a written permit, which shall be nontransferable, to a person, firm, political subdivision, or corporation showing good cause to use radio equipment capable of receiving a police emergency frequency, as a necessity, in the lawful pursuit of a business, trade, or occupation.

(b) Notwithstanding paragraph (a), a permit is not required for emergency response personnel, as defined in section 299F.092, who are members of a public safety agency, as defined in section 403.02, to use agency-issued radio equipment as described in subdivision 1, paragraph (a), when:

(1) the holder of a Federal Communications Commission (FCC) license has granted

the public safety agency written permission for the use of the frequencies authorized under the FCC license; or

(2) the agency is authorized to monitor or operate on any police emergency talk group on the ARMER public safety radio system in accordance with the technical and operational standards adopted by the Statewide Radio Board, as provided in section 403.37 or where the public safety agency use of a frequency allocated to police interoperability is consistent with any applicable rules or regulations.

Subd. 4.[Repealed, 1983 c 293 s 115]

History: *(9950-48)* 1935 c 195 s 8; 1961 c 661 s 1; 1965 c 721 s 1; 1981 c 37 s 2; 1983 c 293 s 91; 1986 c 444; 1987 c 191 s 1; 2003 c 121 s 1,2; 2008 c 224 s 1

Allied Radio Matrix for Emergency Response (ARMER)
Standards, Protocols, Procedures

Document Section:	**1 – Management of System**	**Status:** Interoperability Committee **Date: 11/18/08**
Sub-Section:	**State 1.1.2**	
Procedure Title:	**Criteria for the Installation of Base Stations and General Operations on MINSEF**	
Date Established:	**01/22/09**	SRB Approval: 01/22/09
Replaces Document Dated:	**n/a**	
Date Revised:	**n/a**	

1. Purpose or Objective:

The intent of these rules is to establish an orderly, workable radio network for the common use by all law enforcement agencies throughout the state of Minnesota. All regulations, operations, and procedures of the Minnesota Statewide Radio Board (SRB) and the operation of this emergency communications system are subject to the approval of the Commissioner of Public Safety for the state of Minnesota.

2. Technical Background:

- **Capabilities**

A base station transmitter and receiver network made up of Minnesota State Patrol, County Sheriff, and municipal police agencies will provide field mobile, and to some extent, portable unit access to statewide fixed station dispatching assistance and information. These fixed stations shall be approved using the following criteria, which relate to the specific needs of field radio units:

- 24 Hour Dispatching: Applicant that desires a base station on MINSEF must have 24 hour dispatching in a bona fide public safety dispatching facility. These dispatch points must monitor MINSEF at all times. The monitor must have a reception range comparable to that of the agency's own mobile to base receiver.
- Training: The applicant department must train dispatchers and other users of MINSEF to be fully knowledgeable about the MINSEF operating policies and procedures contained in this or any other relevant documents.

- Terminal and Recording Equipment: The applicant department must automatically create audio recordings of all MINSEF traffic in which they participate and must retain that recording for a minimum of 30 days. Such recordings must be made available to the Minnesota Statewide Radio Board and/or the Commissioner of Public Safety or his/her designee for the purposes of monitoring, investigating, or enforcing these policies and procedures.

- Rules: The applicant department must agree to abide by the established rules governing MINSEF.

Message Categories: Four Categories of message types are authorized on MINSEF. In order of priority, they are:

- MINSEF Emergency Messages: Used to provide communications in situations where life and/or property are in jeopardy.

- MINSEF Itinerant Messages: Used to provide communications for units, which are out of the range of their home radio system.

- MINSEF Test: Used when testing equipment operating on MINSEF.

- MINSEF Exercise/Drill: Using procedures established by the Minnesota SRB and/or the Commissioner of Public Safety, MINSEF may be used for communications during drills or exercises where the communications function is also being exercised. Before the start of such drill or exercise, the coordinating agency must:
  - Contact the Radio Communications Supervisor (RCS) of the State Patrol District in which the exercise is taking place. The RCS will act as "clearing house" for exercise use.
  - Send a CJIS message to the CJIS lettered region(s) within a 100-mile radius of the site of the drill or exercise advising of the forthcoming use of MINSEF for such purpose. MINSEF will be immediately surrendered if needed for actual need of a higher priority.

- **Constraints**

The APCO Frequency Coordinator shall use the following technical limitations and requirements as a guide to his or her actions relating to authorization requests and license applications:

- All applicable FCC rules and regulations

- Power, antenna gain, antenna height and directional characteristics will be considered by the APCO Frequency Coordinator so that signal is minimized beyond jurisdictional boundaries.

- Any control tones used to tone control base station shall be inaudible.

- Base stations shall have an automatic time-out timer.

- Base stations shall not be equipped with an automatic plain voice or CWID station identifier.

- No radios of any type operating on MINSEF shall be CTCSS tone protected on receive; there are not "PL or "CG" tones on MINSEF.

- Agencies who operate a MINSEF base station shall make there best effort to minimize harmful interference with distant MINSEF base or field units.

3. Operational Context:

- **Authority:** MINSEF is operated on a federally assigned radio frequency in the FCC's police service which is designated as *State Police Use Only*. It is operated with the provision that a state police agency may sub authorize usage on this frequency to any other law enforcement agency in that state pursuant to rules developed by that State Police Agency. These rules enact procedures for sub-granting that authority from Minnesota's only State Police Agency through the Minnesota SRB and the office of the Commissioner of Public Safety for Minnesota.

- **Eligibility:** Any public safety dispatching facility appropriately designated by the Minnesota Department of Public Safety to be a PRIMARY 9-1-1 PSAP under Minnesota State Statutes (Chapter 403 and the Minnesota Code of Administrative Regulations (MCAR) shall be eligible to apply to the Minnesota SRB and the Commissioner of Public Safety for permission to apply for and acquire a license from the Federal Communications Commission (FCC) to operate a base station transmitter on the National Law Enforcement Emergency Channel (NLEEC) (155.475 MHz), known in Minnesota as M1NSEF or VLAW31. Bona fide Minnesota law enforcement agencies using two-way police mobile and portable radios operated by authorized personnel of that agency are eligible, without additional State permission being required, to operate those radios in a manner consistent with MINSEF and FCC guidelines and regulations.

- **Other Public Safety Agencies As Defined In M.S.S. 403.02 Desiring MINSEF:** Other Public Safety Agencies as defined in M.S.S. 403.02 shall be eligible to use MINSEF as specified in M.S.S. 299C.37 Subd 3.

- **Other Applications:** The Statewide Radio Board will consider properly submitted authorization requests which do not meet the requirements listed above on a case by case basis and make the appropriate recommendations to the Commissioner regarding what action he or she should take in those matters. NO OTHER MINSEF LICENSED AGENCY MAY GRANT OR SUB GRANT PERMISSION TO OTHER AGENCIES OR UNITS TO OPERATE ON MINSEF

5. Recommended Procedure:

Before transmitting on MINSEF, any users must monitor (listen to) the channel first to ensure that their radio traffic will not be covering or interfering with that of another user.

When requesting emergency assistance on MINSEF the following information and protocol requirements MUST BE FOLLOWED and included in the initial transmission until contact is established:

1. The term **MINSEF EMERGENCY**

2. The user agency name and complete radio call number

3. The nature of the emergency situation.

4. The location of the unit requesting assistance and the direction of travel, if applicable. Example: "MINSEF Emergency, Aitkin County 321 is in pursuit of a robbery suspect southbound on Highway 65 sought from McGregor."

A secondary use of MINSEF is to provide communications for itinerant units. The term "MINSEF Itinerant" should be used when using MINSEF for this purpose. (Example: "MINSEF Itinerant, Fergus Falls PD Car 2202 to Ramsey County Dispatch for Information.")

The third type of message is used to test equipment. The term "MINSEF Test" should be used when using MINSEF for this purpose. (Example: "MINSEF Test, State Patrol radio service to Golden Valley State Patrol, how do you copy?")

The fourth type of message traffic is used to test and exercise communications equipment and procedures during a drill or exercise. Since MINSEF would likely be used in a real emergency, it is logical to have access to it when a drill or exercise is being conducted. The requirements of MINSEF use in these situations are as follows:

- The primary agency that is coordinating the drill or exercise must request permission in advance. Permission must be requested using the procedure established by the Minnesota Statewide Radio Board and/or the Commissioner of Public Safety.

- The requesting agency must then notify surrounding agencies that might monitor the upcoming drill related MINSEF radio traffic by sending a CJIS switch message to the appropriate CJIS lettered regions (A through F) within a 100 miles radius of the drill or exercise site.

- The controlling base station for the drill or exercise must at regular intervals, broadcast on MINSEF, "THIS IS A MINSEF DRILL' to prevent those who might happen to monitor the drill related traffic from reacting to the traffic as if it were an actual emergency event.

- All MINSEF procedures will apply and be complied with during this type of usage.

- All users during a drill must agree, and the controlling base station must ensure that MINSEF usage will be relinquished or suspended in favor of any usage of a higher priority that requires MINSEF access.

- **Type Of "TALK" On MINSEF:** To avoid confusion, PLAIN LANGUAGE MUST ALWAYS BE USED ON MINSEF, with the exception of the universally recognized "10-4" code for acknowledgement of message receipt.

- **Application Procedure:** Application forms for the authorization to apply for an FCC License for MINSEF shall be prepared by the agency seeking said authorization and be directed to:

  Minnesota Commissioner of Public Safety
  445 Minnesota Street, Suite 1000
  St. Paul, MN 55101

To expedite processing of these authorization requests, a copy of the request shall also be sent to:

APCO Frequency Coordinator
c/o MnDOT Electronic Communications
Waters Edge
1500 County Road B2
Roseville, MN 55113

Submitted authorization requests will be referred by the Commissioner to the Statewide Radio Board who will then make recommendations and provide professional advice to the Commissioner regarding his or her decision in the matter of the request.

6. Management:

Violations of the established rules for the operation and usage of MINSEF shall be reported to the Statewide Radio Board by the agency that monitors such violations. Repeated infractions will be reviewed by the Statewide Radio Board for the purpose of making recommendations to the Commissioner of Public Safety for action. Warning letters will be sent by the chair of the Statewide Radio Board to agencies who have allegedly violated these rules. Said letters will require a reply from the alleged violator agency to the Chair of the Statewide Radio Board within 10 days of receipt. The letter must include:

1. a detailed explanation of circumstances surrounding the alleged violation
2. what, if any, actions will be taken to prevent reoccurrence of the alleged violation.

If an agency repeatedly violates these rules, the Statewide Radio Board shall recommend that the Commissioner cancel their Commissioner's Authorization to operate a MINSEF base station and notify the FCC of this cancellation of authorization

Termination of Authority: Any agency desiring to withdraw from participation in the MINSEF network via either base station or mobile/portable access shall notify the Statewide Radio Board of such withdrawal. The Chair of the Statewide Radio Board will make appropriate notification to the rest of the Network.

Command and Control: Compliance with the rules for the operation of MINSEF shall be the responsibility of the local MINSEF dispatcher having jurisdiction where the situation is taking place.

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Homeland Security Region 1 (Southeast, MN)

Proposal Contact: Captain Terry Waletzki
waletzki.terry@co.olmsted.mn.us
Olmsted County Sheriff's Office
507-287-7811

Requested Amount: $1,200,000

Investment Description:

The region proposes to use the requested funds as follows:

- To fund a radio cache to be used by agencies during a disaster.
- To fund the purchase of radios to supplement first responders within each county in the region.
- To acquire gateways and other radio equipment to increase interoperability throughout the region.

The budget indicates the following allocation of funds:

Planning:	$5,000
Equipment:	$1,190,000
Training:	$5,000

Milestones indicate the following use of funds:

Planning funds are needed to program equipment and create radio banks so the radios are available as a regional resource. Equipment funds ($1,190,000) will be used to purchase a cache of radios at each agency to be used for interoperability. Several counties will need to purchase gateways and other equipment to communicate with volunteer agencies, departments and adjacent counties. Training funds will be used to address SRB required user training for ARMER.

ARMER Status:

A portion of HSEM Region is part of the Phase 3 ARMER implementation. It is anticipated that Phase 3 will be completed 2009, except for tower sites recently added to the plan.

HSEM Region	ARMER Phase	Local Study Status	ARMER Implemented	ARMER Selected	VHF System Upgraded

Blue Earth	4546	Pending			
Dodge	3	Pending			
Faribault	456	Pending			
Fillmore	3	Pending			
Freeborn	3	Pending			
Goodhue	3	Complete	Under Way	Yes	
Houston	3	Pending			
LeSueur	456	Pending			Yes
Mower	3	Pending			Yes
Nicollet	456	Pending			
Olmsted	3	Complete	Completed	Yes	
Rice	3	Complete			
Steele	3	Complete			
Wabasha	3	Complete			
Waseca	3	Complete			
Winona					

All Phase Three counties in HSEM Region One are eligible for a portion of the funds allocated by the Statewide Radio Board to pay a portion of the local enhancement costs.

The grant application indicates that some counties will not adopt the ARMER system and will need to purchase equipment to work towards interoperability goals.

Previous HSGP Interoperable Communication Funding

FY 2006 $500,000
FY 2007 $678,404
FY 2008 $600,000

The Region was asked to provide additional information upon how these funds were used or how they will be allocated for use (request made to all regions). The region did not provide any additional information.

Region Interoperable Communication Strategy

The application did not provide any information upon how this proposal will address State Preparedness Initiatives or Homeland Security Strategy Goals & Objectives. The proposal states the following:

"Radios and gateways will increase interoperability and communications throughout the region. State of MN and interstate."

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Homeland Security Region 2 (Northeast, MN)

Proposal Contact: Lt. Scott Camps, St. Louis County Emergency Manager
camps@co.st-louis.mn.us
St. Louis County Sheriff's Office
218-625-3967

Requested Amount: $803,000

Investment Description:

The proposal seeks to fund the secure microwave links from six counties Public Safety Answering Points (PSAP) in HSEM Region Two into the ARMER microwave backbone. The six counties are as follows: Aitkin, Carlton, Cass, Crow Wing, Kanabec, Pine. This project relates to a similar project that has been funded in counties along the Canadian border. As such, those counties are not included in this proposal. Similarly, Itasca County is already connected into the ARMER backbone.

The proposal seeks to provide dedicated Internet Protocol (IP) bandwidth between county PSAP's in HSEM Region Two that might be available for interoperable communications, including voice communications interoperability, video, mobile data systems, recording sharing and Voice over IP initiatives. It is also noted that a number of counties in HSEM Region Two are participants in the North Eastern Minnesota Enforcement and Safety Information System (NEMESIS) which involves shared record management (6 counties) and shared Computer Aided Dispatch System (4 counties).

The region subsequently refined the proposal to clarify that the microwave links into the ARMER backbone would be leveraged with and integrated with the state infrastructure, to the extent possible, to provide the most efficient implementation and integration.

Equipment funds would be used to acquire equipment necessary to connect each of the 6 county PSAP's into the ARMER backbone, The region cost estimates are based upon a cost of $130,000 per microwave link ($65,000 at each side of the microwave link).

ARMER Status:

HSEM Region Two is part of the Phase 456 of the ARMER implementation. Partial implementation of ARMER in Phase 456 is anticipated on existing state tower sites. New sites have been identified and are currently in development.

HSEM Region	ARMER Phase	Local Study Status	ARMER Implemented	ARMER Selected	VHF System Upgraded
Aitkin	456	Pending			Unknown

Cass	4546	Pending			Unknown
Carlton	456	Pending			Unknown
Cook	456	Pending			Unknown
Crow Wing	456	Pending			Unknown
Itasca	456	Completed	Completed	Yes	
Kanabec	456	Pending			Unknown
Koochiching	456	Pending			Unknown
Lake	456	Pending			Unknown
Pine	456	Pending			Unknown
St. Louis	456	Pending			Unknown

Counties in HSEM Region Two are not currently eligible for any portion of the funds allocated by the Statewide Radio Board to pay a portion of the local enhancement costs.

Previous HSGP Interoperable Communication Funding

FY2006 - $185,000	$90,000 mobile command vehicle for Kanabec and Pine County $95,000 for interoperability for agencies affected by the Itasca County conversion to ARMER.
FY2007 - $520,934	$420,934 is allocated to mobile and portable radio caches which has not been expended as of yet.
FY2008 - $485,000	$265,000 for regional video conferencing. $140,000 Radio IP enhancements to the regional mobile and computer aided dispatch system. $80,000 for mobile command vehicle enhancements and upgrades for Crow Wing and Lake County.

Region Interoperable Communication Strategy

This proposal builds upon the border county project to connect all PSAP's along the Canadian border. The region indicates that the proposal strengthens capabilities for current voice and data needs and for future needs, including enhanced IP applications and that the project enhances the build out of the statewide ARMER Interoperable Communications system and provides for future technologies in voice and data projects that could use the backbone.

From a regional perspective, the region has a board strategy to provide enhanced IP connectivity between PSAP's and with the implementation of the ARMER backbone seeks to leverage the state backbone to support that objective. Providing a microwave link into the ARMER backbone will support present and future cross spectrum interoperability planning. The region appears to have a number of other projects and initiatives that might be supported by this project, including video conferencing, record management systems, computer aided dispatch and voice of IP applications.

Funding Level

The region has indicated that if full funding of their proposal is not possible, they would prioritize the implementation and do a partial implementation.

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Homeland Security Region 3 (Northwest, MN)

Proposal Contact: Jennifer Olson/Mary Hilbrandt
Mary.hilbrand@state.mn.us and jolson@nwrdc.org
DPS/HSEM Region 3 RPC, HSEM Region 3 Planner
218-634-3356/218-745-6733

Requested Amount: $600,000

Investment Description:

The region indicates that in 2007 they participated in a Regional Capability Assessment where the region was given a score of 1.47 out of ten points for communications capabilities (copy of report is attached). Contributing factors to the low score were as follows: inadequate local funding to purchase P25 communication equipment and the lack of communication training and exercise plans.

The regions proposes to expend funds as follows:

- $90,000 for planning to continue funding the Communications Grant/Project Coordination position.
- $500,000 for the purchase of P25 interoperable communications equipment in each of the 14 counties based upon the recommendation of current assessments.
- $5,000 for end user and operators training.
- $5,000 to conduct a series of exercise meetings, including drills, tabletops and functional and/or full scale exercises.

It is significant to note that the specific equipment that will be acquired with the $500,000 and, for that matter, the $776,793 currently outstanding in previous grants will be based upon the recommendation of local assessments currently underway in the region.

ARMER Status:

HSEM Region Two is part of the Phase 456 of the ARMER implementation. Partial implementation of ARMER in Phase 456 is anticipated on existing state tower sites. New sites have been identified and are currently in development.

HSEM Region	ARMER Phase	Local Study Status	ARMER Implemented	ARMER Selected	VHF System Upgraded
Becker	456	Pending			Unknown
Beltrami	456	Pending			Unknown
Clay	4546	Pending			P25

Clearwater	456	Pending			Unknown
Hubbard	456	Pending			Unknown
Kittson	456	Pending			Unknown
Lake Woods	456	Pending			Unknown
Mahnomen	456	Pending			Unknown
Marshall	456	Pending			Unknown
Norman	456	Pending			Unknown
Pennington	456	Pending			Unknown
Polk	456	Pending			Unknown
Red Lake	456	Pending			Unknown
Roseau	456	Pending			Unknown

Counties in HSEM Region Three are not currently eligible for any portion of the funds allocated by the Statewide Radio Board to pay a portion of the local enhancement costs.

Previous HSGP Interoperable Communication Funding

FY2006 - $500,000	$15,000 grant management $4,828 grant drafting costs (planning) $480,172 for communication equipment, including repeaters, sat phones, portable radios, base stations, mobile communication center (Lake of the Woods), microwave, paging and pagers.
FY2007 - $687,416	$2,557.05 for M&A and the following allocations: $376,793 to be allocated for interoperable communications equipment based upon assessments currently underway. $120,000 for Communication Grant/Project Coordination $100,000 for regional TICP development $10,000 TICP training $30,000 for communications training $20,000 regional exercise planning $10,000 exercise development related to new IC equipment $20,662 for grant management
FY2008 - $500,000	$75,000 for continued funding of Communication Grant/Project Coordination $400,000 for interoperable communications equipment based upon assessments currently underway. $5,000 training related to equipment $5,000 exercise development $15,000 for grant management

Region Interoperable Communication Strategy

The regions proposal indicates a strong interest in establishing a P25 standard for equipment and has been very active in establishing a regional governance structure to support regional planning. It is noted that a dominate county (Clay County) received a COPS grant to replace its public safety communication system with a P25 VHF system in conjunction with Fargo/Moorhead region.

The region places tremendous reliance upon the completion of local assessments that are currently underway, referencing that funds will be used as recommended by those assessments.

Funding Level

The region has indicated that if full funding of their proposal is not possible, it would significantly effect the regions progress toward achieving interoperability.

At this point, the region has $776,793 in funds earmarked for Interoperable Communications equipment. The following list indicates how funds were allocated in 2006:

Equipment	Cost	County
2 Repeaters (Sheriff)	$9,000.00	Becker
1 Repeater (EMS)	$4,500.00	Becker
2 Satellite Phones	$1,500.00	Beltrami
Digital Conversion Interface	$8,500.00	Beltrami
17 Portables- Jail	$24,500.00	Clay
4 Base Stations	$12,400.00	Clay
4 Bank Chargers	$5,200.00	Clay
6 Mobiles (Sheriff)	$13,500.00	Clearwater
Dispatch Base System	$31,524.00	Hubbard
Repeater/Portables	$15,000.00	Kittson
1 Mobile Com. Center	$2,000.00	Lake of Woods
10 Portables (Sheriff)	$7,500.00	Lake of Woods
Microwave Trans/Rec	$40,000.00	Mohnomen
8 Mobile Units	$46,848.00	Marshall
2 Mobiles- TRF Fire	$9,000.00	Pennington
Console, Bases, Paging	$115,000.00	Polk
8 Mobiles	$11,200.00	Red Lake
16 Pagers	$8,000.00	Red Lake
3 Digital Microwave	$115,000.00	Roseau

F.1 Communications

Target Capabilities List Outcome Statement

A continuous flow of critical information is maintained as needed among multi-jurisdictional and multi-disciplinary emergency responders, command posts, agencies, and the governmental officials for the duration of the emergency response operation in compliance with National Incident Management System (NIMS). To accomplish this, the jurisdiction has a continuity of operations plan for public safety communications to include the consideration of critical components, networks, support systems, personnel, and an appropriate level of redundant communications systems in the event of an emergency.

Communications
Average Capability Score
1.47

Regional Capability Profile

To promote interoperability, the counties in Region 3 share frequencies and some agencies have small caches of radios. Region 3 primarily uses analog very high frequency (VHF) systems, with some counties being able to purchase P25 equipment. There is little redundant communications other than the use of satellite phones and local ham radio operators. The State radio plan has funding for the system backbone. Region 3 needs a regional communications working group with representation from all disciplines to further promote and incorporate interoperability and tactical plans.

The following factors contributed to Region 3's scores:

- Individual counties have local plans; they need assistance to develop regional communications action committees.
- Agencies and 911 Centers within Region 3 do not receive adequate local funding to purchase P25 communication equipment or create, maintain, train for and exercise disaster plans.
- Local entities need an assessment to get the numbers and information to make sound educated business decisions concerning operations and communications.

Future goals for Region 3 include the following:

- Create a regional communications interoperability action committee comprised of local elected officials, Tribal officials, law enforcement, fire, emergency medical services (EMS), dispatcher leadership, technical support staff, health, public works and others as they become apparent.
- Develop a tactical working group to apply for grants/funding, and create a regional plan that increases interoperability, use of tactical frequencies and disaster/tactical Standard Operating Procedures for Region 3.
- Consider utilizing the State trucking system and migrate towards a strategic Statewide communications plan.

The interoperability continuum, which is a best practice, provides Region 3 with a visual depiction of where they are and where they need to go. This will provide Region 3's needs and requirements when they compile local capabilities and gaps (bottom up approach) to the regional picture. The use of the SAFECOM template is imperative to sustain the capability of the regional concept.

Capability Findings

Scale values for 17 measures were aggregated to generate Region 3's average score. The figure on the following page presents the minimum, maximum, and average for the measures in this capability. The average score for this capability indicates ***Limited Progress*** towards achieving the capability's outcome.

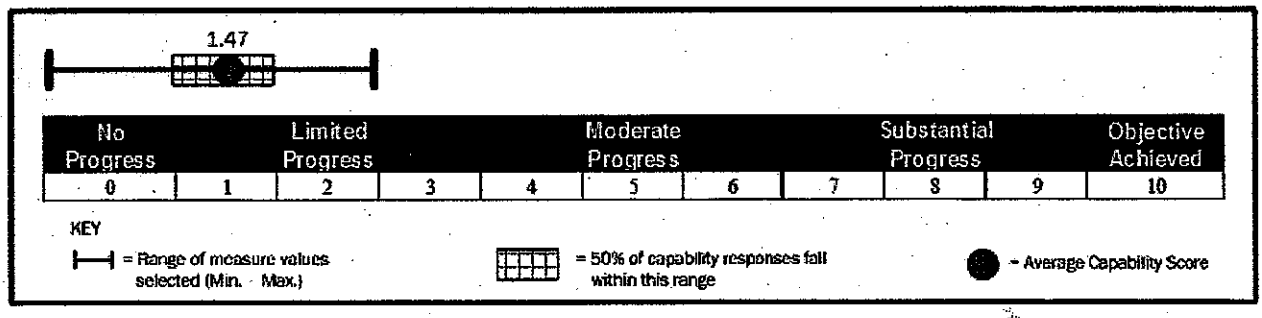

Figure 1: Communications Summary

Comparison of Average Scores

The average score for the Communications capability falls below the average score for the Common Capabilities and below the average score for all Target Capabilities assessed in Region 3.

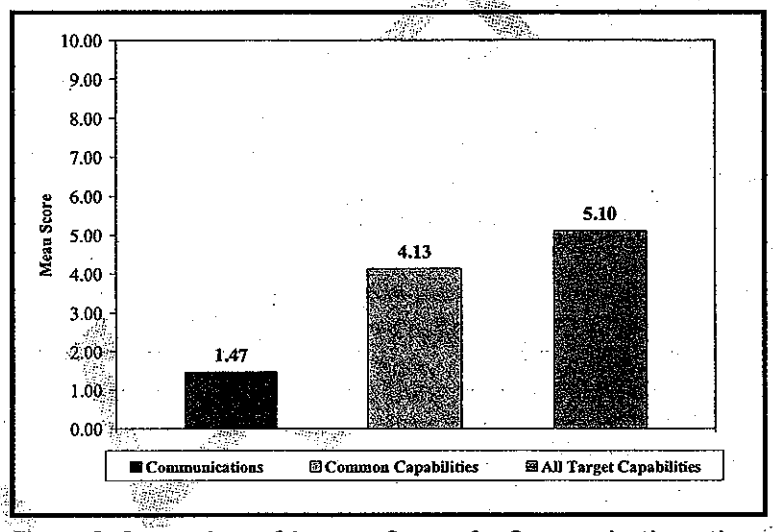

Figure 2: Comparison of Average Scores for Communications, the Common Capabilities, and All Target Capabilities

Capability Summary

To aid in the identification of areas for future resource commitment, the figures on the following pages provide Region 3's responses to each measure within the Communications capability.

The Communications plans within the region are based on a formal assessment of risks and vulnerabilities.

Our region coordinates the procurement of Communications assets to ensure interoperability.

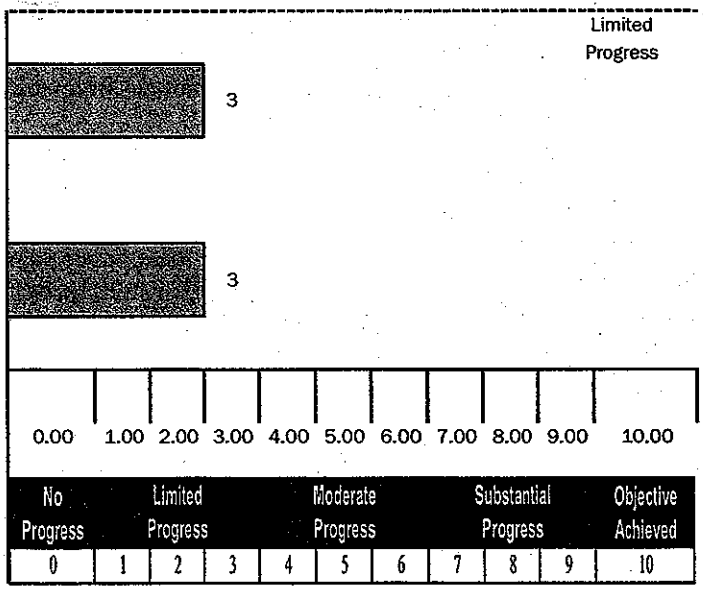

Figure 3: Regional Measure Responses for the Communications Capability

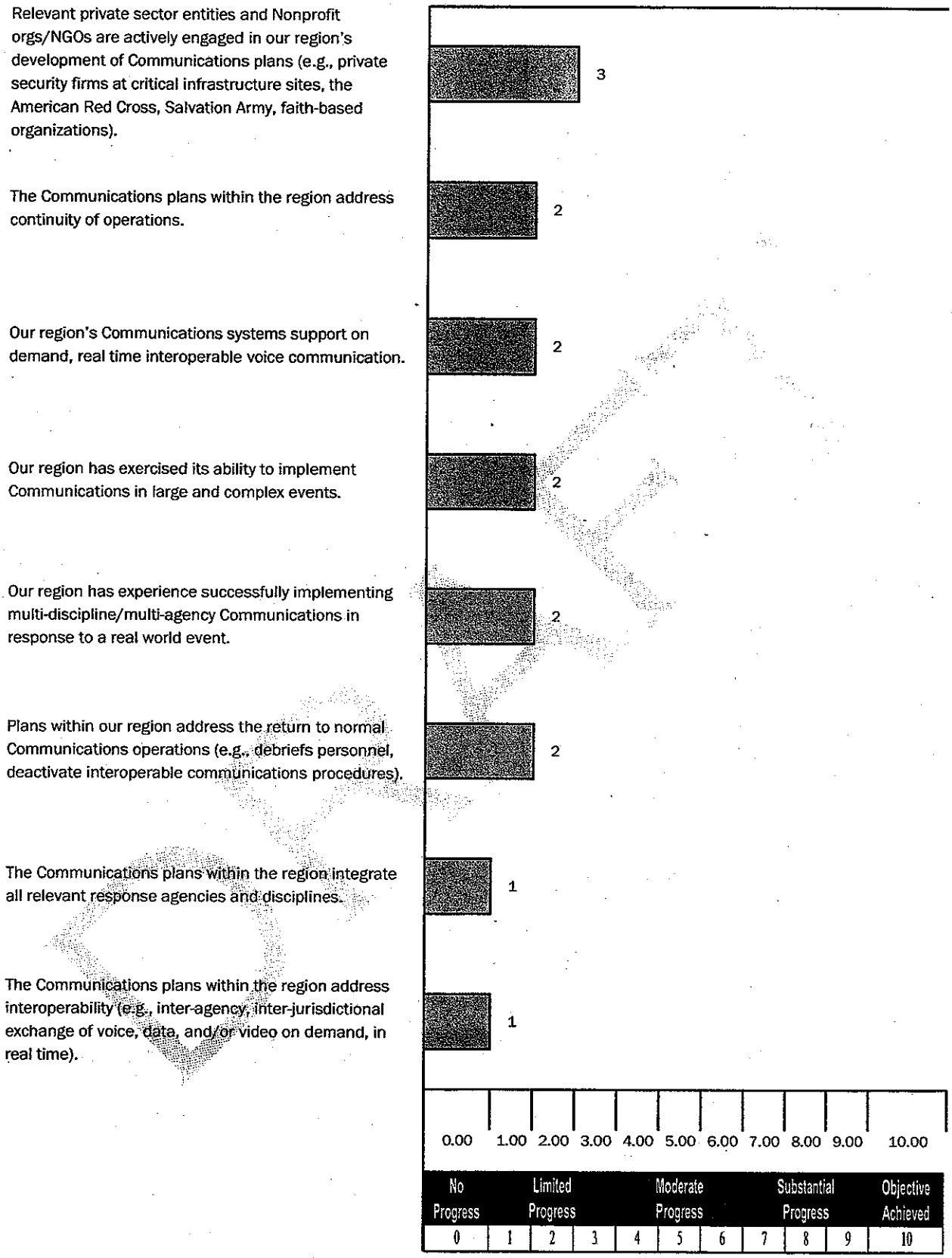

Figure 4: Regional Measure Responses for the Communications Capability (continued)

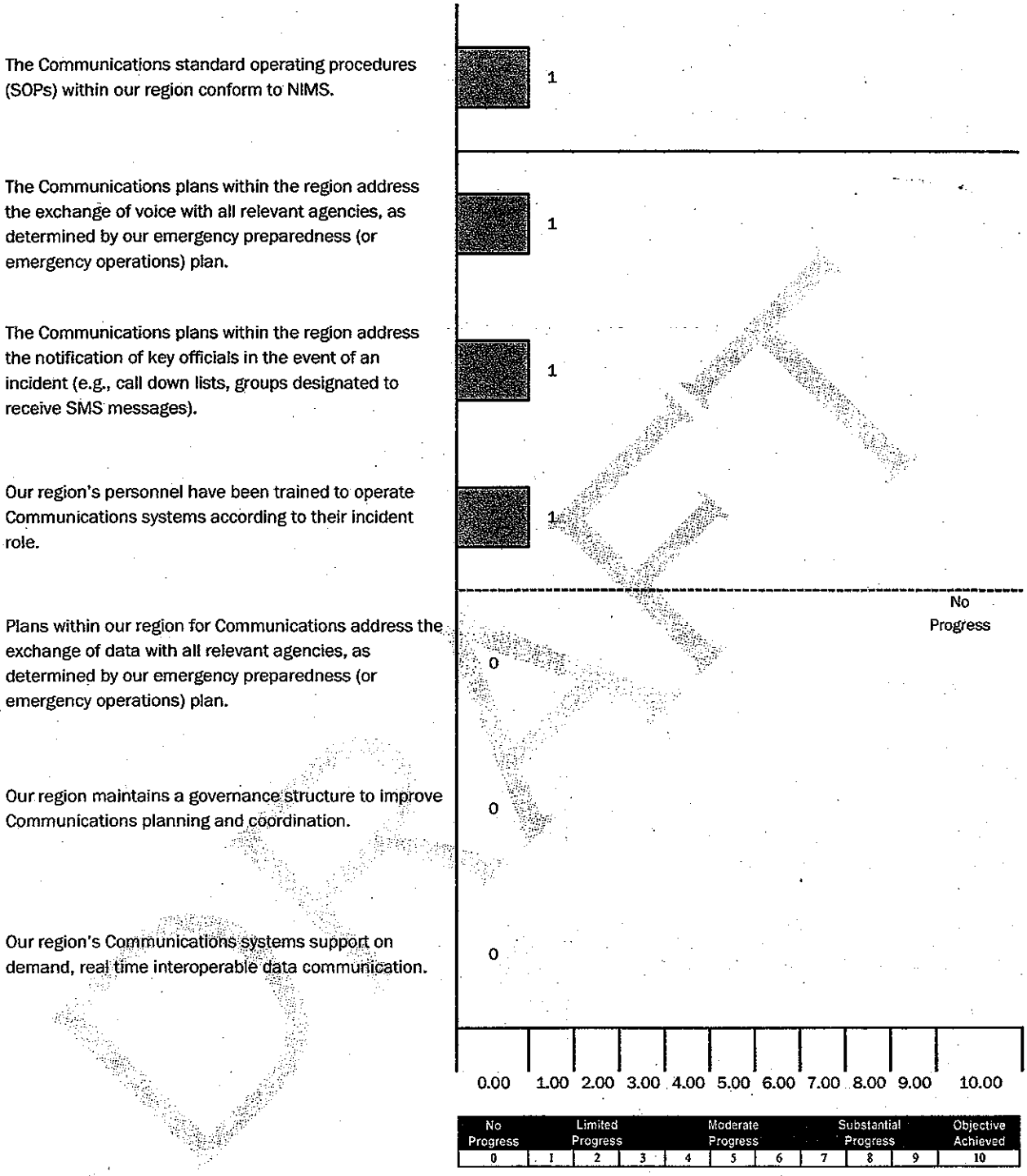

Figure 5: Regional Measure Responses to the Communications Capability (continued)

On-site Visit Observations

High-level observations captured during the On-site Visit are presented below.

Communications Capability On-Site Observations
Strengths: • A new regional radio board is currently being implemented to handle various tasks and foster dialogue throughout Region 3
Areas for Improvement: • The level of available communications and interoperability varies dramatically from county to county • Analog, ham (amateur) radio, and 800MHz are all used to varying degrees throughout Region 3 • Funding, geography, and topography all pose barriers to improving communications within Region 3 • Region 3 cited a need for increased exercises using communication equipment

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Homeland Security Region 4 (Central, MN)

Proposal Contact: Sheriff Tom Larson, Pope County Sheriff
Tom.larson@co.pope.mn.us
Pope County Emergency Manager
320-634-5411

Requested Amount: $17,807,600

Investment Description:

The HSEM Region 4 proposal provides funding for portable and mobile radios necessary to replace equipment in the 18 counties making up the region. The proposal indicates the HSEM region has worked very closely with the Central Minnesota Regional Radio Board to develop a coordinated proposal and determined that subscriber radios are the regions highest priority.

The proposal provides for interoperability equipment as follows:

2,964 portable radios	$8,447,400
2,753 mobile radios	$9,360,200

It is noted that the proposal specifies that funds will be used to acquire P25 capable equipment but is not limited to ARMER capable equipment (700/800 MHz equipment).

ARMER Status:

A substantial portion of HSEM Region Four is part of the Phase 3 of the ARMER implementation. The Phase 3 implementation in central MN will be completed during 2009.

HSEM Region	ARMER Phase	Local Study Status	ARMER Implemented	ARMER Selected	VHF System Upgraded
Benton	3	Completed	In Progress	Yes	
Big Stone	3	Completed			Unknown
Douglas	456	Completed			Unknown
Grant	456	Completed			Unknown
Kandiyohi	3	Completed	In Progress	Yes	
Meeker	3	Completed			Unknown
Mille Lacs	456	In Progress			Unknown
Morrison	456	Completed			Unknown
Otter Tail	456	Completed			Unknown

Pope	3	Completed			Unknown
Stearns	3	Completed	Completed	Yes	
Stevens	3	Completed			Unknown
Swift	3	Completed			Unknown
Todd	3	Completed			Unknown
Traverse	3	Completed			Unknown
Wadena	456	Completed			Unknown
Wilkin	456	Completed			Unknown
Wright	3	Completed	In Progress	Yes	

The following counties in HSEM Region Four Three that are eligible for a portion of the funds allocated by the Statewide Radio Board to pay a portion of the local enhancement costs: Benton, Stearns and Wright.

Previous HSGP Interoperable Communication Funding

FY2006 – unspecified	
FY2007 - $741,392	- Contract for regional Tactical Interoperable Communication plan development. - Contract for detail county by county planning for radio system implementations.
FY2008 - $500,000	

Region Interoperable Communication Strategy

The proposal indicates the region is working closely with the Central MN Regional Radio Board, which has done extensive work in developing local assessments of communication infrastructure. This planning anticipates the Phase Three implementation of the backbone throughout a large portion of the region and enhancements necessary for enhanced interoperability.

Funding Level

The region did not respond to the request for additional information. However, when the proposal was submitted the region acknowledged that it did not anticipate its proposal would be fully funded.

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Homeland Security Region 5 (SW, MN)

Proposal Contact: Jim Reinert, Murray County Emergency Manager
jreinert@co.murray.mn.us
320-634-5411

Requested Amount: $270,000

Investment Description:

The HSEM Region 5 proposal provides funding for the acquisition of two multi-spectrum portable radios for each Emergency Manager and for each of the two tribal governments within the region. The proposal indicates VHF/800 MHz radios will be used to assure each E.M. is capable of communicating with neighboring counties, irrespective of with communication system exists. As noted in the HSEM Region 5 proposal, counties within the region are currently participating in local assessments and that this proposal will provide the resources to assure Emergence Management have the ability to operate in a cross spectrum environment.

$5,000 of the total requested grant amount is allocated to planning to pay the cost of acquiring the programming the radios, $250,000 is allocated to equipment for 40 radios ($6,250 per radio) and $15,000 is allocated to training for the new equipment.

ARMER Status:

The counties in HSEM Region 5 are all part of the Phase 456 ARMER implementation. In a number of instances, basic communications on tower sites already maintained by the state may occur during 2010. Additional sites have been identified and site acquisition and development is currently underway.

HSEM Region	ARMER Phase	Local Study Status	ARMER Implemented	ARMER Selected	VHF System Upgraded
Brown	456	In Progress			Unknown
Chippewa	456	In Progress			Unknown
Cottonwood	456	In Progress			Unknown
Jackson	456	In Progress			Unknown
LacQuiParle	456	In Progress			Unknown
Lincoln	456	In Progress			VHF
Lyons	456	In Progress			Unknown
Pipeston	456	In Progress			Unknown
Martin	456	In Progress			Unknown
McLeod	456	In Progress			Unknown

Murray	456	In Progress			Unknown
Nobles	456	In Progress			Unknown
Redwood	456	In Progress			P25 VHF
Rock	456	In Progress			Unknown
Sibley	456	In Progress			Unknown
Watonwan	456	In Progress			Unknown
Yellow Medicine	456	In Progress			Unknown

No of the counties in HSEM Region Five are eligible for funds allocated by the Statewide Radio Board to pay a portion of the local enhancement costs: Benton, Stearns and Wright.

Previous HSGP Interoperable Communication Funding

FY2006 – unspecified	
FY2007 - $741,392	$100,000 - Contract for regional Tactical Interoperable Communication plan development.
FY2008 - $500,000	

Region Interoperable Communication Strategy

The region's proposal indicates that counties are currently participating in local assessments. Based upon that comment, it would appear that the region and counties have not been able to develop a broader interoperability strategy. The proposal provides resources necessary to address cross spectrum issues at the Emergency Management level.

Funding Level

The region did not respond to the request for additional information. However, the regions proposal is reasonable straightforward and the implications of receiving lesser amount might be anticipated to be reducing the number of radios per county or staging the acquisition over more than one year.

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Homeland Security Region 6 (Metro, MN)

Proposal Contact: Jennifer Callahan, Assist. Director of Emergency Management
Sherburne County
763-241-4561

Requested Amount: $430,000

Investment Description:

HSEM Region Six proposal provides funding for improvements to the ARMER communications system in the metropolitan area, including improvements to radio towers, fiber optics and the acquisition of additional ARMER subscriber radios.

With respect to the fiber optics portion of the grant proposal, $82,000 would fund the implementation of a fiber optics link between the Carver County tower sites into the county's countywide fiber optics ring. The proposal indicates this fiber optics link would provide greater reliability and redundancy in the ARMER network.

The proposal calls for funds to be allocated as follows:

$25,000 for planning, $325,000 for equipment, $25,000 for training and $60,000 for exercise development. With respect to training and exercise funds, those funds would be used for TICP training and exercise development.

ARMER Status:

The counties in HSEM Region 6 are all part of the original ARMER implementation, except for Sherburne County. Anoka, Carver, Dakota, Hennepin, Ramsey and Washington Counties have all transitioned to the ARMER system. Scott and Sherburne County is in the process of transitioning. Isanti and Chisago Counties did provide some enhancements to the basic network with available grant funds a number of years ago, but they have not transitioned on to the ARMER system. It is noted that Sherburne County is a member of the Central MN Regional Radio Board, whereas all other counties in HSEM Region 6 are covered by the Metropolitan Emergency Services Board.

HSEM Region	ARMER Phase	Local Study Status	ARMER Implemented	ARMER Selected	VHF System Upgraded
Anoka	1	N/A	Yes		
Carver	1	N/A	Yes		
Chisago	1	N/A	No		Yes
Dakota	1	N/A	Yes		
Hennepin	1	N/A	Yes		

Isanti	1	N/A	No		No
Ramsey	1	N/A	Yes		
Scott	1	N/A	Pending		
Sherburne	3	N/A	Pending		
Washington	1	N/A	Yes		

Counties in HSEM Region Six have been eligible for funds allocated by the Statewide Radio Board to pay a portion of the local enhancement costs, including Sherburne County.

Previous HSGP Interoperable Communication Funding

FY2006 – unspecified	
FY2007 - $114,000	$114,000
FY2008 - $500,000	

Region Interoperable Communication Strategy

The region's proposal relies on the fact that the metropolitan area has transitioned to the ARMER public safety system and the fact a regional TICP has been developed. Acting through the Metropolitan Emergency Services Board, extensive organizational work and planning has already occurred in the metropolitan area.

Funding Level

The region did not fully respond to the request for additional information. The details of the regions radio tower improvement proposal are not clear and may overlap with proposals the proposal from the Metropolitan Emergency Services Board. It is also noted that $45,000 in funding was provided to the Twin City UASI Region for TICP exercise development in the FY2008 Interoperable Emergency Communications Grant Program (IECGP).

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Metropolitan Emergency Services Board (Metro, MN)

Proposal Contact: Jill Rohret, Regional Radio Coordinator
Metropolitan Emergency Services Board (MESB)
651-643-8394

Requested Amount: $1,135,350

Investment Description:

The MESB proposal provides funding for local improvements to the ARMER communications system in the Dakota, Anoka and Scott/Carver sub-systems. It provides funding to add one additional channel in each of the systems to provide additional capacity. This proposal would address the continued development of the ARMER backbone, resulting in hirer levels of transient radio traffic in each of the sub-systems. Experience is indicating that up to 40% of system capacity is used by transient or itinerant users. The additional channels in each sub-system would provide additional surge capacity in the metro area.

The allocation of funds for this proposal is as follows:

Dakota County Sub-system	$343,605
Anoka County Sub-system	$378,450
Carver/Scott Sub-system	$413,295

ARMER Status:

The counties in HSEM Region 6 are all part of the original ARMER implementation, except for Sherburne County. Anoka, Carver, Dakota, Hennepin, Ramsey and Washington Counties have all transitioned to the ARMER system. Scott and Sherburne County is in the process of transitioning. Isanti and Chisago Counties did provide some enhancements to the basic network with available grant funds a number of years ago, but they have not transitioned on to the ARMER system. It is noted that Sherburne County is a member of the Central MN Regional Radio Board, whereas all other counties in HSEM Region 6 are covered by the Metropolitan Emergency Services Board.

HSEM Region	ARMER Phase	Local Study Status	ARMER Implemented	ARMER Selected	VHF System Upgraded
Anoka	1	N/A	Yes		
Carver	1	N/A	Yes		
Chisago	1	N/A	No		Yes
Dakota	1	N/A	Yes		
Hennepin	1	N/A	Yes		

Isanti	1	N/A	No		No
Ramsey	1	N/A	Yes		
Scott	1	N/A	Pending		
Washington	1	N/A	Yes		

Counties in the MESB have been eligible for funds allocated by the Statewide Radio Board to pay a portion of the local enhancement costs, including Sherburne County.

Previous HSGP Interoperable Communication Funding

FY2006 – none	
FY2007 – none	
FY2008 - none	

Region Interoperable Communication Strategy

The region's proposal relies on the fact that the metropolitan area has transitioned to the ARMER public safety system and the fact a regional TICP has been developed. Acting through the Metropolitan Emergency Services Board, extensive organizational work and planning has already occurred in the metropolitan area.

Funding Level

If not fully funded, the proposal does allow for partial funding on any single county implementation. In follow up material the MESB indicated that if full funding was not available, the individual counties may need to contribute a portion of the cost.

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Border Counties- Kittson, Roseau, Lake of the Woods, Koochiching, St. Louis, Lake and Cook

Proposal Contact: Lt. Scott Camps, St. Louis County Emergency Manager
St. Louis County Sheriff's Office
218-625-3967

Requested Amount: $875,000

Investment Description:

The Border County proposal provides funding necessary to complete the development of a dedicated microwave connection across Minnesota's Canadian border. The project was proposed in two phases, as follows:

- Phase One- linking each of the seven county PSAP's into the state's microwave backbone.
- Phase Two- provide dedicated microwave links across the ARMER backbone to connect all border county PSAP's.

Based upon the unique responsibilities of counties along the international border, this proposal addresses the common needs of counties within two regions (HSEM Region 2 and 3) and Regional Radio Boards (NE and NW RRB).

ARMER Status:

HSEM Region	ARMER Phase	Local Study Status	ARMER Implemented	ARMER Selected	VHF System Upgraded
Cook	456	Pending			Unknown
Kittson	456	Pending			Unknown
Koochiching	456	Pending			Unknown
Lake	456	Pending			Unknown
Lake of the Woods	456	Pending			Unknown
Roseau	456	Pending			Unknown
St. Louis	456	Pending			Unknown

Previous HSGP Interoperable Communication Funding

FY2006 – none	
FY2007 – $1,000,000	

FY2008 – $1,000,000	

Region Interoperable Communication Strategy

The strategy to develop a dedicated microwave network across Minnesota's northern border was originally proposed in FY2006. The Border Counties have submitted it each year thereafter, requesting funds to fully fund the initiative.

The initiative supports various elements of the State Preparedness Report related to interoperable communications. The counties indicate completion of this project will support a statewide communications network, criminal justice systems and enhance projects associated with the North Eastern Minnesota Enforcement and Safety Information System (NEMESIS) which provides a shared Records Management System among four of the seven border counties and shared Computer Aided Dispatch among two of the seven border counties.

In response to follow up questions, the counties indicate that they have not yet expended any of the funds allocated in FY2007 or FY2008. The counties indicate the project must be coordinated with MnDOT's implementation of the ARMER public safety communication system in Phase 456. It would appear that the project anticipates sharing towers with the ARMER backbone, but that the proposal anticipates a separate dedicated microwave backbone (41 hoops) across the northern tier.

Funding Level

If not fully funded, the counties indicate it would be necessary for them to continue to seek funding until the project was fully funded.

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Division of Emergency Communication Networks
ARMER Implementation

Proposal Contact: Scott Wiggins, Director
Scott.wiggins@state.mn.us
Division of Emergency Communication Networks
651-201-7546

Requested Amount: $500,000

Investment Description:

This investment proposal provides funds for the detail design and specifications necessary for county integrations on to the ARMER backbone. This proposal builds upon the fact that the Phase Three implementation in central MN and southeastern MN is nearly complete and a number of local assessments have been completed. The completion of these assessments and the Phase Three backbone places a number of counties at the next step in their infrastructure renewal process.

This proposal is specifically directed at ARMER implementations as those implementations are consistent with the state's desire to achieve the highest level of interoperability by encouraging the adoption of a standards based common infrastructure. Similarly, that alternative does require an additional level of planning for operations and interoperability.

The funds assigned to this proposal would be allocated to the regional radio boards for allocation to individual counties. The detail design and specification planning is projected at $35,000-40,000 per plan and would thusly, provide funding for up to 15 county planning processes.

ARMER Status:

Phase One of the ARMER plan, which provided for construction of the ARMER backbone in the metropolitan area was completed in 2002. Phase Two provided for local implementations in the metropolitan area. At this point, local county implementations (Phase Two) have occurred in Anoka, Carver, Dakota, Hennepin, Ramsey and Washington Counties with implementation in Scott County planned to occur for 2009.

Phase Three of the ARMER providing a backbone in 23 counties of southeastern and central Minnesota was funded in 2005 and will be completed during 2009. Local implementations in Stearns and Olmsted County occurred during 2005 & 2006. Local assessments have been conducted in a large portion of central Minnesota, and a number

of counties in central Minnesota (Sherburne, Wright, Kandiyohi and others) have elected to proceed with local implementations.

Phase 456 was funded in 2007. Detail backbone planning was completed midyear 2008 and implementation is proceeding. Of particular note is the local Itasca County implementation of an ARMER compatible system that has been linked into the ARMER backbone. Zone controllers are now in place for all regions of Minnesota, providing the opportunity to encourage local integrations on to the ARMER backbone at any location in the state.

Previous HSGP Interoperable Communication Funding

FY2006 – $332,000	$332,000 allocated to counties for local planning and assessments.
FY2007 – $100,000 local $400,000 state	$400,000 was allocated to DECN for Interoperable Communications planning (used for SCIP development) $100,000 allocated to Stearns County for local planning Central MN.
FY2008 - none	

Region Interoperable Communication Strategy

This proposal relates directly to the statewide strategy to encourage ARMER system participation. Funding the local planning process has been a critical link in supporting Minnesota's overall strategy to encourage and support local ARMER participation. This proposal would continue to support that initiative.

Funding Level

This proposal would provide funds for up to 15 detail design plans. A lesser level of funding would result in funding a reduced number of local detail designs.

FY2009 State Homeland Security Program (SHSP)
Statewide Radio Board- Interoperability Committee
Grant Workgroup

Proposing Region or Entity: Division of Emergency Communication Networks
ARMER Implementation

Proposal Contact: Scott Wiggins, Director
Scott.wiggins@state.mn.us
Division of Emergency Communication Networks
651-201-7546

Requested Amount: $3,000,000

Investment Description:

This investment proposal provides funds for local costs related to county integrations on to the ARMER backbone. This proposal builds upon the fact that the Phase Three implementation in central MN and southeastern MN is nearly complete and a number of local assessments have been completed. The completion of these assessments and the Phase Three backbone places a number of counties in the position to elect to transition to the ARMER backbone.

This proposal is specifically directed at ARMER implementations as those implementations are consistent with the state's desire to achieve the highest level of interoperability by encouraging the adoption of a standards based common infrastructure. Similarly, that alternative does require an additional level of planning for operations and interoperability.

The funds assigned to this proposal would be allocated to the regional radio boards for allocation to individual counties electing to transition to the ARMER system, in those instances where the county is not eligible for state grants provided for to counties in SE Minnesota or the four counties in central Minnesota of Phase Three.

A**MER Status**:

Phase One of the ARMER plan, which provided for construction of the ARMER backbone in the metropolitan area was completed in 2002. Phase Two provided for local implementations in the metropolitan area. At this point, local county implementations (Phase Two) have occurred in Anoka, Carver, Dakota, Hennepin, Ramsey and Washington Counties with implementation in Scott County planned to occur for 2009.

Phase Three of the ARMER providing a backbone in 23 counties of southeastern and central Minnesota was funded in 2005 and will be completed during 2009. Local implementations in Stearns and Olmsted County occurred during 2005 & 2006. Local assessments have been conducted in a large portion of central Minnesota, and a number

of counties in central Minnesota (Sherburne, Wright, Kandiyohi and others) have elected to proceed with local implementations.

Phase 456 was funded in 2007. Detail backbone planning was completed midyear 2008 and implementation is proceeding. Of particular note is the local Itasca County implementation of an ARMER compatible system that has been linked into the ARMER backbone. Zone controllers are now in place for all regions of Minnesota, providing the opportunity to encourage local integrations on to the ARMER backbone at any location in the state.

Previous HSGP Interoperable Communication Funding

FY2006 - $425,000	$80,000 Goodhue County $220,000 Itasca County $125,000 Stearns County- was reallocated to planning
FY2007 - None	
FY2008 - None	

During 2003, 2004 and 2005 grant funds were allocated to counties and other local units of government to encourage ARMER system participation. In 2005, state funds were appropriated to pay a portion of local implementation costs in all counties in the SE, MN implementation of Phase Three and four counties (Benton, Stearns, Sherburne and Wright) in the Central MN implementation of Phase Three.

Region Interoperable Communication Strategy

This proposal relates directly to the statewide strategy to encourage ARMER system participation. Partial funding of local costs for county integrations on to the ARMER system supports Minnesota's overall strategy to encourage and support local ARMER participation. This proposal would continue to support that initiative.

Funding Level

The number and amount of support that might be provided to counties electing to transition to the ARMER backbone.

Emergency Communication Networks
444 Cedar Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.282.6565 • Fax: 651.296.2665 • TTY: 651.282.6555

MEMO

To: **NW Regional Radio Board/Regional Advisory Committee**

From: Ron Whitehead

Date: December 31, 2008

Subject: Synopsis of Outstanding Grants

The following is a summary of funds that have been allocated to the NW Regional Radio Boards:

2008 State Homeland Security Grant Program

Task #	Planning	Training	Equipment	Exercise	M&A
1			$84,350.00		$2,608.00

Task 1- Mobile/Portable Radios for Cross Spectrum Interoperability.
Required Match: None
Performance Period: Two years (refer to grant contract)

2008 Interoperable Emergency Communication Grant (IECGP)

Task #	Planning	Training	Equipment	Exercise	M&A
1	$75,753.00*				$2,343.00

Task 1 Participant Expenses (Planning, Training & Exercise
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: A small amount was placed in Training and Exercise categories, as funds can be shifted between categories as long as there was funding in the category initially.

Note: $500,000 was also allocated to HSEM Region 3 for Interoperable Communications.

Public Safety Interoperable Communication Grant (PSIC)

Task #	Planning	Training	Equipment	Exercise	M&A
1					$30,750.00

Task 1 State M&A funds allocated for RRB Administrative Costs
Required Match: 25% of grant amount (20% of grant + match)-$7,688.00
Performance Period: Grant ends June 30, 2010
$15,000 in 2008, $10,500 in 2009 and $5,250 in 2010

Task #	Planning	Training	Equipment	Exercise	M&A
1			$554,396.00		
2					18,966.00
3		$77,818.00			

Task 1 700/800 subscriber equipment
Required Match: 25% of grant amount (20% of grant+ match)-$138,599.00
Performance Period: Grant ends June 30, 2010

Task 2 PSIC Management and Administrative Funds (these investments)
Required Match: 25% of grant amount (20% of grant + match)-$18,966.00
Performance Period: Grant ends June 30, 2010

Task 3 Training Costs (course fees, attendance expenses, etc)
Required Match: None
Performance Period: Grant ends June 30, 2010

Additional Funds

2007 DHS Grant Program

$100,000 was allocated to HSEM Region 3 for Tactical Interoperable Communication plan and exercise development and $100,000 was allocated to HSEM Region 3 for Interoperable Communication planning. Additional funds were allocated to the border counties (3 counties are part of the NW RRB) for Tactical Interoperable Communication plan and exercise development.

Required Match: None
Performance Period: Initial expiration date June 30, 2009 but can be extended to accomplish the purpose.

Emergency Communication Networks
444 Cedar Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.282.6565 • Fax: 651.296.2665 • TTY: 651.282.6555

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Office of Communications
Office of Justice Programs
Office of Traffic Safety
State Fire Marshal and Pipeline Safety

MEMO

To: **NE MN Regional Radio Board/Regional Advisory Committee**

From: Ron Whitehead

Date: December 31, 2008

Subject: Synopsis of Outstanding Grants

The following is a summary of funds that have been allocated to the NE Regional Radio Boards:

2008 State Homeland Security Grant Program

Task #	Planning	Training	Equipment	Exercise	M&A
1			$99,487.00		$3,077.00
2			$273,590.00		$8,461.00

Task 1- Mobile/Portable Radios for Cross Spectrum Interoperability.
Required Match: None
Performance Period: Two years (refer to grant contract)

Task 2 VHF/UHF ARMER Backbone based Infrastructure
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: $500,000 was also allocated to HSEM Region 2 for Interoperable Communications.

2008 Interoperable Emergency Communication Grant (IECGP)

Task #	Planning	Training	Equipment	Exercise	M&A
1	$59,632.00*				$1,844.00

Task 1 Participant Expenses (Planning, Training & Exercise
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: A small amount was placed in Training and Exercise categories, as funds can be shifted between categories as long as there was funding in the category initially.

Public Safety Interoperable Communication Grant (PSIC)

Task #	Planning	Training	Equipment	Exercise	M&A
1					$32,250.00

Task 1 State M&A funds allocated for RRB Administrative Costs
Includes $1,500.00 allocated to RAC prior to establishment of RRB.
Required Match: 25% of grant amount (20% of grant + match) - $8,063.00
Performance Period: Grant ends September 30, 2010

Task #	Planning	Training	Equipment	Exercise	M&A
1			$514,180.00		
2					17,894.00
3		$82,281.00			

Task 1 700/800 subscriber equipment
Required Match: 25% of grant amount (20% of grant+ match)-$128,545.00
Performance Period: Grant ends June 30, 2010

Task 2 PSIC Management and Administrative Funds (these investments)
Required Match: 25% of grant amount (20% of grant + match)-$4,474.00
Performance Period: Grant ends June 30, 2010

Task 3 Training Costs (course fees, attendance expenses, etc)
Required Match: None
Performance Period: Grant ends June 30, 2010

Additional Funds

2007 DHS Grant Program

$100,000 was allocated to HSEM Region 2 for Tactical Interoperable Communication plan and exercise development and $100,000 was allocated to HSEM Region 2 for Interoperable Communication planning. Additional funds were allocated to the border counties (4 counties are part of the NE RRB) for Tactical Interoperable Communication plan and exercise development.

Required Match: None
Performance Period: Initial expiration date June 30, 2009 but can be extended to accomplish the purpose.

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MEMO

To: **Central MN Regional Radio Board/Regional Advisory Committee**

From: Ron Whitehead

Date: December 31, 2008

Subject: Synopsis of Outstanding Grants

The following is a summary of funds that have been allocated to the Central MN Regional Radio Boards:

2008 State Homeland Security Grant Program

Task #	Planning	Training	Equipment	Exercise	M&A
1			$152,695.00		$4,723.00
2			$771,026.00		$23,846.00

Task 1- Mobile/Portable Radios for Cross Spectrum Interoperability.
Required Match: None
Performance Period: Two years (refer to grant contract)

Task 2 VHF/UHF ARMER Backbone based Infrastructure
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: $500,000 was also allocated to HSEM Region 4 for Interoperable Communications.

2008 Interoperable Emergency Communication Grant (IECGP)

Task #	Planning	Training	Equipment	Exercise	M&A
1	$102,620.00*				$3,174.00

Task 1 Participant Expenses (Planning, Training & Exercise
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: A small amount was placed in Training and Exercise categories, as funds can be shifted between categories as long as there was funding in the category initially.

Public Safety Interoperable Communication Grant (PSIC)

Task #	Planning	Training	Equipment	Exercise	M&A
1					$41,000.00

Task 1 State M&A funds allocated for RRB Administrative Costs
Required Match: 25% of grant amount (20% of grant + match)-$10,250.00
Performance Period: Grant ends September 30, 2010
$20,000 in 2008, $14,000 in 2009 and $7,000 in 2010

Task #	Planning	Training	Equipment	Exercise	M&A
1			$842,823.00		
2					$29,183.00
3		$129,935.00			

Task 1 700/800 subscriber equipment
Required Match: 25% of grant amount (20% of grant+ match)-$210,706.00
Performance Period: Grant ends June 30, 2010

Task 2 PSIC Management and Administrative Funds (these investments)
Required Match: 25% of grant amount (20% of grant + match)-$7,296.00
Performance Period: Grant ends June 30, 2010

Task 3 Training Costs (course fees, attendance expenses, etc)
Required Match: None
Performance Period: Grant ends June 30, 2010

Additional Funds

2007 DHS Grant Program

$100,000 was allocated to HSEM Region 4 for Tactical Interoperable Communication plan and exercise development and $100,000 was allocated to HSEM Region 4 for Interoperable Communication planning.

Required Match: None
Performance Period: Initial expiration date June 30, 2009 but can be extended to accomplish the purpose.

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MEMO

To: **MESB Regional Radio Board**

From: Ron Whitehead

Date: December 31, 2008

Subject: Synopsis of Outstanding Grants

The following is a summary of funds that have been allocated to the MESB Regional Radio Boards:

2008 State Homeland Security Grant Program

Task #	Planning	Training	Equipment	Exercise	M&A
1			$390,262.00		$12,070.00
2					

Task 1- Mobile/Portable Radios for Cross Spectrum Interoperability.
Required Match: None
Performance Period: Two years (refer to grant contract)

Task 2 VHF/UHF ARMER Backbone based Infrastructure
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: $500,000 was also allocated to HSEM Region 6 for Interoperable Communications. Additional funds are allocated to the Urban Area Security Initiative (UASI).

2008 Interoperable Emergency Communication Grant (IECGP)

Task #	Planning	Training	Equipment	Exercise	M&A
1	$48,885.00*				$1,512.00

Task 1 Participant Expenses (Planning, Training & Exercise
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: A small amount was placed in Training and Exercise categories, as funds can be shifted between categories as long as there was funding in the category initially.

Public Safety Interoperable Communication Grant (PSIC)

Task #	Planning	Training	Equipment	Exercise	M&A
1					None

Task 1 State M&A funds allocated for RRB Administrative Costs
Required Match: 25% of grant amount (20% of grant + match)
Performance Period: Grant ends September 30, 2010

Task #	Planning	Training	Equipment	Exercise	M&A
1			$1,151,457.00		
2					$37,441.00
3		$96,567.00			

Task 1 700/800 subscriber equipment
Required Match: 25% of grant amount (20% of grant+ match)-$287,864.00
Performance Period: Grant ends June 30, 2010

Task 2 PSIC Management and Administrative Funds (these investments)
Required Match: 25% of grant amount (20% of grant + match)-$9,360.00
Performance Period: Grant ends June 30, 2010

Task 3 Training Costs (course fees, attendance expenses, etc)
Required Match: None
Performance Period: Grant ends June 30, 2010

Additional Funds

2007 DHS Grant Program

$188,000 was allocated to the MESB for Tactical Interoperable Communication plan and exercise development from the State's share of UASI funds in 2007. $45,000 was allocated to the UASI for Interoperable Communications exercise development from the 2008 IECGP program.

Required Match: None
Performance Period: Initial expiration date June 30, 2009 but can be extended to accomplish the purpose.

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MEMO

To: **SW MN Regional Radio Board/Regional Advisory Committee**

From: Ron Whitehead

Date: December 31, 2008

Subject: Synopsis of Outstanding Grants

The following is a summary of funds that have been allocated to the SW Regional Radio Boards:

2008 State Homeland Security Grant Program

Task #	Planning	Training	Equipment	Exercise	M&A
1			$70,806.00		$2,190.00
2					

Task 1- Mobile/Portable Radios for Cross Spectrum Interoperability.
Required Match: None
Performance Period: Two years (refer to grant contract)

Task 2 VHF/UHF ARMER Backbone based Infrastructure
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: $500,000 was also allocated to HSEM Region 5 for Interoperable Communications. HSEM Region 5 covers the SW RRB and a portion of the SC RRB.

2008 Interoperable Emergency Communication Grant (IECGP)

Task #	Planning	Training	Equipment	Exercise	M&A
1	$70,379.00*				$2,177.00

Task 1 Participant Expenses (Planning, Training & Exercise
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: A small amount was placed in Training and Exercise categories, as funds can be shifted between categories as long as there was funding in the category initially.

Public Safety Interoperable Communication Grant (PSIC)

Task #	Planning	Training	Equipment	Exercise	M&A
1					$32,250.00

Task 1 State M&A funds allocated for RRB Administrative Costs
Includes $1,500.00 allocated to the RAC prior to RRB formation.
Required Match: 25% of grant amount (20% of grant + match)-$8,063.00
Performance Period: Grant ends September 30, 2010

Task #	Planning	Training	Equipment	Exercise	M&A
1			$497,009.00		
2					$16,935.00
3		$67,475.00			

Task 1 700/800 subscriber equipment
Required Match: 25% of grant amount (20% of grant+ match)-$124,252.00
Performance Period: Grant ends June 30, 2010

Task 2 PSIC Management and Administrative Funds (these investments)
Required Match: 25% of grant amount (20% of grant + match)-$4,234.00
Performance Period: Grant ends June 30, 2010

Task 3 Training Costs (course fees, attendance expenses, etc)
Required Match: None
Performance Period: Grant ends June 30, 2010

Additional Funds

2007 DHS Grant Program

$100,000 was allocated to HSEM Region 5 for Tactical Interoperable Communication plan and exercise development and $100,000 was allocated to HSEM Region 5 for Interoperable Communication planning. HSEM Region 5 covers the SW RRRB and a portion of the SC RRB.

Required Match: None
Performance Period: Initial expiration date June 30, 2009 but can be extended to accomplish the purpose.

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Office of Traffic Safety
State Fire Marshal and Pipeline Safety

MEMO

To: **SC MN Regional Radio Board/Regional Advisory Committee**

From: Ron Whitehead

Date: December 31, 2008

Subject: Synopsis of Outstanding Grants

The following is a summary of funds that have been allocated to the SC Regional Radio Boards:

2008 State Homeland Security Grant Program

Task #	Planning	Training	Equipment	Exercise	M&A
1			$71,038.00		$2,197.00
2					

Task 1- Mobile/Portable Radios for Cross Spectrum Interoperability.
Required Match: None
Performance Period: Two years (refer to grant contract)

Task 2 VHF/UHF ARMER Backbone based Infrastructure
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: $500,000 was also allocated to HSEM Region 1 and to HSEM Region 5 for Interoperable Communications. The SC RRB is split between HSEM Region 1 and HSEM Region 5.

2008 Interoperable Emergency Communication Grant (IECGP)

Task #	Planning	Training	Equipment	Exercise	M&A
1	$54,259.00*				$1,678.00

Task 1 Participant Expenses (Planning, Training & Exercise
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: A small amount was placed in Training and Exercise categories, as funds can be shifted between categories as long as there was funding in the category initially.

Public Safety Interoperable Communication Grant (PSIC)

Task #	Planning	Training	Equipment	Exercise	M&A
1					$25,800.00

Task 1 State M&A funds allocated for RRB Administrative Costs
Includes $1,200.00 allocated to the SC RAC prior to RRB formation.
Required Match: 25% of grant amount (20% of grant + match)-$6,450.00
Performance Period: Grant ends September 30, 2010

Task #	Planning	Training	Equipment	Exercise	M&A
1			$421,522.00		
2					&14,519.00
3		$62,451.00			

Task 1 700/800 subscriber equipment
Required Match: 25% of grant amount (20% of grant+ match)-$105,381.00
Performance Period: Grant ends June 30, 2010

Task 2 PSIC Management and Administrative Funds (these investments)
Required Match: 25% of grant amount (20% of grant + match)-$3,630.00
Performance Period: Grant ends June 30, 2010

Task 3 Training Costs (course fees, attendance expenses, etc)
Required Match: None
Performance Period: Grant ends June 30, 2010

Additional Funds

2007 DHS Grant Program

$100,000 was allocated to HSEM Region 1 and HSEM Region 5 for Tactical Interoperable Communication plan and exercise development and $100,000 was allocated to HSEM Region 1 and HSEM Region 5 for Interoperable Communication planning. . The SC RRB is split between HSEM Region 1 and HSEM Region 5.

Required Match: None
Performance Period: Initial expiration date June 30, 2009 but can be extended to accomplish the purpose.

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Office of Justice Programs

Office of Traffic Safety

State Fire Marshal and Pipeline Safety

MEMO

To: **SE MN Regional Radio Board/Regional Advisory Committee**

From: Ron Whitehead

Date: December 31, 2008

Subject: Synopsis of Outstanding Grants

The following is a summary of funds that have been allocated to the SE Regional Radio Boards:

2008 State Homeland Security Grant Program

Task #	Planning	Training	Equipment	Exercise	M&A
1			$101,362.00		$3,135.00
2			$895,385.00		$27,692.00

Task 1- Mobile/Portable Radios for Cross Spectrum Interoperability.
Required Match: None
Performance Period: Two years (refer to grant contract)

Task 2 VHF/UHF ARMER Backbone based Infrastructure
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: $500,000 was also allocated to HSEM Region 1 for Interoperable Communications. HSEM Region 1 covers the SE RRB and a portion of the SC RRB.

2008 Interoperable Emergency Communication Grant (IECGP)

Task #	Planning	Training	Equipment	Exercise	M&A
1	$56,632.00*				$1,844.00

Task 1 Participant Expenses (Planning, Training & Exercise
Required Match: None
Performance Period: Two years (refer to grant contract)

Note: A small amount was placed in Training and Exercise categories, as funds can be shifted between categories as long as there was funding in the category initially.

Public Safety Interoperable Communication Grant (PSIC)

Task #	Planning	Training	Equipment	Exercise	M&A
1					$24,800.00

Task 1 State M&A funds allocated for RRB Administrative Costs
Required Match: 25% of grant amount (20% of grant + match)-$6,200.00
Performance Period: Grant ends September 30, 2010

Task #	Planning	Training	Equipment	Exercise	M&A
1			$518,613.00		
2					18,063.00
3		$83,473.00			

Task 1 700/800 subscriber equipment
Required Match: 25% of grant amount (20% of grant+ match)-$129,653.00
Performance Period: Grant ends June 30, 2010

Task 2 PSIC Management and Administrative Funds (these investments)
Required Match: 25% of grant amount (20% of grant + match)-$4,516.00
Performance Period: Grant ends June 30, 2010

Task 3 Training Costs (course fees, attendance expenses, etc)
Required Match: None
Performance Period: Grant ends June 30, 2010

Additional Funds

2007 DHS Grant Program

$100,000 was allocated to HSEM Region 1 for Tactical Interoperable Communication plan and exercise development and $100,000 was allocated to HSEM Region 3 for Interoperable Communication planning. Note: HSEM Region 1 covers the SE RRB and a portion of the SC RRB.

Required Match: None
Performance Period: Initial expiration date June 30, 2009 but can be extended to accomplish the purpose.

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State Fire Marshal and Pipeline Safety

To: Colonel Mark Dunaski, Chair
Statewide Radio Board, Interoperability Committee

SRB, Interoperability Committee Members

From: Ron Whitehead, Chair
Interoperability Committee, Grant Workgroup

Date: April 14, 2009

Subject: 2009 State Homeland Security Grant Program (SHSP)

Background

As the State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is responsible for the State Communication Interoperability Plan (SCIP). The Interoperability Committee with its broad representation of public safety disciplines representing different regions of the state provides important input into the administration and maintenance of the SCIP and into the allocation of grant funds to support Minnesota's interoperable communication strategies.

In the FY2009 State Homeland Security Program (SHSP) grant process the application and fund allocation process for all interoperable communication proposals was delegated to the SRB. Unlike previous years, the Division of Homeland Security and Emergency Management determined that $5,821,425.00 would be allocated to Interoperable Communication and that all proposals would be submitted to the Division of Emergency Communication Networks to develop a consolidated Investment Justification and to allocate the $5,821,425 among the various proposals.

In furtherance of this process, the Interoperability Grant Workgroup did the following:

2/2/2009	Application deadline for all Interoperable Communication grant applications
2/4/2009	Grant Workgroup reviewed applications to determine which applications were consistent with Minnesota's Interoperable Communication Strategy.

2/17/2009	Grant Workgroup presented applications to the Interoperability Committee and invited applicants to provide follow up information. At this meeting, the Interoperability Committee approved the overall list of applications recommended by the Grant Workgroup and approved the submission of an Investment Justification generically providing for all approved applications.
2/23/2009	The recommendation of the Interoperability Committee was submitted to the HSEM Strategic Allocation Committee.
2/26/2009	The recommendation of the Interoperability Committee was submitted to the Statewide Radio Board and approved.
3/20/2009	An Interoperable Communications Investment Justification for $5,821,425 was submitted to HSEM for inclusion in the FY2009 SHSP grant process. The overall FY2009 SHSP grant application was submitted to the Department of Homeland Security by HSEM.

In connection with this process, additional time was required to determine how the available funds would be allocated among the various proposals. In addition, the FY2009 process constituted a substantial change over the process from previous years requiring further development of proposals and consideration of issues, such as the status of prior year grants.

Upon the completion of this process, the following actions were taken to develop a recommendation for the allocation of funds:

1. Funding applicants were asked to provide additional information based upon questions and issues presented by the Interoperability Committee, HSEM Allocation Committee and the SRB. A copy of those questions is attached as Appendix A and the additional information is incorporated into the summary of proposals attached as Appendix B.

2. The Grant Workgroup held two meetings (3/25/2009 & 4/8/2009) to develop evaluation criteria (such as, need vs. nice, strongest present need, most benefits presently, address basic operability issues, addresses responder safety issues) and to develop a final recommendation.

Before discussing the Grant Workgroup's recommendation, there are issues developed by the Grant Workgroup to be addressed, as follows:

Previous DHS Grant Process Issues

- There is a history of allocating funds based upon vague and speculative proposals and although this approach may have been excusable in the early years of this process the framework for interoperable communications has undergone significant development and documentation (see Minnesota's SCIP).
- Regions (both HSEM regions and Regional Radio Boards) are still struggling with the idea of establishing regional and statewide funding priorities and the associated idea that those priorities will not always require equal allocations of funds among regions and to counties within each region.
- There is a national, regional and local concern that prior year funds have not been expended and where there is a legitimate reason for this carryover, retained funds were not being used to develop and refine the proposal or to plan for the implementation of the initiative.

Future SHSP Grant Process

FY2009 should be considered a year of transition from a vaguely defined grant application and allocation process to a more clearly defined allocation process, as follows:

- The FY2010 SHSP grant application process should begin immediately upon the completion of the FY2009 SHSP grant allocation process.
- State and regional Interoperable Communication priorities must be clearly articulated by the SRB, and by regions where appropriate, as soon as possible.
- Grant proposals must be clearly articulated with equipment lists and stated allocation formulas based upon how the proposal addresses articulated priorities, and, where multi-year funding might be necessary, how the project will be staged and developed to refine the proposal.

Finally, as chair of the Grant Workgroup I strongly suggest there is a need for reciprocity in the process. Throughout this allocation process, we have asked people from each region to provide valuable input and perspective in this allocation process. Those people have been honest and have acknowledged that their regions are not yet ready to implement a priority. They have genuinely concurred in the allocation of funds to other regions based upon priorities and feasibility. There is sincere need to make sure that such selflessness is not lost in the process and that from year to year there is enough consistency in the process and priorities to assure that as other regions reach a similar stage of planning and implementation their time will come.

Allocation Recommendation- FY2009 SHSP

The Grant Workgroup met by conference call on March 25, 2009 and April 8, 2009 to review the various proposals and develop the following recommendation:

Applicant	**Requested**	**Recommendation***
HSEM Region 1	$1,200,000.00	$216,300.00
HSEM Region 2	$803,000,00	$515,000.00
HSEM Region 3	$600,000.00	$422,300.00
HSEM Region 4	$17,807,600.00	$576,645.50
HSEM Region 5	$270,000,.00	$278,100.00
HSEM Region 6	$430,000.00	$208,060.00
MESB	$1,135,350.00	$618,000.00
DECN	$3,500,000.00	$2,884,000.00
Border Counties	$875,000.00	$103,000.00

* Recommended amounts include an allocation of 3% for Management and Administrative (M&A) expenses, as fiscal agents in most regions require those funds to cover expenses. An applicant need not allocate any funds to M&A and can use those funds consistent with their proposal.

Comments with respect to each recommendation are as follows:

HSEM Region One-The region sought funding to establish a radio cache, purchase radios to supplement first responders in each county and to acquire gateways and other radio equipment. The recommendation did not provide any funding to develop radio caches, but instead provided a limited amount of funds to acquire radios for first responders in the region with an allocation of those funds as follows:

Planning	$5,000
Equipment	$200,000
Training	$5,000
M&A	$6,300

HSEM Region Two-The region sought funding for microwave connections from six counties' PSAPs to the ARMER microwave backbone. The recommendation provides funding for four microwave connections connecting county PSAPs to the ARMER microwave backbone. Funds are to be allocated as follows:

Planning	$5,000
Equipment	$495,000
M&A	$15,000

HSEM Region Three-The region sough funding for interoperable communication planning, communication equipment, training and exercise development. It is noted that in further development of the regions proposal, there was an indication the equipment funds would be used to upgrade PSAP consoles to consoles capable of integration with the state network to enhance interoperability. The recommendation provided funding for a planning and equipment at a reduced level, as follows:

Planning	$80,000
Equipment	$320,000
Training	$5,000
Exercise	$5,000
M&A	$12,300

HSEM Region Four- the region sought funding for P25 compatible portables and mobile radios for each county in the region. The region noted the detail planning and cooperation that has developed around the implementation of the ARMER backbone in the central portion of the state, including the completion of detail county by county assessments where many counties in the process of evaluating and electing long term decisions to renew communication infrastructure. The recommendation provides a very limited amount of funding in comparison to the overall request and similarly, evidences that fact that it is unlikely DHS funds will fund a large number of radios. The recommendation provides equipment, planning and training funds, as follows:

Planning	$5,000
Equipment	$549,850
Training	$5,000
M&A	$16,795.50

HSEM Region Five-The region sought $270,000 in funds for 40 cross spectrum radios to provide two for each emergency manager and two to each of the two tribes in the region. The recommendation provides funds for the region's proposal, including an additional allocation for M&A funds. The recommendation provides for planning, equipment and training funds as follows:

Planning	$5,000
Equipment	$250,000
Training	$15,000
M&A	$8,100

HSEM Region Six-The region sought $430,000 in funds for a fiber optic connection in Carver County and other improvements to radio towers and planning, training and exercise funds. Due to the lack of details concerning the other "improvements to radio

towers" it was difficult to recommend funding for that portion of the request. The recommendation provides funding for the fiber optic improvement and for the planning, training and exercise request with funds allocate as follows:

Planning	$25,000
Equipment	$92,000
Training	$25,000
Exercise	$60,000
M&A	$6,060

The recommend includes a suggestion that the region use planning funds to develop a specific proposal for next year's grant application process.

MESB- The Metropolitan Emergency Services Board sought funding for a single channel addition in three distinct sub-systems (Dakota, Anoka and Scott/Carver) of the metro region ARMER backbone. The volume of transient traffic in each of those sub-systems was demonstrating the need to add a channel. The recommendation provides partial funding for the region's proposal providing $600,000 for equipment. The recommended funds should be allocated as follows:

Equipment	$600,000
M&A	$18,000

Division of Emergency Communication Networks- DECN requested funds for allocation to the various regional radio boards specifically directed as 2 purposes. A portion of the requested funds were to provide detail planning funds to counties electing to transition to the ARMER backbone. The second portion of the request was to provide infrastructure and possibly subscriber radio funds to counties electing to transition to the ARMER system that are not eligible for grants of state funds. As these funds must be allocated to local entities, DECN will develop an allocation of any funds to regional radio boards consistent with the need throughout the state. DECN requested $3.5 million for this purpose. The recommendation provides $2.8 million for the two purposes. DECN will develop a recommendation for the allocation of these funds to the regions and will determine fund allocation between planning and equipment.

Border Counties- The border counties sought $875,000 to fund a microwave network between PSAPs in the nine counties along the Canadian border. The initial proposal by the border counties was for $2,875,000 and the border counties were allocated $1 million in FY2007 and another $1 million in FY2008 for this project. There was considerable discussion of this proposal and lacking evidence of a refined and more detail plan for the project, the recommendation provided $100,000 to the border counties to develop a detail design and implementation plan. It is noted these funds will probably not be immediately available to the region. However, the counties currently

have $2 million available to them for this purpose and the $100,000 allocated to them can be used to replace those funds. Similarly, the Grant Workgroup recognized the value of the project and the need to complete it but was unable to move it forward without evidence of a current design plan and implementation plan.

Emergency Communication Networks
444 Cedar Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.282.6565 • Fax: 651.296.2665 • TTY: 651.282.6555

Alcohol and Gambling Enforcement

ARMER/911 Program

Bureau of Criminal Apprehension

Driver and Vehicle Services

Homeland Security and Emergency Management

Minnesota State Patrol

Office of Communications

Office of Justice Programs

Office of Traffic Safety

State Fire Marshal and Pipeline Safety

To: Colonel Mark Dunaski, Chair
Statewide Radio Board, Interoperability Committee

SRB, Interoperability Committee Members

From: Ron Whitehead, Chair
Interoperability Committee, Grant Workgroup

Date: April 14, 2009

Subject: 2009 State Homeland Security Grant Program (SHSP)

Background

As the State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is responsible for the State Communication Interoperability Plan (SCIP). The Interoperability Committee with its broad representation of public safety disciplines representing different regions of the state provides important input into the administration and maintenance of the SCIP and into the allocation of grant funds to support Minnesota's interoperable communication strategies.

In the FY2009 State Homeland Security Program (SHSP) grant process the application and fund allocation process for all interoperable communication proposals was delegated to the SRB. Unlike previous years, the Division of Homeland Security and Emergency Management determined that $5,821,425.00 would be allocated to Interoperable Communication and that all proposals would be submitted to the Division of Emergency Communication Networks to develop a consolidated Investment Justification and to allocate the $5,821,425 among the various proposals.

In furtherance of this process, the Interoperability Grant Workgroup did the following:

2/2/2009	Application deadline for all Interoperable Communication grant applications
2/4/2009	Grant Workgroup reviewed applications to determine which applications were consistent with Minnesota's Interoperable Communication Strategy.

2/17/2009	Grant Workgroup presented applications to the Interoperability Committee and invited applicants to provide follow up information. At this meeting, the Interoperability Committee approved the overall list of applications recommended by the Grant Workgroup and approved the submission of an Investment Justification generically providing for all approved applications.
2/23/2009	The recommendation of the Interoperability Committee was submitted to the HSEM Strategic Allocation Committee.
2/26/2009	The recommendation of the Interoperability Committee was submitted to the Statewide Radio Board and approved.
3/20/2009	An Interoperable Communications Investment Justification for $5,821,425 was submitted to HSEM for inclusion in the FY2009 SHSP grant process. The overall FY2009 SHSP grant application was submitted to the Department of Homeland Security by HSEM.

In connection with this process, additional time was required to determine how the available funds would be allocated among the various proposals. In addition, the FY2009 process constituted a substantial change over the process from previous years requiring further development of proposals and consideration of issues, such as the status of prior year grants.

Upon the completion of this process, the following actions were taken to develop a recommendation for the allocation of funds:

1. Funding applicants were asked to provide additional information based upon questions and issues presented by the Interoperability Committee, HSEM Allocation Committee and the SRB. A copy of those questions is attached as Appendix A and the additional information is incorporated into the summary of proposals attached as Appendix B.

2. The Grant Workgroup held two meetings (3/25/2009 & 4/8/2009) to develop evaluation criteria (such as, need vs. nice, strongest present need, most benefits presently, address basic operability issues, addresses responder safety issues) and to develop a final recommendation.

Before discussing the Grant Workgroup's recommendation, there are issues developed by the Grant Workgroup to be addressed, as follows:

Previous DHS Grant Process Issues

- There is a history of allocating funds based upon vague and speculative proposals and although this approach may have been excusable in the early years of this process the framework for interoperable communications has undergone significant development and documentation (see Minnesota's SCIP).
- Regions (both HSEM regions and Regional Radio Boards) are still struggling with the idea of establishing regional and statewide funding priorities and the associated idea that those priorities will not always require equal allocations of funds among regions and to counties within each region.
- There is a national, regional and local concern that prior year funds have not been expended and where there is a legitimate reason for this carryover, retained funds were not being used to develop and refine the proposal or to plan for the implementation of the initiative.

Future SHSP Grant Process

FY2009 should be considered a year of transition from a vaguely defined grant application and allocation process to a more clearly defined allocation process, as follows:

- The FY2010 SHSP grant application process should begin immediately upon the completion of the FY2009 SHSP grant allocation process.
- State and regional Interoperable Communication priorities must be clearly articulated by the SRB, and by regions where appropriate, as soon as possible.
- Grant proposals must be clearly articulated with equipment lists and stated allocation formulas based upon how the proposal addresses articulated priorities, and, where multi-year funding might be necessary, how the project will be staged and developed to refine the proposal.

Finally, as chair of the Grant Workgroup I strongly suggest there is a need for reciprocity in the process. Throughout this allocation process, we have asked people from each region to provide valuable input and perspective in this allocation process. Those people have been honest and have acknowledged that their regions are not yet ready to implement a priority. They have genuinely concurred in the allocation of funds to other regions based upon priorities and feasibility. There is sincere need to make sure that such selflessness is not lost in the process and that from year to year there is enough consistency in the process and priorities to assure that as other regions reach a similar stage of planning and implementation their time will come.

Allocation Recommendation- FY2009 SHSP

The Grant Workgroup met by conference call on March 25, 2009 and April 8, 2009 to review the various proposals and develop the following recommendation:

Applicant	**Requested**	**Recommendation***
HSEM Region 1	$1,200,000.00	$216,300.00
HSEM Region 2	$803,000,00	$515,000.00
HSEM Region 3	$600,000.00	$422,300.00
HSEM Region 4	$17,807,600.00	$576,645.50
HSEM Region 5	$270,000,.00	$278,100.00
HSEM Region 6	$430,000.00	$208,060.00
MESB	$1,135,350.00	$618,000.00
DECN	$3,500,000.00	$2,884,000.00
Border Counties	$875,000.00	$103,000.00

* Recommended amounts include an allocation of 3% for Management and Administrative (M&A) expenses, as fiscal agents in most regions require those funds to cover expenses. An applicant need not allocate any funds to M&A and can use those funds consistent with their proposal.

Comments with respect to each recommendation are as follows:

HSEM Region One-The region sought funding to establish a radio cache, purchase radios to supplement first responders in each county and to acquire gateways and other radio equipment. The recommendation did not provide any funding to develop radio caches, but instead provided a limited amount of funds to acquire radios for first responders in the region with an allocation of those funds as follows:

Planning	$5,000
Equipment	$200,000
Training	$5,000
M&A	$6,300

HSEM Region Two-The region sought funding for microwave connections from six counties' PSAPs to the ARMER microwave backbone. The recommendation provides funding for four microwave connections connecting county PSAPs to the ARMER microwave backbone. Funds are to be allocated as follows:

Planning	$5,000
Equipment	$495,000
M&A	$15,000

HSEM Region Three-The region sough funding for interoperable communication planning, communication equipment, training and exercise development. It is noted that in further development of the regions proposal, there was an indication the equipment funds would be used to upgrade PSAP consoles to consoles capable of integration with the state network to enhance interoperability. The recommendation provided funding for a planning and equipment at a reduced level, as follows:

Planning	$80,000
Equipment	$320,000
Training	$5,000
Exercise	$5,000
M&A	$12,300

HSEM Region Four- the region sought funding for P25 compatible portables and mobile radios for each county in the region. The region noted the detail planning and cooperation that has developed around the implementation of the ARMER backbone in the central portion of the state, including the completion of detail county by county assessments where many counties in the process of evaluating and electing long term decisions to renew communication infrastructure. The recommendation provides a very limited amount of funding in comparison to the overall request and similarly, evidences that fact that it is unlikely DHS funds will fund a large number of radios. The recommendation provides equipment, planning and training funds, as follows:

Planning	$5,000
Equipment	$549,850
Training	$5,000
M&A	$16,795.50

HSEM Region Five-The region sought $270,000 in funds for 40 cross spectrum radios to provide two for each emergency manager and two to each of the two tribes in the region. The recommendation provides funds for the region's proposal, including an additional allocation for M&A funds. The recommendation provides for planning, equipment and training funds as follows:

Planning	$5,000
Equipment	$250,000
Training	$15,000
M&A	$8,100

HSEM Region Six-The region sought $430,000 in funds for a fiber optic connection in Carver County and other improvements to radio towers and planning, training and exercise funds. Due to the lack of details concerning the other "improvements to radio

towers" it was difficult to recommend funding for that portion of the request. The recommendation provides funding for the fiber optic improvement and for the planning, training and exercise request with funds allocate as follows:

Planning	$25,000
Equipment	$92,000
Training	$25,000
Exercise	$60,000
M&A	$6,060

The recommend includes a suggestion that the region use planning funds to develop a specific proposal for next year's grant application process.

MESB- The Metropolitan Emergency Services Board sought funding for a single channel addition in three distinct sub-systems (Dakota, Anoka and Scott/Carver) of the metro region ARMER backbone. The volume of transient traffic in each of those sub-systems was demonstrating the need to add a channel. The recommendation provides partial funding for the region's proposal providing $600,000 for equipment. The recommended funds should be allocated as follows:

Equipment	$600,000
M&A	$18,000

Division of Emergency Communication Networks- DECN requested funds for allocation to the various regional radio boards specifically directed as 2 purposes. A portion of the requested funds were to provide detail planning funds to counties electing to transition to the ARMER backbone. The second portion of the request was to provide infrastructure and possibly subscriber radio funds to counties electing to transition to the ARMER system that are not eligible for grants of state funds. As these funds must be allocated to local entities, DECN will develop an allocation of any funds to regional radio boards consistent with the need throughout the state. DECN requested $3.5 million for this purpose. The recommendation provides $2.8 million for the two purposes. DECN will develop a recommendation for the allocation of these funds to the regions and will determine fund allocation between planning and equipment.

Border Counties- The border counties sought $875,000 to fund a microwave network between PSAPs in the nine counties along the Canadian border. The initial proposal by the border counties was for $2,875,000 and the border counties were allocated $1 million in FY2007 and another $1 million in FY2008 for this project. There was considerable discussion of this proposal and lacking evidence of a refined and more detail plan for the project, the recommendation provided $100,000 to the border counties to develop a detail design and implementation plan. It is noted these funds will probably not be immediately available to the region. However, the counties currently

have $2 million available to them for this purpose and the $100,000 allocated to them can be used to replace those funds. Similarly, the Grant Workgroup recognized the value of the project and the need to complete it but was unable to move it forward without evidence of a current design plan and implementation plan.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Captain Terry Waletzki, Olmsted County Sheriff's Office
Proposal by: HSEM Region One

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

"Funds will continue to build the interoperable communications within the region. As the ARMER backbone system reaches completion in MN, this will allow us to use the 800 MHz radios to enhance communications interoperability. A cache of radios will be built to be used by agencies during a disaster. Additional radios will be purchased and used to supplement first responders within the counties. Gateways and other radio equipment will be purchased to increase interoperability throughout the region"

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

Phase One

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

Phase Two

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009 deadline[1] would allow funding of that proposal. The total amount requested in all

[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

approved Interoperable Communication proposals was $26,620,950. HSEM has indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be allocated to Interoperable Communications. As such, a determination of whether your proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

3. Describe how you developed the estimate cost for any equipment, including a description of the equipment and pricing method. For example, if your proposal includes the acquisition of portable radios please describe how you arrived at the cost of the portable radio. If your proposal includes other equipment, please provide some kind of breakdown in cost by major categories.

4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you

provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

How would the funds be used or allocated within the region.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Lt. Scott Camps, St. Louis County Sheriff's Office
Proposal by: HSEM Region Two

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

"The project would be for secure microwave link from each PSAP in the remaining 6 counties (excluding border counties and Itasca County) of the region to the state system. The cost for this initiative is estimated at approximately $130,000 for each of the 6 PSAP links to the state system, totaling $780,000. In addition, $23,000 for Management and Administration (3%) for this project would be requested. The total requested for phase of the project is $803,000."

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

Phase One

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

Phase Two

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009 deadline[1] would allow funding of that proposal. The total amount requested in all

[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

approved Interoperable Communication proposals was $26,620,950. HSEM has indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be allocated to Interoperable Communications. As such, a determination of whether your proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

3. Describe how you developed the estimate cost for any equipment, including a description of the equipment and pricing method. For example, if your proposal includes the acquisition of portable radios please describe how you arrived at the cost of the portable radio. If your proposal includes other equipment, please provide some kind of breakdown in cost by major categories.

4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you

provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

None additional at this time.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Mary Hilbrandt/Jennifer Olson
Proposal by: HSEM Region Three

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

"This regional investment is part of a multi-year dedication to upgrade communication in the 14 county region & represents a continuation of the implementation phase. In addition to ensuring compliance with the state plan, this investment will increase interoperability with response disciplines, emergency management, ND, Canada, MN, US & other private entities & specifically addresses the communications system analysis results from the FY07 HSGP that were not funded by FY08's grant budget. A Grant/Project Coordinator will also be funded"

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

Phase One

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

Phase Two

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009

deadline[1] would allow funding of that proposal. The total amount requested in all approved Interoperable Communication proposals was $26,620,950. HSEM has indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be allocated to Interoperable Communications. As such, a determination of whether your proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

3. Describe how you developed the estimate cost for any equipment, including a description of the equipment and pricing method. For example, if your proposal includes the acquisition of portable radios please describe how you arrived at the cost of the portable radio. If your proposal includes other equipment, please provide some kind of breakdown in cost by major categories.

4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

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[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

None additional at this time.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Sheriff Tom Larson
Proposal by: HSEM Region Four

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

"It has been determined that Region Four is in need of APCO project 25 compliant Portable radios, a count of 2964 is needed in this region with an averaged price applied we are requesting $8,447,400.00 We also have a need in relation to Mobiles radios, we in region 4 have a need for 2753 APCO project 25 compliant models with an averaged price applied we are requesting $9,360,200.00. A total need in region 4 of $17, 837,600.00 for APCO project 25 compliant radios."

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

Phase One

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

Phase Two

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009 deadline[1] would allow funding of that proposal. The total amount requested in all

[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

approved Interoperable Communication proposals was $26,620,950. HSEM has indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be allocated to Interoperable Communications. As such, a determination of whether your proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

3. Describe how you developed the estimate cost for any equipment, including a description of the equipment and pricing method. For example, if your proposal includes the acquisition of portable radios please describe how you arrived at the cost of the portable radio. If your proposal includes other equipment, please provide some kind of breakdown in cost by major categories.

4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you

provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

If your proposal is not fully funded how will you distribute the funds available.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Jim Reinert, Murray County Emergency Manager
Proposal by: HSEM Region Five

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

"Purchase 40 All In One (VHF/800) portable radios. Two radios for each county and the two tribes. These radios will be for the Emergency Managers in each of these locations. These radios transmit on both VHF and 800 so they will be able to communicate no matter what there neighbor system may be."

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

Phase One

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

Phase Two

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009 deadline[1] would allow funding of that proposal. The total amount requested in all approved Interoperable Communication proposals was $26,620,950. HSEM has

[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be allocated to Interoperable Communications. As such, a determination of whether your proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

3. Describe how you developed the estimate cost for any equipment, including a description of the equipment and pricing method. For example, if your proposal includes the acquisition of portable radios please describe how you arrived at the cost of the portable radio. If your proposal includes other equipment, please provide some kind of breakdown in cost by major categories.

4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

None at this point.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Jennifer Callahan, Sherburne County Assistant Emergency Manager
Proposal by: HSEM Region Six

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

- "Close the communication gaps between regional first responders.
- Build a robust communication infrastructure through the use of equipment which will allow for the improvement of radio towers, fiber optics, and 800MHz radios.
- Regional training and exercises that will incorporate the TICP.

  Planning: $25,000.00
  Equipment: $325,000.00
  Training: $25,000.00
  Exercise: $60,000.00"

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

Phase One

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

Phase Two

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009

deadline[1] would allow funding of that proposal. The total amount requested in all approved Interoperable Communication proposals was $26,620,950. HSEM has indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be allocated to Interoperable Communications. As such, a determination of whether your proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

3. Describe how you developed the estimate cost for any equipment, including a description of the equipment and pricing method. For example, if your proposal includes the acquisition of portable radios please describe how you arrived at the cost of the portable radio. If your proposal includes other equipment, please provide some kind of breakdown in cost by major categories.

4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

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[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

More detail information concerning the intended us of the funds.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Jill Rohret, Radio Coordinator
Proposal by: Metropolitan Emergency Services Board

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

> "The requested one channel addition to the Dakota County subsystem, the Anoka County subsystem and the Carver/Scott County subsystem is included in MnDOT's plan."

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

Phase One

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

Phase Two

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009 deadline[1] would allow funding of that proposal. The total amount requested in all approved Interoperable Communication proposals was $26,620,950. HSEM has indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be

[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

allocated to Interoperable Communications. As such, a determination of whether your proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

3. Describe how you developed the estimate cost for any equipment, including a description of the equipment and pricing method. For example, if your proposal includes the acquisition of portable radios please describe how you arrived at the cost of the portable radio. If your proposal includes other equipment, please provide some kind of breakdown in cost by major categories.

4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Lt Scott Camps, St. Louis County Sheriffs Office
Proposal by: Border Counties

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

> "The request for 2009 Homeland Security funds of $875,500 will complete the system (border microwave network), providing a secure, dedicated microwave link between all 7 of the border counties in conjunction with the statewide communications system. This amount includes 3% Management and Administrative funds of $25,500 on a project cost of $850,000. The project cost would purchase equipment and services to complete required links between each Public Safety Answering Point within the border region."
> "

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

<u>Phase One</u>

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

<u>Phase Two</u>

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009

deadline[1] would allow funding of that proposal. The total amount requested in all approved Interoperable Communication proposals was $26,620,950. HSEM has indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be allocated to Interoperable Communications. As such, a determination of whether your proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

3. Describe how you developed the estimate cost for any equipment, including a description of the equipment and pricing method. For example, if your proposal includes the acquisition of portable radios please describe how you arrived at the cost of the portable radio. If your proposal includes other equipment, please provide some kind of breakdown in cost by major categories.

4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

---

[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

> Please provide details concerning the integration with the ARMER microwave backbone. MnDOT has indicated they have provided capacity for border counties in the their microwave plan. It is not clear what these additional funds are funding.
>
> Please provide a design plan as $2 million has already been allocated, the implementation of the ARMER backbone in northern Minnesota was funded in 2007. It would appear that the proposal should be updated and that a more specific design plan should be available.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Scott Wiggins, Director
Proposal by: DECN/RRB consolidated proposal

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

> "This portion of the proposal provides funds to counties to complete their detail design work for the implementation of communication system replacements."

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

Phase One

Determination of which proposals will be included in the FY2009 SHSP Interoperable Communications Investment Justification.

Phase Two

Determination of which proposals should be funded and to what extent they will be funded.

Your proposal was determined to be an appropriate Interoperable Communications proposal and the Investment Justification submitted to HSEM by the February 13, 2009 deadline[1] would allow funding of that proposal. The total amount requested in all approved Interoperable Communication proposals was $26,620,950. HSEM has indicated that approximately $5,821,425 of Minnesota's total FY2009 SHSP grant will be allocated to Interoperable Communications. As such, a determination of whether your

[1] It would be impossible to include each specific proposal in a single Investment Justification so they must be consolidated into a investment which broadly includes the proposals that are submitted and accepted.

proposal will be funded and to what extent will be made by the SRB in Phase Two of this process.

In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
2. HSEM Strategy and Allocation Committee
3. Statewide Radio Board

In that process, some issues were raised which might be relevant to Phase Two of this process. Of particular import was the admonishment at the HSEM Strategy and Allocation Committee that the Homeland Security and Advisory Committee (HSAC) may reallocate funds to other investment categories. Implementation and spending plans for FY2007 and FY2008 SHSP funds for multi-year investment plans was discussed as an important issue in that determination.

In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

2. For the FY2009 proposal, describe whether it should be considered for partial funding, if full funding is not adopted and describe how the proposal would be adjusted if it were only partially funded.

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4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

Determine how funds would be allocated to Regional Radio Boards.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

FY 2009 State Homeland Security Program
Interoperable Communications Proposal

To: Scott Wiggins, Director
Proposal by: DECN/RRB consolidated proposal

From: Tom Johnson/Ron Whitehead, Interoperable Communication Investment Leads
Division of Emergency Communication Networks

Subject: FY2009 SHSP-Interoperable Communications Proposal

You submitted the following Interoperable Communications proposal for consideration as part of Minnesota's FY2009 SHSP Interoperable Communications Investment Justification:

> "This portion of the proposal provides funds to counties and of local governments to offset the costs for those local units of government to transition to the ARMER system. This proposal is predicated upon the fact that the ARMER system as a "standards based common communication system" facilitates the highest level of public safety communication interoperability based upon the SAFECOM Interoperability Matrix. DHS funds have been allocated to this purpose in FY2003 through FY2006. Funding was provided by the Minnesota legislature in 2005 for this purpose in the metro area ($8 million) and in a number of counties in the Phase Three implementation ($9.5 million), but not all counties. This proposal would provide funds for counties that are not eligible for local enhancement funds under the 2005 legislation and would continue the practice of supporting the transition of counties to a communication infrastructure that supports the highest level of interoperability."

As Minnesota's State Interoperability Executive Committee (SIEC), the Statewide Radio Board (SRB) is charged with maintaining Minnesota's State Communication Interoperability Plan (SCIP) and with evaluating and prioritizing Interoperable Communication proposals.

Based upon the adjustments made in the FY2009 SHSP grant process by the Division of Homeland Security and Emergency Management (HSEM), the process has been divided into two phases, as follows:

<u>Phase One</u>

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<u>Phase Two</u>

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In Phase One of this process, we have presented all proposals to the following groups:

1. SRB, Interoperability Committee
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3. Statewide Radio Board

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In order to provide for an appropriate and thorough review of your proposal in Phase Two (funding allocation) of this year's process, we would ask that you provide the following additional information:

1. For FY2006, FY2007 and FY2008 describe any Interoperable Communication funds your region received, including the amount, amount expended and the use of funds expended. In that description, please specify any amounts remaining for any of those fiscal years and describe, in detail, what your region plans on doing with those funds.

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4. Where your proposal involves the acquisition of equipment, please describe your implementation plan with estimated dates of completion and any contingencies upon which the implementation plan might be dependant.

With respect to the SRB, experience would indicate that detail and specific proposals are more likely to be funded than proposals without detail or with substantial unanswered questions. All proposals will be included in the process, but we would request you provide this additional information to enable us to present a more thorough and comprehensive presentation of your proposal.

The following additional specific information is also requested concerning your proposal:

Determine how funds would be allocated to Regional Radio Boards.

Please submit the requested information to Tom Johnson by March 20, 2009. The SRB, Interoperability Committee, Grant Workgroup will develop the proposals and submit them to the Interoperability Committee. It would be our intent to submit the Interoperability Committee's recommendation to the Statewide Radio Board for consideration at its May 28, 2009 meeting.

VHF/UHF Public Safety Interoperable Infrastructure Planning

Federal Engineering Project Review

SRBIC Meeting

May 19, 2009

Agenda

- **Introductions**
- **Project objectives**
- **Project overview**
- **Review draft report on conceptual approaches**
- **Discussions/feedback**
- **Next steps**

Introductions

- **Brad Barber - *FE* Project Manager**
- **Robert Pletcher - *FE* Senior Consultant**
- **Chuck Hnot - *FE* Project resource/ Program Manager on other related Minnesota public safety projects**

Project Objectives

- **Research and assess options used or available for use by states or regional entities to facilitate interoperability**

- **Assist in evaluation and selection of the best approach to maximize interoperability throughout the state (including federal, state, tribal, local government and appropriate non-governmental entities), between bordering states and along the Canadian border**

Project overview

- **Review ARMER and SCIP plans**
- **Develop list of conceptual approaches to provide interoperable infrastructure**
- **Draft report and presentation to the SRBIC providing an overview of the conceptual approaches**
- **Revise draft report and presentation materials with feedback from SRBIC**

Project overview (cont.)

- **Review draft report and presentation materials at 7 RAC/TOC meetings**
- **Update draft final report and presentation materials with feedback from RAC/TOC meetings and provide technical evaluations to SRBIC**
- **SRBIC develops “plan of action”**
- **Review final report and presentation materials at SRB meeting**
- **SRB approves “plan of action” to develop statewide interoperable infrastructure**

Interoperability 101

- **SAFECOM's five "lanes" to interoperability**
  - **Governance**
  - **Standard operating procedures**
  - **Training and exercises**
  - **Usage**
  - **Technology**
    1. **Swap radios**
    2. **Gateways**
    3. **Shared channels**
    4. **Proprietary shared systems**
    5. **Standards-based shared systems**

ARMER

- **ARMER – P25 standards based shared system offers level five interoperability**
- **Not all users will join ARMER**
- **Interoperability infrastructure should leverage ARMER investment and address local and regional issues**

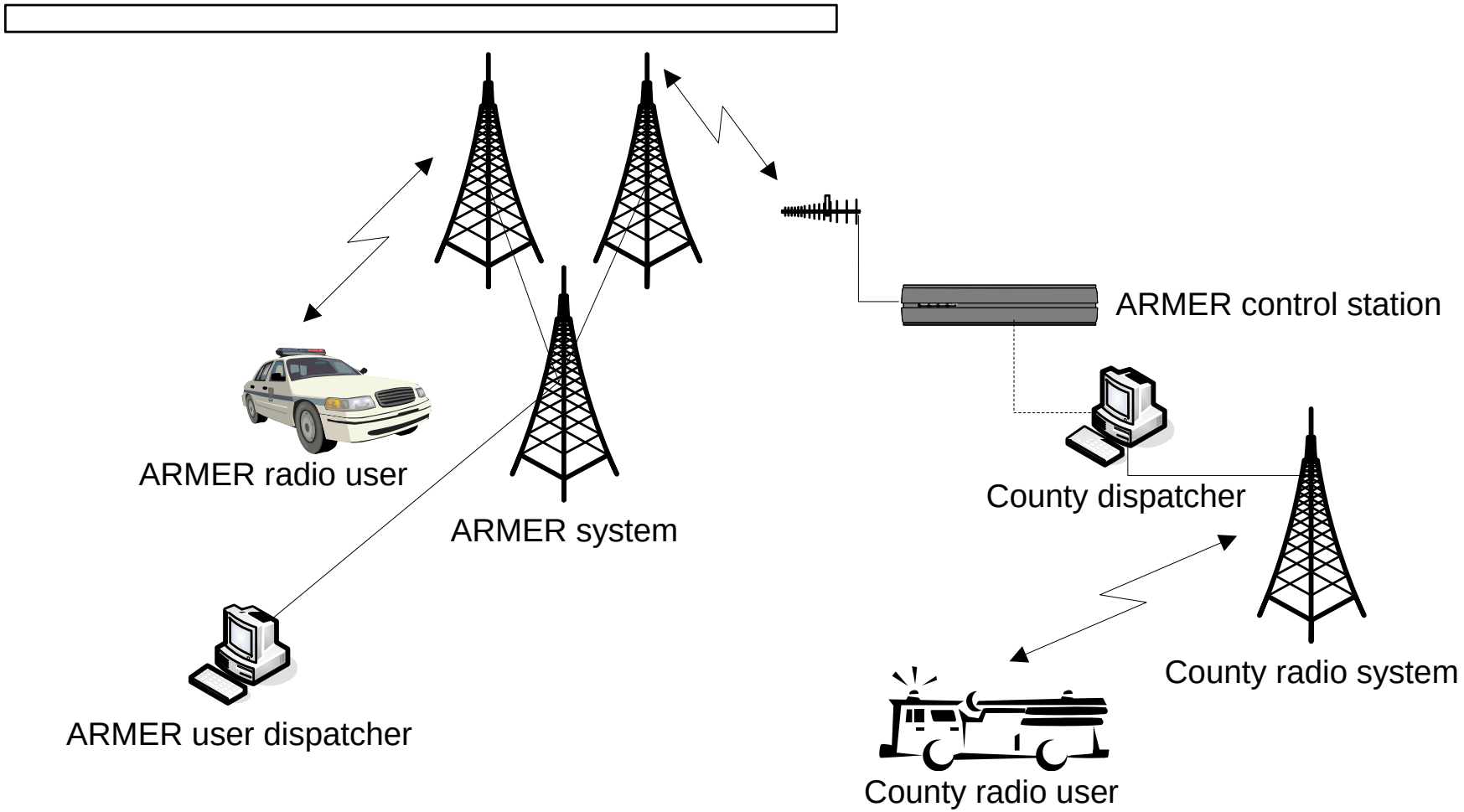
Interoperability approaches

- **Donor radios**
  - (ARMER control stations)
- **Dedicated audio connections**
- **RoIP gateways**
- **Interoperability channel overlay**
- **Hybrid solution**

Donor radios

- **ARMER control stations in PSAPs**
  - Provides level one interoperability
  - Relatively inexpensive, easy to use, manage and maintain
  - Not very scalable
  - Does not address coverage issues
  - Does not require additional transport
  - Limited interoperability between non-ARMER users (i.e. adjacent counties)

Donor radio concept diagram



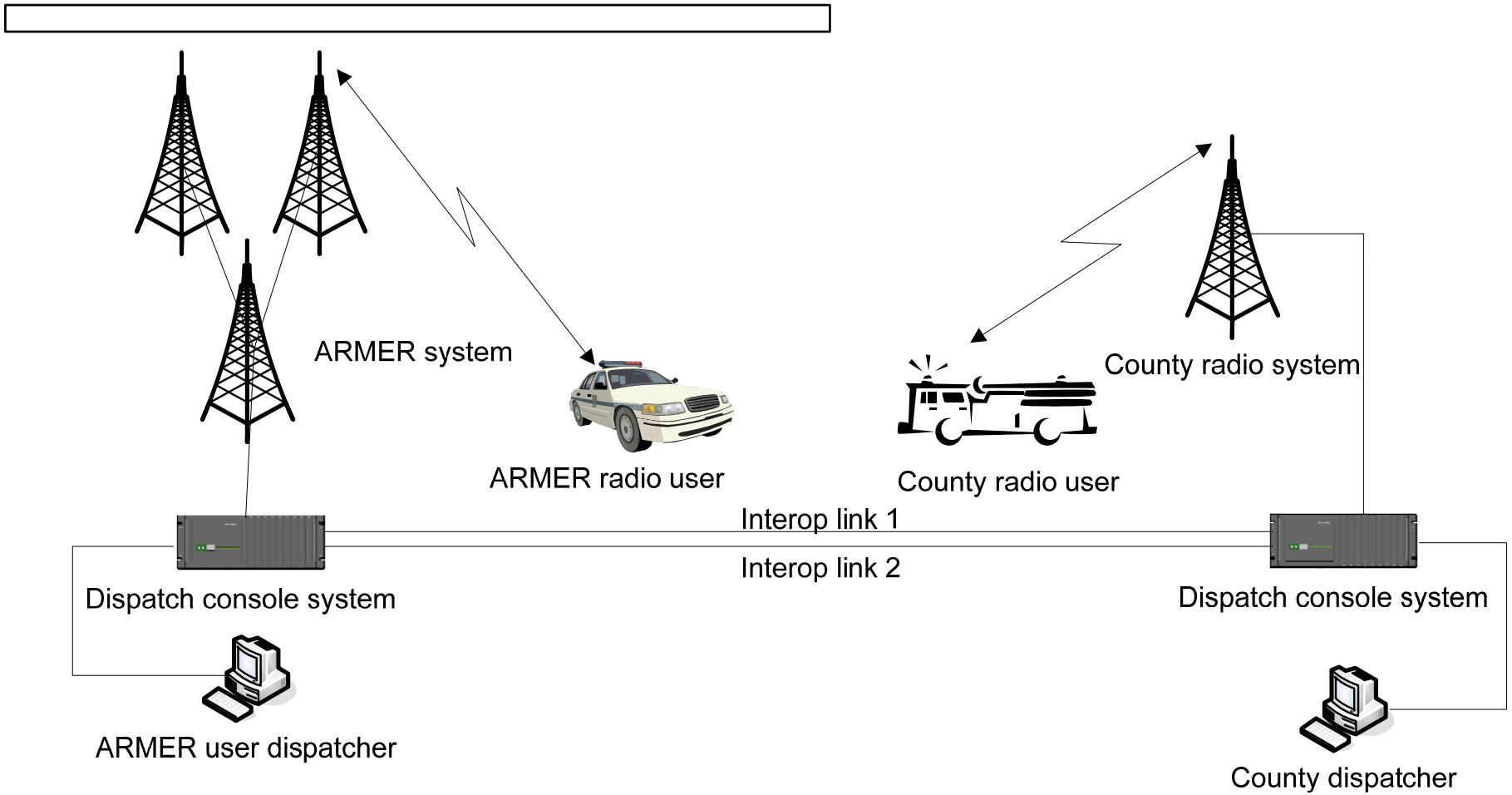
Donor radio example

- **Pennsylvania STARNET**
  - Dedicated 800 MHz talk group for each county on the statewide radio system (PA-STARNET) as well as a dedicated PA-STARNET control station for each PSAP
  - Link to PA interoperability presentation

Dedicated audio connections

- **Dedicated audio connections between dispatch centers**
  - Provides level two interoperability
  - Moderately expensive, easy to use and maintain, moderately difficult to manage
  - Not very scalable
  - Does not address coverage issues
  - Requires additional transport

Dedicated connections diagram



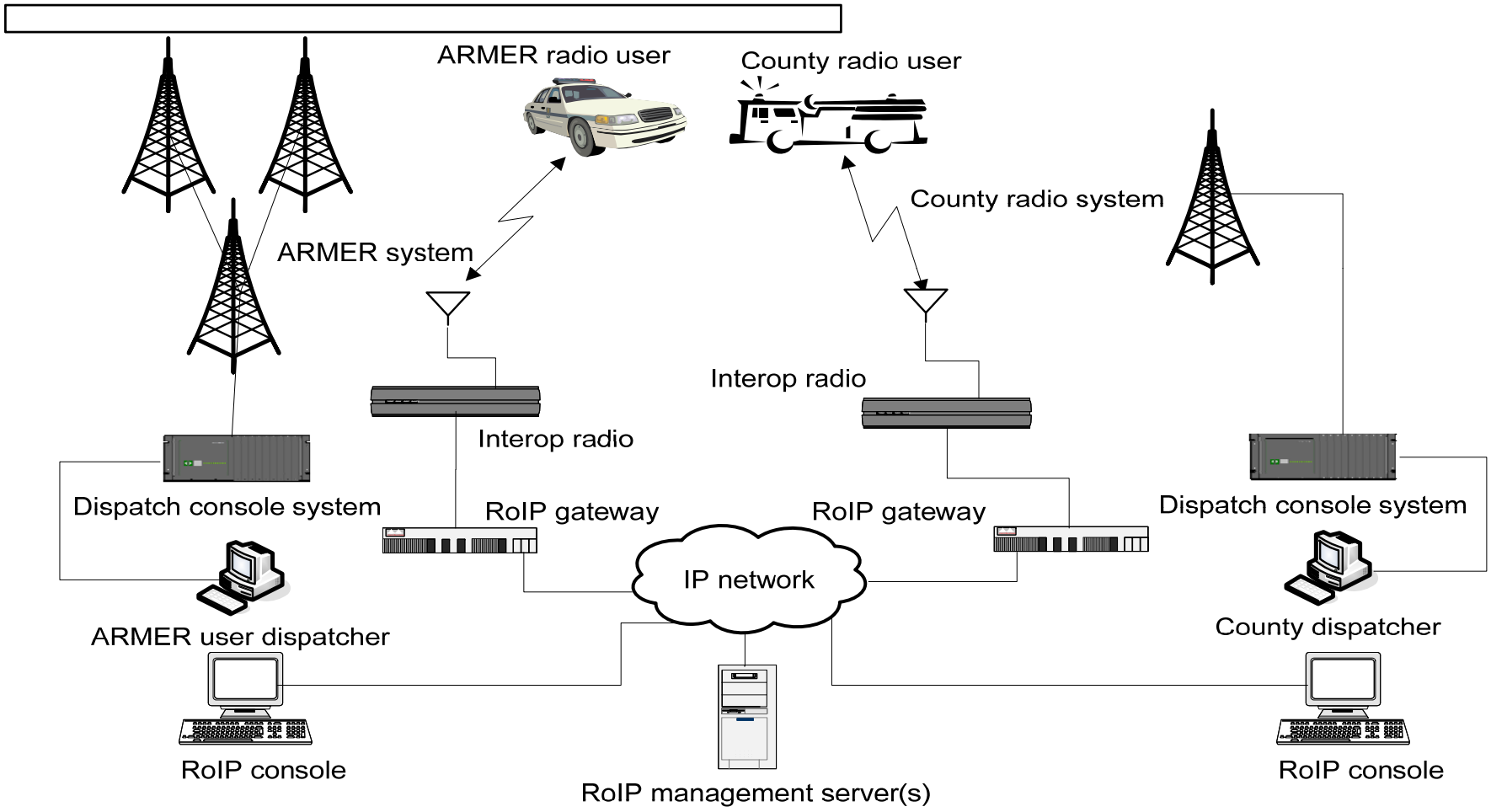
Dedicated connection example

- **Seattle, WA – Tri-county interoperability system (TRIS).**
  - Ties six major public safety radio systems together using microwave or optical fiber circuits to provide dispatcher-to-dispatcher connectivity for King County, City of Tacoma, Snohomish County & Port of Seattle as well as the Washington State Patrol and federal Integrated Wireless Network (IWN)

Radio over IP systems

- **RoIP – expands VoIP to mobile radio**
  - Provides level two interoperability
  - Moderate to high cost, moderately more difficult to use, manage and maintain
  - Extremely scalable
  - Does not address coverage issues
  - Needs robust IP and transport network
  - Standards still in development
    - Public safety VoIP working group

RoIP concept diagram



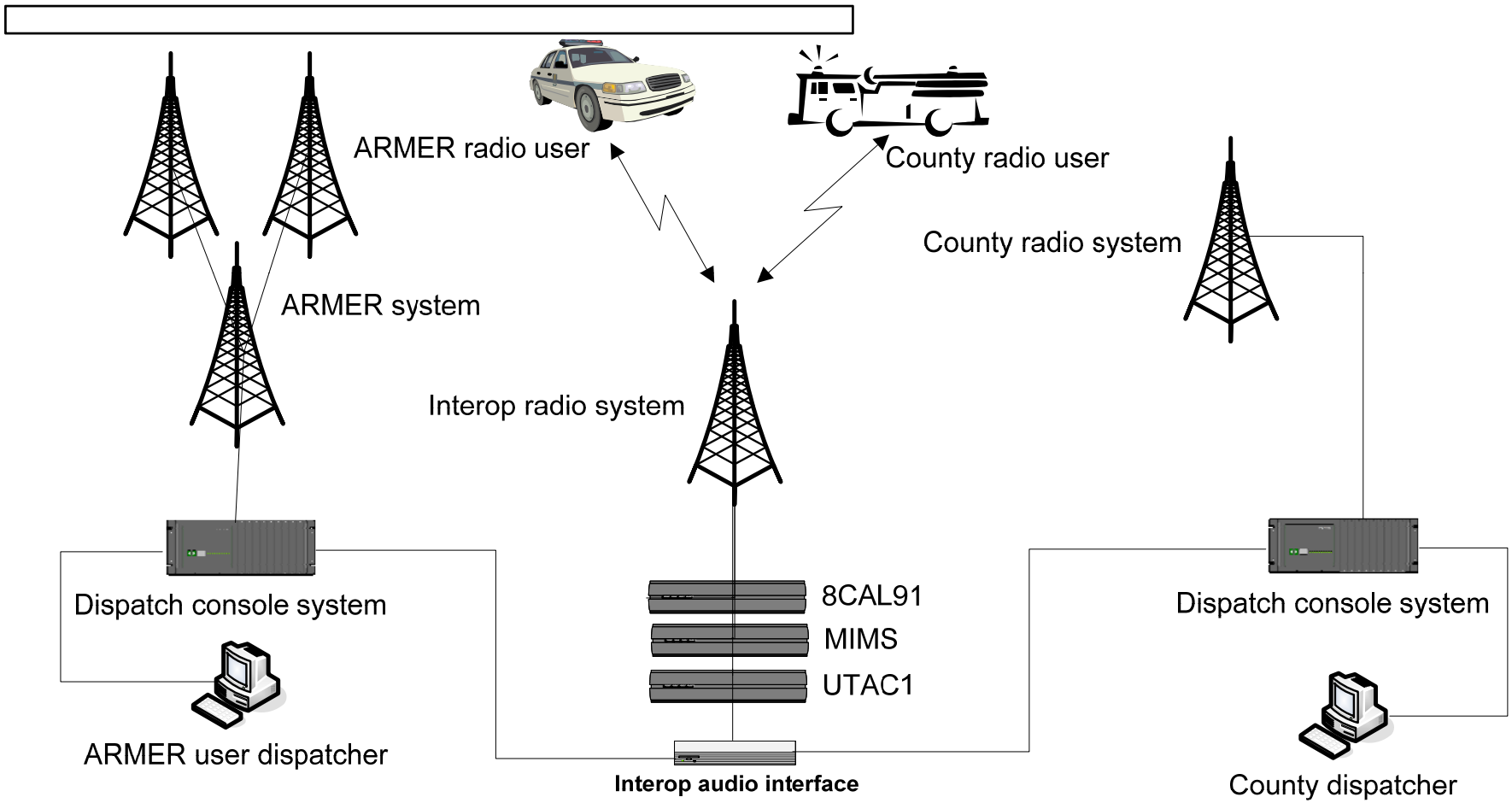
RoIP examples

- **Florida (FIN)**
  - Link to Florida FIN website
  - Link to Motorola Motobridge website
- **Virginia COMLINC**
  - Link to Virginia COMLINC website
  - Link to SyTech RIOS website
  - Link to CISCO IPICS website
- **OPSCAN (Western WA)**
  - Link to Twisted Pair OPSCAN case study
- **PA-STARNET**
  - Link to M/A-Com Network First website

Interoperability overlay

- **Dedicated interoperability channels (VHF/UHF/800) deployed statewide**
  - Provides level three interoperability
  - Moderate to high cost, easy to use, maintain and manage
  - Not very scalable
  - Spectrum issues can be complex
    - 36 narrowband channels potentially available
  - Improves interoperability when all users have interoperable channels in radios

Interop overlay diagram



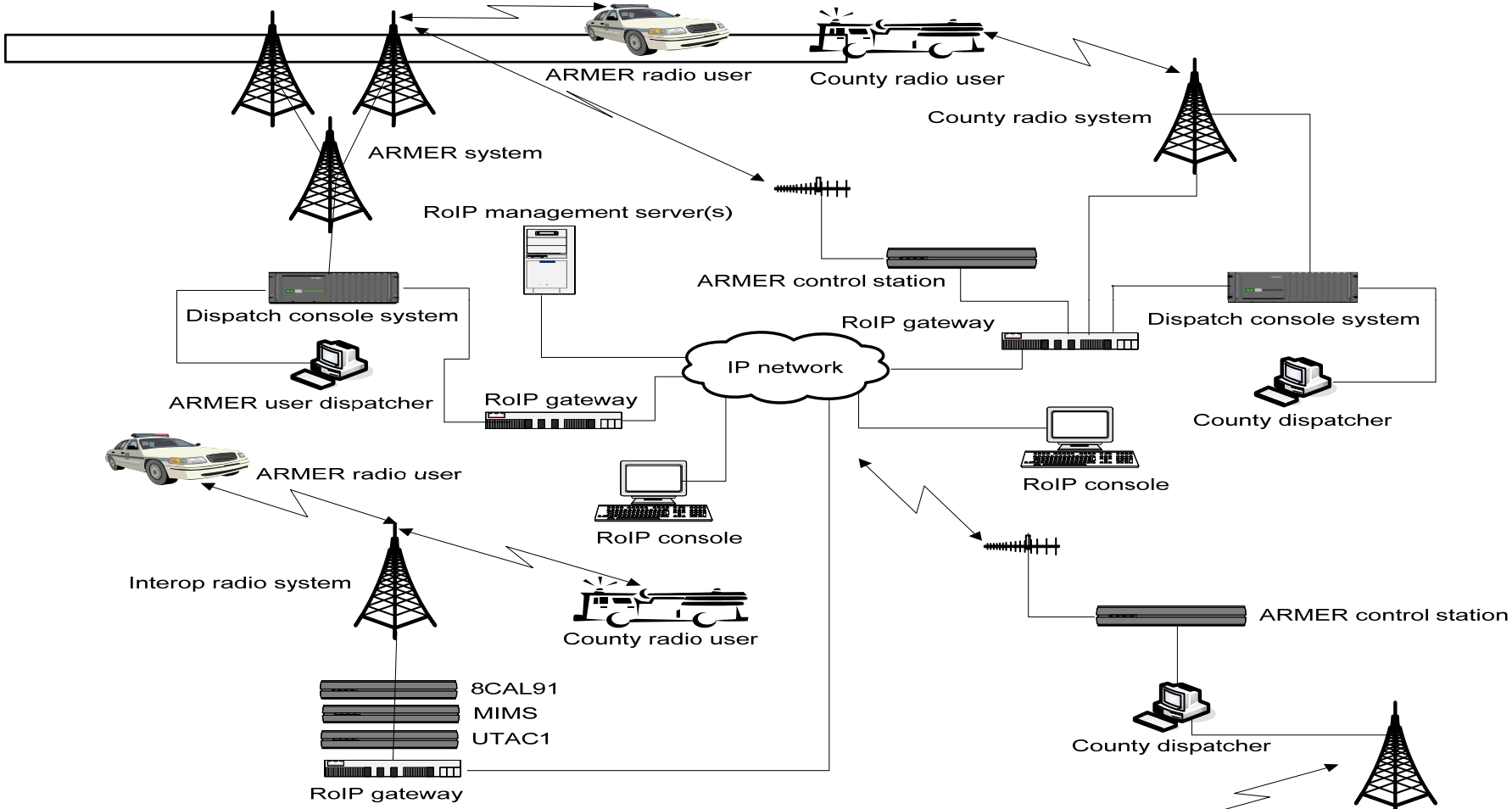
Interop overlay examples

- **Florida FIN and PA STARNET**
  - overlay of VHF, UHF and 800 MHz (FL) channels deployed statewide
- **Arizona AIRS**
  - VHF, UHF and 800 MHz channels deployed at approximately 32 sites statewide in a back-to-back mode with one 4 W circuit per site

Hybrid approach

- **Uses combination of methods such as donor radios, RoIP, Interop overlay**
  - Provides varying levels of interoperability (level one to level three)
  - Moderate to high cost, complex to use, manage and maintain
  - Can be very scalable and flexible

Hybrid diagram



Hybrid approach examples

- **Florida FIN**
  - Interoperability overlay and RoIP system
- **PA STARNET**
  - Interoperability overlay, RoIP system and donor radios
- **OPSCAN**
  - RoIP system and interoperability overlay

Summary of approaches

Approach	Complexity	Scalability	Ease of use	Cost	Interoperability Level
Donor radios	Low	Low	High	Low	1-2
Dedicated connections	Medium	Low	High	Medium	2
Radio over IP	Medium to High	High	Medium to High	Medium to High	2
Interoperability overlay	Medium	Low	High	Medium	3
Hybrid	Medium to High	High	Medium to High	Medium to High	1-3

Open Discussion

Next steps

- **Determine approaches to present to RAC/TOC groups, revise draft report and presentations with SRBIC feedback (due by COB on 5/21)**
- **Presentations to RAC/TOC groups in June, update report and findings**
- **Present to SRBIC on August 25th (special meeting)**

FE Key Contacts – I/O

Ronald Bosco
President/CEO
703-359-8200
rbosco@fedeng.com

John Murray
Senior Vice President
703-946-3626
jmurray@fedeng.com

Brad Barber
Project Manager
850-994-0880
bbarber@fedeng.com

Robert Pletcher
Sr. Consultant
512-213-4964
rpletcher@fedeng.com

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VHF/UHF Interoperability Infrastructure Planning Project Deliverable Number 2
DRAFT Version 2

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Prepared by:

"Unleashing the Power of Technology"

Federal Engineering®

Federal Engineering, Inc.
10600 Arrowhead Dr, Suite 160
Fairfax, VA 22030
703-359-8200

Executive Summary

Minnesota's Statewide Communications Interoperability Plan (SCIP) identified a need for the state to develop a plan to provide an interoperability infrastructure linking existing and future public safety radio systems within and adjacent to Minnesota. The primary public safety radio interoperability system in Minnesota is the Allied Radio Matrix for Emergency Response (ARMER). ARMER is a P25 standards-based radio system that ultimately offers the highest level of interoperability possible to the state, local and regional radio users in Minnesota. The SCIP also recognizes that not all local or regional radio users will join ARMER and envisions leveraging the investment in ARMER by utilizing the ARMER backbone to support additional interoperability infrastructure. This additional interoperability infrastructure will be one facet of the plans used to address interoperability between disparate systems in the state and adjacent jurisdictions.

There are five types of interoperability solutions, as defined by the Department of Homeland Security's SAFECOM program, ranging from basic (level one) to advanced (level five). These are:

1. Swap radios – swap radios from disparate systems
2. Gateways – patch audio together from different sources
3. Shared channels – use a shared or common set of channels
4. Proprietary shared systems – use a shared system with proprietary features
5. Standards-based shared systems – use a shared, standards based system

In this report, Federal Engineering Inc. (***FE***) outlines several conceptual approaches the state may consider to provide an interoperability infrastructure along with the technical and operational considerations inherent in each. Table 1 shows a summary of these approaches and their respective characteristics.

Table 1 - Interoperability infrastructure solutions

Approach	Complexity	Scalability	Ease of use	Cost	Interoperability Level[1]
Donor radios	Low	Low	High	Low	1-2
Dedicated connections	Medium	Low	High	Medium	2
Radio over IP	Medium to High	High	Medium to High	Medium to High	2
Interoperability overlay	Medium	Low	High	Medium	3
Hybrid	Medium to High	High	Medium to High	Medium to High	1-3

The concepts and issues outlined in this report shall be the basis for further analysis and evaluation of interoperability infrastructure options by the state in conjunction with its local and regional partners. The ultimate goal of this planning process is to select the best approach or combination of approaches to maximize interoperability throughout the state (including federal, state, tribal, local government and appropriate non-governmental entities), between bordering states and along the Canadian border.

[1] As defined in the SAFECOM interoperability continuum.

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1. Introduction

In 2007, the Minnesota Department of Public Safety, Division of Emergency Communication Networks (DPS) coordinated the development of a State Communication Interoperability Plan (SCIP) consistent with criteria adopted by the U.S. Department of Homeland Security (DHS). The SCIP provided an overview of the status of interoperability in Minnesota and outlined several steps toward enhancing interoperability throughout the state.

The foundation for public safety radio interoperability in Minnesota is the Allied Radio Matrix for Emergency Response (ARMER). ARMER is a P25 standards-based shared radio system that ultimately offers the highest level of interoperability possible to the state, local and regional radio user agencies in Minnesota that join ARMER. Over $150 million in state and local funds was originally invested in the ARMER project for the Twin Cities metropolitan area and another $45 million was spent to expand ARMER to 23 counties outside the Twin Cities in 2005. In 2007, the Legislature approved another $186 million to fund the further expansion of ARMER to the remaining counties in the state with a projected completion date of late 2012. Recognizing that not all local or regional radio users will join ARMER, the SCIP also laid out the vision of leveraging this investment by utilizing the ARMER backbone to support additional interoperability infrastructure. This additional interoperability infrastructure would be one facet in the state's overall plans to address interoperability between legacy systems in the state and adjacent jurisdictions (primarily VHF) and between legacy systems and ARMER.

FE's report to the state constitutes the output for Task 3 (deliverable 2) of the Minnesota DPS VHF/UHF Interoperability Infrastructure Planning Project. It builds upon the conceptual approaches outlined in Task 2 (deliverable 1) of this project. This report outlines the technical and operational considerations the state should evaluate before selecting any singular approach or combination of approaches to provide an interoperability infrastructure.

2. Interoperability basics

As outlined in the Interoperability Continuum developed by SAFECOM, a communications program of the Department of Homeland Security, an agency's level of interoperability improves as they address five key criteria. Interoperability improves as an agency or group of agencies makes progress on each of these criteria or "lanes" as defined by SAFECOM. These interoperability lanes are characterized as follows.

Governance

Interoperability improves as coordination and collaboration between agencies and disciplines improve. A formal governance structure is key to the success of interoperable communications projects and the structure should include local, tribal, state, and federal entities from all pertinent public safety disciplines within the region.

Standard operating procedures

Interoperability is enhanced by the development of standard operating procedures (SOPs) governing the use of interoperable resources during day-to-day operations and emergency incident management. This becomes especially important when interoperable resources are available on a regional or statewide basis. Ultimately, these SOPs should also be consistent with and integrate the procedures detailed in the National Incident Management System (NIMS).

Training and exercises

Training in the proper utilization of interoperable resources and then testing that training through regular local, regional and state exercises is critical to the successful use of any interoperability solution.

Usage

It is only when interoperable resources can be easily accessed and utilized on a day-to-day basis that the highest levels of interoperability can be achieved.

Technology

While technology is integral to achieving improved interoperability, a successful solution must also address all the other criteria listed previously. The evaluation of technology choices should also address multiple criteria such as:

- Needs of the end users
- Communications environments in different regions
- Capabilities of existing support infrastructure
- Cost of the technology versus the improved interoperability it would provide
- Sustainability and maintainability of the technology
- Scalability to support day-to-day incidents as well as larger, multiple agency incidents
- Security and access management

The Technology lane includes five basic types of technologies to achieve communications interoperability ranging from basic to advanced solutions. These are:

1. Swap radios
2. Gateways
3. Shared channels
4. Proprietary shared systems
5. Standards-based shared systems

ARMER, since it is a P25 standards based shared radio system, offers the highest level of interoperability infrastructure to state, local and regional radio users in the state of Minnesota. However, not all local or regional radio users will join ARMER nor does ARMER inherently improve interoperability with adjacent states and provinces. Therefore, Minnesota is committed to consider approaches that address interoperability between legacy systems in the state and adjacent jurisdictions (primarily VHF) and between legacy systems and ARMER. The final interoperability approach or solution chosen should also leverage the investment in ARMER to the maximum extent possible. The following sections outline several conceptual approaches for Minnesota to consider in developing an interoperable infrastructure that meets these requirements.

3. Donor radio connections to ARMER

In this approach, shown in Figure 1, local or regional systems use fixed ARMER 800 MHz radio control stations installed in local or regional public safety answering points (PSAPs) or dispatch centers to communicate with ARMER users on a trunked talk group or groups. The fixed radio control stations, if integrated into local or regional dispatch console systems, also provide the option of connecting or patching ARMER talk groups to local or regional radio resources.

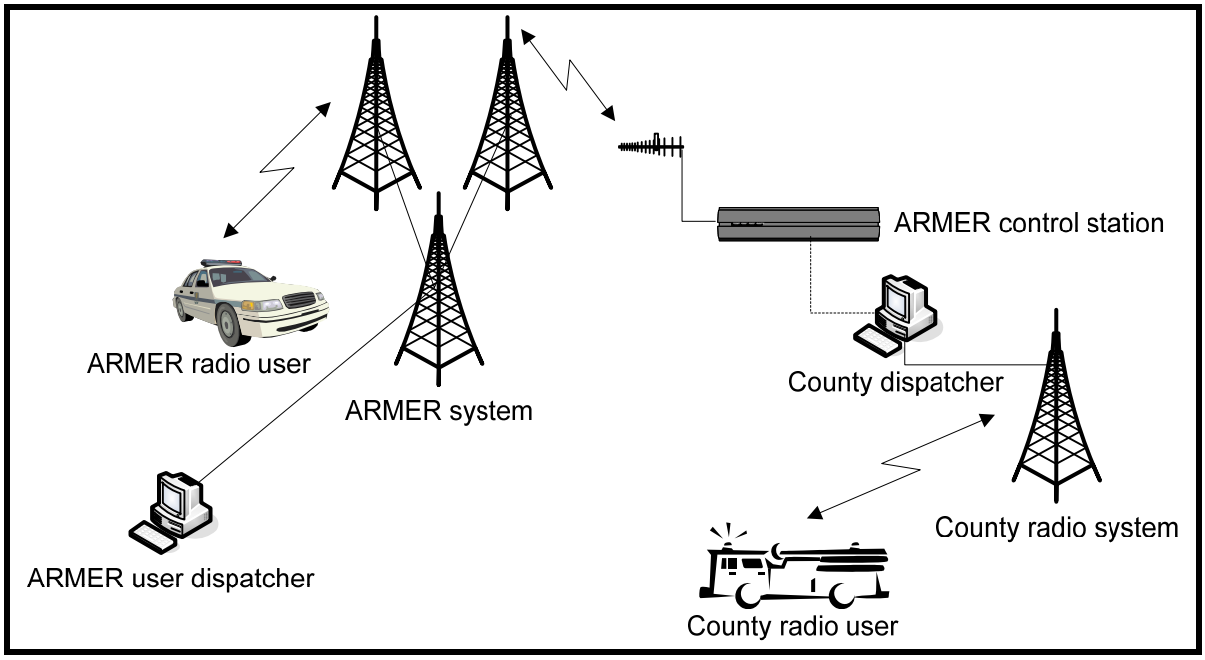

Figure 1 - Donor radio connection to ARMER

Local and regional users have a single interoperable communications path per radio control station to ARMER users and a dispatcher must relay information or patch radio traffic together for this approach to be effective. Since this solution does not add separate radio channels or capacity to the statewide, regional or local user's primary radio system, it adds traffic to these existing systems if they interconnect through console patches or other gateways. The use of compatible radios and dispatch console equipment may also allow the use of additional radio features such as access to multiple modes or scanning though scanning may be of limited operational value in this configuration.

The donor radio approach provides basic level one (swap radios) interoperability in the SAFECOM interoperability continuum. Level two (gateway) interoperability is possible

when the ARMER control station is patched to a local radio resource via a dispatch console or gateway.

3.1 Characteristics of the donor radio approach

Talk group programming in the ARMER control stations would be the primary issue to be resolved during implementation of this solution. A consistent approach for programming is required so that all radio users and dispatchers can be trained in the proper use of the resources. For instance, each locality or region could have a separate talk group on the ARMER system so that ARMER users would be able to quickly contact a local or regional dispatcher by selecting the appropriate talk group though this may create ARMER system loading issues. Another approach would be to establish mutual aid talk groups on a regional or statewide basis or just to use existing ARMER mutual aid talk groups but restrict the conditions under which a local or regional dispatcher can access them.

The primary advantage to the donor radio approach is simplicity but this may also be its biggest disadvantage since it offers only limited interconnection between users in separate frequency bands or radio systems. Some of the other advantages and disadvantages of this approach are as follows.

Advantages:

1. May not require additional end user subscriber programming since current channels and/or trunked talk group resources may be used
2. Does not require significant capital and maintenance costs to implement and maintain
3. Has a built in access control or gating point, the dispatcher
4. Does not require additional transport (microwave, fiber, leased lines)
5. Is included in current DPS plans and funds are available to execute this solution
6. SOPs for use of this approach would be relatively simple to develop

Disadvantages:

1. Offers limited connections from local systems to ARMER and vice versa
2. Will add traffic when ARMER radios are patched to local, regional or state system resources, potentially overloading conventional channels or trunked talk groups

3. Requires a dispatcher to relay information or patch traffic together depending on local or regional implementation
4. Does not address differences in coverage between ARMER and local radio systems
5. Only works if the ARMER control station is within the coverage of an ARMER site
6. Provides limited interoperability between non-ARMER systems or users
7. Is not easily scalable and does not provide interoperable connections to non-traditional LMR systems, i.e. PCS, telephone, unlicensed wireless, etc.

3.2 Example of the donor radio approach

Pennsylvania STARNET

The Commonwealth of Pennsylvania provides a dedicated 800 MHz talk group for each county on the statewide radio system (PA-STARNET) as well as a dedicated PA-STARNET control station for each PSAP. Local PSAPS have the option of connecting this control station directly into their normal dispatch console systems through a remote control adapter and the majority of the PSAPs in the Commonwealth have done this.

Link to PA-STARNET information:

http://www.outreach.psu.edu/programs/interop/files/Breakout6.pdf

4. Dedicated audio connections to ARMER

In this solution, shown in Figure 2, state, local and regional dispatch centers would be connected together using dedicated microwave or optical fiber communication links to enable console patching between dispatch centers and disparate radio systems. The dedicated links between dispatch centers can patch radio resources available in separate dispatch centers together.

For instance, when requested, and ARMER users dispatch center one might connect an ARMER talk group to Interop link 1. A county dispatcher would connect a local county radio channel to Interop link 1. Once the incident or need for communications is over, each dispatch center would take down the patches to Interop link 1.

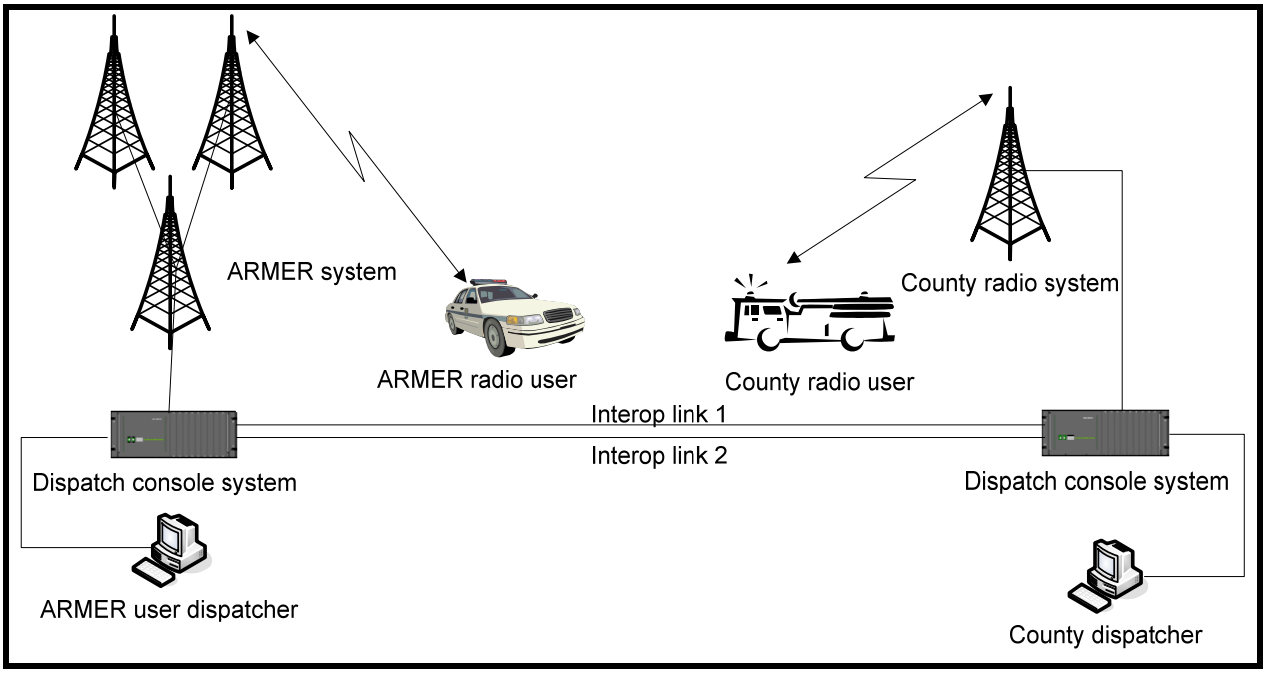

Figure 2 - Dedicated audio connections

This approach provides level two (gateway) interoperability in the SAFECOM interoperability continuum.

4.1 Characteristics of the dedicated audio connection approach

The primary advantage to this approach is that it allows local, state and regional dispatchers to continue to use the same equipment that they use every day to create interoperability talk paths. It works best when the dispatch centers use similar dispatch console equipment. Gateway type solutions can only work when the interconnected users are within the respective coverage areas of their interconnected systems. Some of the other issues inherent in this approach as follows.

Advantages:

1. Dedicated links provide a high degree of flexibility to dispatch operators
2. Does not require reprogramming of existing subscribers
3. May be less costly than overlay and Radio over Internet Protocol (RoIP) solutions to deploy and maintain

Disadvantages:

1. These links can easily be overloaded
2. Use of the system requires a high degree of cooperation to be effective
3. Requires additional transport between dispatch centers
4. Gateway systems do not address coverage or capacity issues inherent in the interconnected networks
5. Only improves interoperability between linked systems or users
6. Connecting too many systems or channels together can actually inhibit communications
7. The system is not easily scalable and may not provide interoperable connections to non-traditional LMR systems, e.g., PCS, telephone, unlicensed wireless, etc.

4.2 Example of dedicated audio connection approach

Seattle, WA Tri-County Interoperability System (TRIS)

The TRIS directly ties six major public safety radio systems together using microwave or fiber circuits to provide dispatcher-to-dispatcher connectivity on the King County, city of Tacoma, Snohomish County and Port of Seattle 800 MHZ trunked radio systems as well as the VHF systems operated by the Washington State Patrol and the federal Integrated Wireless Network (IWN). Each dispatch center has one or more dedicated links to each of the other primary dispatch centers that can be patched to a trunked or conventional

resource in the primary system. A coordination intercom function is also present on these consoles allowing all participating centers to coordinate activities on a common "party line" basis. Additionally, VHF, and UHF radio control stations are tied into a shared dispatch console central electronics bank so that out-of-band, out-of-area radio users can communicate via radio with users on the King County, city of Tacoma, Snohomish County and Port of Seattle 800 MHz systems.

5. Radio over Internet Protocol connections to ARMER

This approach, as depicted in Figure 3, would utilize a Radio over Internet Protocol (RoIP) system or systems to connect ARMER users and infrastructure to other state, local and regional users and radio systems. RoIP is an expansion of the use of Voice over Internet Protocol (VoIP) with additional control functions needed in land mobile radio systems such as push to talk (PTT). VoIP employs session control protocols to control the set-up and teardown of calls as well as specialized audio coding and decoding to enable transmission of audio over an IP network. In order to deploy an RoIP system or systems, existing transport networks would have to be expanded and/or enhanced utilizing RoIP routers and gateways to transmit audio data packets over statewide, local and regional networks.

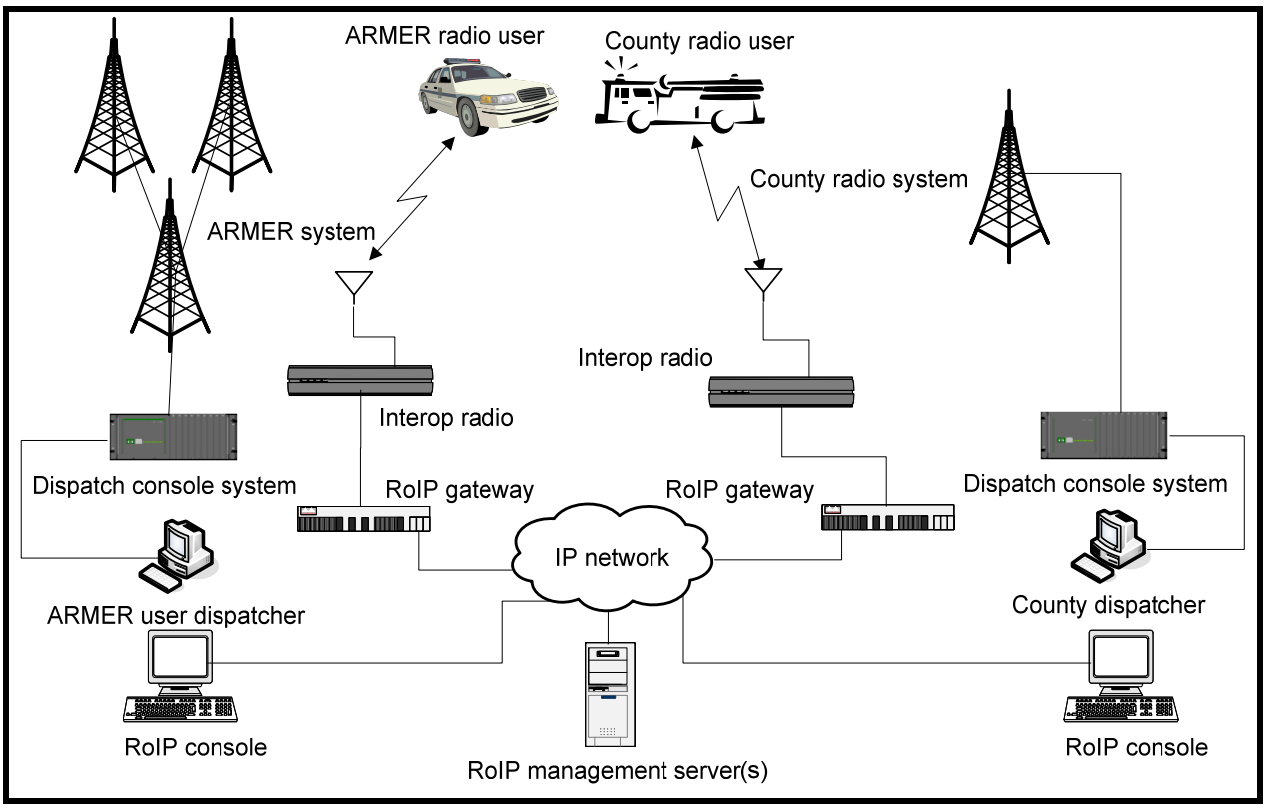

Figure 3 - RoIP connections

The interoperability radios connected to the RoIP system may be new radios installed strictly for interoperability purposes, existing local or regional mutual aid channels, existing primary local or regional radio channels or any combination thereof.

The use of RoIP interoperability solutions continues to expand as the underlying technologies mature and as the land mobile radio market in general continues to move towards convergence with more traditional voice and data networks.

RoIP connections would provide level two (gateway) interoperability in the SAFECOM interoperability continuum albeit with greater flexibility than more traditional gateway connections, such as console-based patches.

5.1 Characteristics of the RoIP approach

While RoIP systems can significantly enhance interoperability, understanding the underlying technology as well as the specific capabilities and drawbacks of a particular vendor solution is essential for planning and deploying these systems. RoIP systems are less efficient, spectrally, than the use of a shared system and require additional ancillary equipment at the dispatch centers that also increases the need for training and other ongoing support. Just as with other gateway type solutions, RoIP systems work only when the interconnected users are within the respective coverage areas of their interconnected systems. Some of the other advantages and disadvantages of this approach are as follows.

Advantages:

1. RoIP systems are scalable and can provide interoperable connections to non-traditional LMR systems, e.g., PCS, telephone, unlicensed wireless, etc.
2. The nature of these systems can also enable limited PC-based access to land mobile radio channels and networks
3. Does not require reprogramming of existing subscribers
4. Use of an RoIP system does not necessarily require immediate investment in legacy RF systems
5. Can also be used to improve interoperability between non-ARMER systems and users
6. Building a robust IP network to support RoIP systems may complement or expand options for other IP based systems including new or expanded land mobile radio or data systems
7. Use of existing IP networks may result in cost savings versus more traditional land mobile radio site interconnection methods

Disadvantages:

1. RoIP systems do not address coverage or capacity issues inherent in the interconnected networks
2. Only improves interoperability between linked systems or users
3. Most traditional land mobile radio transport networks were not originally designed to support IP communications
4. Total cost to implement and maintain can be significant
5. Limits the use of advanced subscriber radio features
6. RoIP systems from different vendors may have proprietary features
7. Supporting transport and IP networks must be designed to provide the quality of service and reliability needed for public safety communications systems
8. Complexity and capabilities of RoIP result in more effort needed to develop effective SOPs, training guidelines and security safeguards
9. Connecting too many systems or channels together can actually inhibit communications or create a "ping pong" effect disrupting necessary communications
10. Work to define standards for communications interfaces between different RoIP systems is still ongoing[2]

5.2 Examples of RoIP systems

Florida Interoperability Network (FIN)

The FIN utilizes an RoIP system (Motorola Motobridge) to interconnect an overlay of VHF, UHF and 800 MHz interoperability channels to the 800 MHz Statewide Law Enforcement Radio System (SLERS) utilized by state law enforcement officers and 225 SLERS and local dispatch centers. All FIN-connected dispatch centers are currently fed by T1 circuits but the state is evaluating scaling some sites back to fractional T1 service depending on the number of local mutual aid resources in that area.

Links to FIN information:

http://dms.myflorida.com/suncom/public_safety/radio_communications/florida_interoperability_network_fin

http://www.motorola.com/Business/US-EN/Business+Solutions/Product+Solutions/Incident+Scene+and+Event+Management/MOTOBRIDGE+IP+Interoperability+Solution_US-EN

[2] http://www.safecomprogram.gov/SAFECOM/currentprojects/voip/

Virginia Commonwealth's Link to Interoperable Communications (COMLINC)

The COMLINC project leverages several different RoIP systems to allow disparate radio systems to communicate within Virginia and to interface with the Statewide Agencies Radio System (STARS) network. The STARS project team reviews regional and local interoperability projects, working in conjunction with the Commonwealth Interoperability Coordinator, State Interoperability Executive Committee, and the Virginia Information Technologies Agency (VITA) to ensure that all RoIP technologies considered for COMLINC meet certain technical and functional requirements. Currently COMLINC uses three different vendor solutions. These are:

- Cisco IPICS
- Motorola Motobridge
- SyTech RIOS

Links to ComLINC information:

http://www.interoperability.virginia.gov/CommunicationSystems/COMLINC.cfm

http://www.cisco.com/en/US/prod/collateral/ps6712/ps6718/prod_brochure0900aecd80352c7e.html

http://www.motorola.com/Business/US-EN/Business+Solutions/Product+Solutions/Incident+Scene+and+Event+Management/MOTOBRIDGE+IP+Interoperability+Solution_US-EN

http://sytechcorp.com/new_site/SytechCorp/SyTechCorpXY/CDR02.asp

Olympic Public Safety Communications Alliance Network (OPSCAN)

OPSCAN uses a RoIP system installed by an integrator (ARINC with Twisted Pair servers/software and Cisco gateways) to connect users from disparate radio systems amongst a consortium of 43 local, state, federal, non-governmental, tribal, and transit agencies. A shared microwave backbone around the entire Olympic Peninsula of Washington State and a network of interoperability gateways, routers and servers supports OPSCAN. The OPSCAN network utilizes the national VTAC and UTAC channels through eleven cross band repeater sites.

Link to OPSCAN information:

http://www.twistpair.com/index/case-opscan

6. Interoperability channel overlay for ARMER

An interoperability channel overlay, as depicted in Figure 4, would include the build-out of new interoperability channels or the incorporation of existing interoperability channels in multiple bands. Typically, interoperability channel overlay systems include one or more VHF channels, one or more UHF channels and one or more 700/800 MHz national mutual aid channels statewide or by region. The number and band of the interoperability channels deployed may be based on the number and types of radio users in each band in that particular state and/or region but are often also restricted by the transport capacity of the statewide radio system. Interoperability overlays do not provide the same levels of coverage or capacity as a primary statewide radio system but do provide a resource for command and control functions or a “lifeline” to local and regional radio users who are outside the coverage of their primary radio systems.

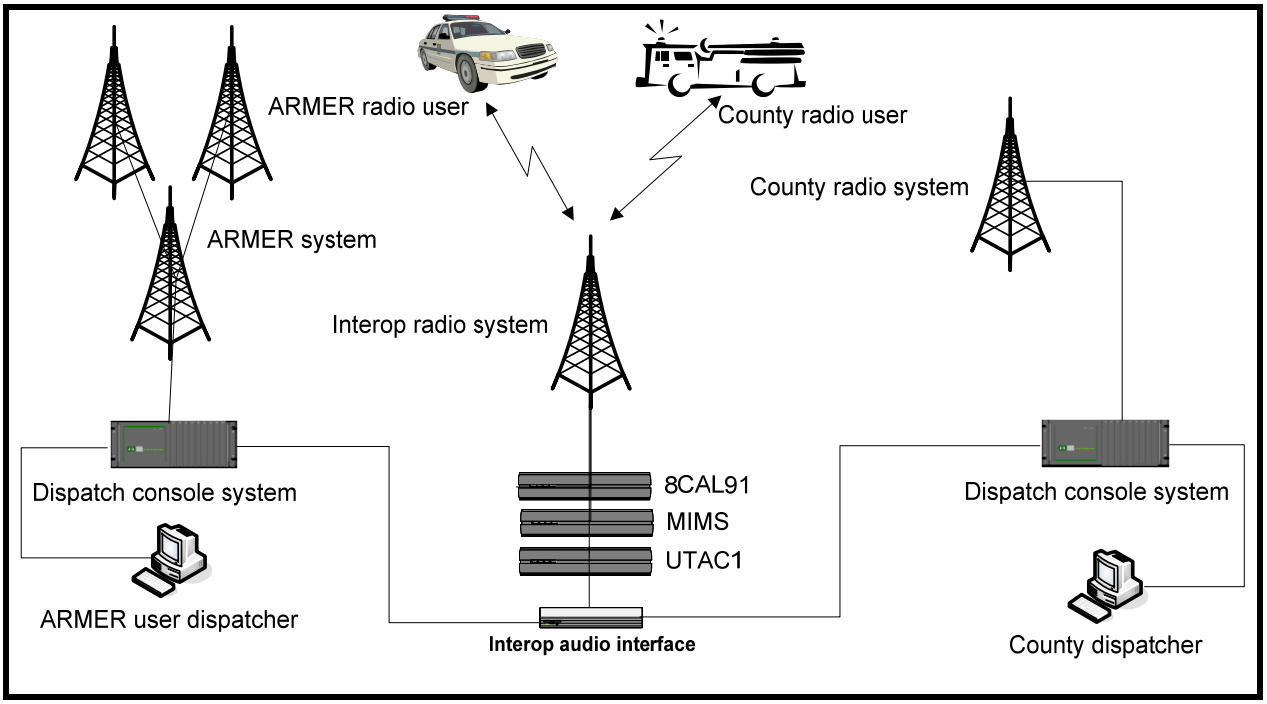

Figure 4 - Interoperability channel overlay

The use of a small number of conventional channels (VHF) for interoperability was part of the original conceptual plan for ARMER and estimated bandwidth requirements for this are included in the overall ARMER transport network design. Conventional mutual

aid channels can also be retrofitted into the current ARMER network and included in the design of ARMER phases still being deployed.

The interoperability channel overlay provides state, local and regional users a set of common channels for use during events requiring responses from multiple public safety/service disciplines but may become overloaded if not managed properly. Since the overlay infrastructure utilizes radio channels that are separate from the state, region or local user's primary radio system it does not add traffic to these systems unless the overlay channels connect to them through console patches and/or gateways.

This approach provides level three (shared channels) interoperability in the SAFECOM interoperability continuum.

6.1 Characteristics of the interoperability channel overlay approach

The primary issues with deploying an interoperability channel overlay all relate to spectrum. Finding new unused channels or identifying existing channels to utilize in an overlay network can be extremely challenging especially in congested bands like VHF. Border states like Minnesota must also coordinate the use of certain channels with Canada, particularly in areas above what is referred to as "Line A" , as shown in Figure 5, which further reduces the pool of potential channels.

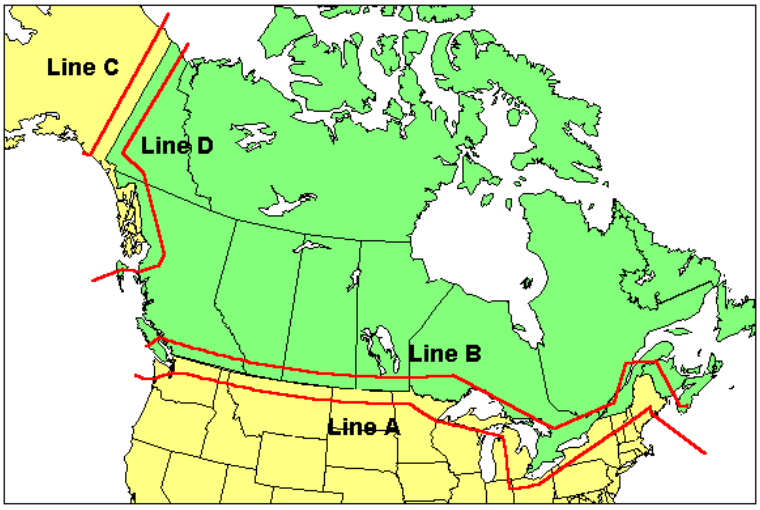

Figure 5 - Line A

Adding further complexity to these challenges are several spectrum related initiatives mandated by the Federal Communications Commission (FCC). In the VHF and UHF bands, the FCC has mandated that all wideband (25 kHz) channels operating below 512 MHz (VHF and UHF) must move to narrowband (12.5 kHz) channels by January 1, 2013. The 800 MHz band is in the midst of a process called rebanding which will separate public safety radio channels from those used by commercial wireless carriers.

In a previous report provided to DPS, ***FE*** identified thirty-six narrowband frequencies that may have the potential for use on a statewide basis for interoperable communications.

Some of the other advantages and disadvantages of this approach are as follows.

Advantages:

1. Improves interoperability between both ARMER and non-ARMER systems and radio users
2. A common set of channels across multiple bands provides at least one common channel for programming into any users' radio
3. Costs to maintain are relatively low when combined with existing statewide radio system infrastructure
4. The overlay does not necessarily require a dispatcher to activate or participate in a call depending upon the specific system implementation
5. Being an "always on" solution, it can be relatively simple to use in a day-to-day or emergency situation
6. The overlay system can provide a separate and potentially redundant communication system for use during catastrophic failures of local or regional systems although limitations in capacity quickly become an issue

Disadvantages:

1. If radio traffic is not controlled the overlay system will be overloaded quite easily.
2. Cost to implement can be significant
3. Additional channels may need to be programmed into all subscriber radios
4. Requires development of standard channel naming and SOPs for effective use
5. Separate channels in different frequency bands do not provide consistent coverage across bands and are not usually consistent with the coverage provided by the primary state, regional or local system

6. Monitoring and/or recording of these overlay channels may require additional resources
7. Providing balanced or equivalent coverage in all bands deployed for interoperability becomes more difficult due to differences in propagation characteristics between bands
8. Integrating existing state, local or regional radio resources can be problematic (varying levels of maintenance, coverage, accessibility, etc.)
9. An overlay system is not easily scalable and does not provide interoperable connections to non-traditional LMR systems, e.g., PCS, telephone, unlicensed wireless, etc.

6.2 Examples of interoperability channel overlay systems

Florida Interoperability Network (FIN)

The FIN includes an overlay of VHF, UHF and 800 MHz interoperability channels deployed across 93 sites statewide that enhance and expand the capabilities of the 800 MHz Statewide Law Enforcement Radio System (SLERS) utilized by state law enforcement officers. The interoperability overlay connects to SLERS and local dispatch centers via a Radio over IP (RoIP) system (Motorola Motobridge).

Arizona Interoperability Radio System (AIRS)

AIRS is a system of VHF, UHF and 800 MHz interoperability channels deployed at approximately 32 sites statewide. The channels at each site interconnect in a back-to-back manner using four-wire audio bridges and are tone remote controlled over a single four-wire circuit. Each site connects to regional dispatch centers via the state's Department of Public Safety statewide microwave system.

Pennsylvania STARNET

Pennsylvania has installed VHF and UHF overlay systems. The VHF system uses the National Emergency Police Frequency (NEPF), which is available to all public safety agencies in the Commonwealth. The state installed 50 base stations on this simplex, carrier squelch channel. The state is also in the process of deploying a UHF overlay system with approximately 50 base stations/repeaters on the national UHF interoperability channels (UCALL, UTACS). In both cases, the VHF and UHF overlay channels connect to an M/A-COM Network First device at each site and interface into the PA-STARNET system on dedicated talk groups.

7. Hybrid approach

As indicated in several previous examples, statewide or regional interoperability systems are often deployed as or migrate to a hybrid approach that include some aspect, if not all, of the approaches described previously. Several factors cause this to occur including; budgetary constraints at the state, local and regional levels, the maturation of underlying communications technologies, and variability in state, local or regional needs. In some cases, interoperability solutions deployed to meet a short term or immediate need are also later incorporated into a more robust or widespread solution. Hybrid approaches often develop when there is insufficient transport or other technological issues that restrict deployment of the preferred or standard interoperability solution in a particular area or region. One hybrid approach, as depicted in Figure 6, would utilize three of the conceptual approaches presented previously – donor radios, RoIP systems and an interoperability overlay.

The hybrid approach provides level one (swap radios) to level three (shared channels) interoperability in the SAFECOM interoperability continuum depending on the solution deployed in a particular area or region.

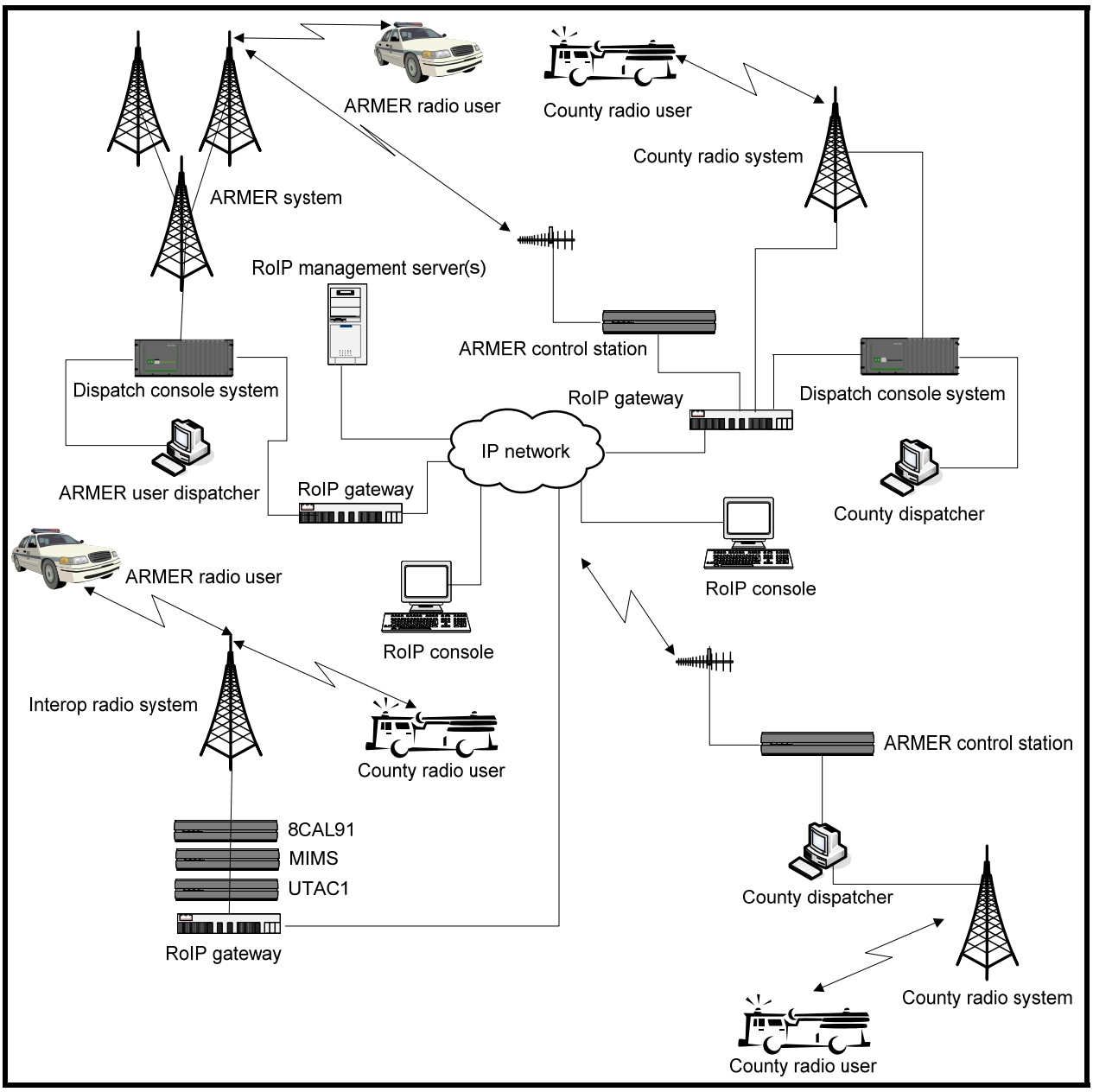

Figure 6 - Hybrid approach

7.1 Characteristics of the hybrid approach

The predominant issue with the hybrid approach is that it does not provide the same level of interoperability system wide or for all potential users. This increases the need for training and exercises so that all users know what interoperability resources are

available in a particular area and how to use them. It also means that SOPs and incident management plans must take into account these variables as well. Additionally, the hybrid approach has all the advantages and disadvantages of the interoperability solutions that it utilizes in the areas where those distinct solutions have been deployed. Management and maintenance of the hybrid approach is also more complicated due to the variability in the solution although it does also provide the highest degree of flexibility of all the approaches presented.

7.2 Examples of the hybrid approach

Florida Interoperability Network (FIN)

The FIN includes an overlay of VHF, UHF and 800 MHz interoperability channels deployed across 93 sites statewide that are connected to state and local dispatch centers via an RoIP system (Motorola Motobridge).

Pennsylvania STARNET

Pennsylvania has installed VHF and UHF overlay systems that connect to a M/A-COM Network First RoIP system and interface into the PA-STARNET system on dedicated talk groups. Additionally, the Commonwealth provides a dedicated 800 MHz talk group for each county on the statewide radio system, PA-STARNET, as well as a dedicated PA-STARNET control station for each PSAP.

Olympic Public Safety Communications Alliance Network (OPSCAN)

OPSCAN uses an RoIP system installed by an integrator (ARINC with Twisted Pair servers/software and Cisco gateways) to connect users from disparate radio systems amongst a consortium of 43 local, state, federal, non-governmental, tribal, and transit agencies. The OPSCAN network utilizes the national VTAC and UTAC channels through eleven cross band repeater sites.

8. Next steps

This draft report presents several conceptual approaches for implementing interoperability infrastructure solutions within the state and outlines the operational and technical issues inherent in each approach. Most states or regions with radio interoperability systems have opted to utilize one or more of these solutions to enhance interoperability. Standards-based shared systems such as ARMER achieve the highest level of interoperability. However, this approach does not address interoperability with adjacent states or Canada nor does it improve interoperability with those agencies that do not join ARMER.

Regardless of the technology or group of technologies selected, significant work remains to implement an interoperability solution and to establish or enhance the other lanes to interoperability needed to support that solution. The state is well equipped to meet these challenges given the governance structures that are already in place in Minnesota.

The Statewide Radio Board Interoperability Committee (SRBIC) along with the appropriate regional radio committees will review the concepts and issues outlined in this draft report to assist in further evaluating each approach before ***FE*** develops a draft final report and presentation to the SRBIC. The draft final report will incorporate feedback from the regional meetings as well as any interoperability issues that are unique to the regions. The draft final report shall also include a technical evaluation of each interoperability infrastructure solution by ***FE*** to address:

- The extent to which the approach addresses the objective to provide the highest level of interoperability throughout the state
- The flexibility of the approach to address any unique regional interoperability issues
- Adaptability of the approach to standardized training and usage on a statewide basis
- Potential high-level strategies for implementation of the approach

FE and the SRBIC will then develop a final report and recommendation to the Statewide Radio Board for implementation of an interoperability infrastructure solution.

STATEWIDE RADIO BOARD
Interoperability Committee

Tuesday, July 21, 2009,
12:30 p.m. – 3:30 p.m.
Chair: Colonel mark Dunaski

League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Agenda

Call meeting to order
Approval of Agenda
Approval of Meeting Minutes of April 21, 2009

New Business

- Appointment of Vice Chair (Chair Dunaski)
- Standard 3.17.0 **COML** (T. Johnson) Action Required
- Standard 6.5.0 **Capitol Spending** (Chair Dunaski) Action Required
- MOU: Sherburne National Wildlife Refuge,
  re: use of the Statewide Fire Mutual Aid Frequency Action Required
- Presentation on P25 (T. Johnson)

Old Business

Standing Reports

- Grant Workgroup
- Interoperability Workgroup

Adjourn

STATEWIDE RADIO BOARD

Interoperability Committee

Tuesday, April 21, 2009, 1:00 – 3:00 p.m.

League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Minutes

Members/alternates present:

Chair, Col. Mark Dunaski, MN State Patrol Chief
Mylrah Olson, MN Department of Health
Tim Lee, MnDOT
Lance Ross, MN Ambulance Association
Steve Pott, 700 MHz Planning Committee
Dan Bullock (alt), Met Council
Bill Hughes, MEMA
John Sanner, MN Sheriff's Assoc.
Ulie Seal, MN Fire Chiefs Association
Cari Gerlicher, MN Chief's of Police Assoc.
Pat Coughlin, MN Interagency Fire Center
B.J. Battig, UASI
Troy Tretter, MN National Guard
John Dooley, HSEM
Scott Camps, HSEM NE MN
Pat Novacek, HSEM, NW MN
Jay Sikkink (alt), Central MN RAC
Brett Miller, SC MN RAC

Members/alternates absent:

Jim Halstrom, AMEM
Bill Spence, DNR
Bob Norlen, MN EMSRB
Chris Kummer, MESB
Jon Priem, Prairie Island Tribal Police
Jeff Karel, ICE
Mike Martin, FBI
David Mercer, US Border Patrol
Robert Graves, US Secret Service
Dan Anderson, HSEM SW MN
Gary Peterson, HSEM SE MN
Scott McNurlin, SE RAC
Vacant, Tribal

Others Present
Tom Johnson, Statewide Interoperability Program Manager, DPS-DECN
Ron Whitehead, DPS-DECN
Jill Rohret, MESB
Roger Laurence (alt), UASI
Nikia, McKinney (alt), MN National Guard

Chair Dunaski calls the meeting to order at 1:10 p.m.

Lance Ross moves to approve the agenda as amended. Cari Gerlicher seconds the motion. The Motion Prevails.

Dan Bullock moves to approve the amended SRB Interoperability Committee Meeting Minutes of January 20, 2009. The motion is seconded by Ulie Seal. The Motion Prevails.

Standing Reports

FY2009 State Homeland Security Program Grant Proposals

Ron Whitehead gives a recap of the Grant Workgroup's process of reviewing the proposals and developing recommendations. Mr. Whitehead explains that the grant process is new but will be more uniform next year because of the learning that occurred this year. He indicates the grant workgroup will be looking for feedback from the Interoperability Committee and hopes to enlist the aid of the SRB to determine future priorities.

Mr. Whitehead recognizes the members of the Grant Workgroup: Ron Whitehead, Scott Wiggins, Tom Johnson, Jill Rohret, Brian Holmer, Micah Myers, Jennifer Todd, Cari Gerlicher, Scott Camps, Tom Phillips and Dan Anderson.

Mr. Whitehead goes through the grant workgroup's recommendations for each applicant as follows:

Applicant	Requested	Recommendation*
HSEM Region 1	$1,200,000.00	$216,300.00
HSEM Region 2	$803,000.00	$515,000.00
HSEM Region 3	$600,000.00	$422,300.00
HSEM Region 4	$17,807,600.00	$576,645.50
HSEM Region 5	$270,000.00	$278,100.00
HSEM Region 6	$430,000.00	$208,060.00
MESB	$1,135,350.00	$618,000.00
DECN	$3,500,000.00	$2,884,000.00
Border Counties	$875,000.00	$103,000.00

*Recommended amounts include an allocation of 3% for Management and Administrative (M & A) expenses, as fiscal agents in most regions require those

funds to cover expenses. An applicant need not allocate any funds to M & A and can use those funds consistent with the proposal.

Cari Gerlicher moves to approve the recommendation of the Statewide Radio Board Interoperability Committee Grant Workgroup to be forwarded to the Statewide Radio Board Finance Committee for approval. Lance Ross seconds the motion. The Motion Prevails.

New Business

DNR on MINSEF
Tom Johnson explains the language of Standard 1.1.2; **Criteria for the Installation of Base Stations on MINSEF**. He indicates that it would not be time or cost effective for DNR to remove MINSEF from their radios. He explains how and when MINSEF would be used.

Ulie Seal moves to approve the request to allow MN DNR Forestry Division to be allowed to install the MINSEF channel on their portable and mobile radios, with the ability to transmit and receive, for the purpose of emergency messages or law enforcement assisted activities. Brett Miller seconds the motion. The Motion Prevails.

Standing Reports

Interoperability Workgroup
Mr. Johnson gives an update of the Interoperability Committee including a report on the recent COML Training. Several committee members also comment on what an excellent training it was. There are requests for additional training. Mr. Johnson indicated that they are developing "train the trainer" trainings so that the training can be offered more frequently.

For Future Discussion

MINSEF
It is requested that Ulie Seal and Pat Coughlin weigh in at the next month on the impact of MINSEF on the fire service.

P25
It is requested that a discussion occur that the next meeting regarding P25 requirements and compliance and the impact of analog vs. digital when dealing with P25 recommendations and requirements.

The meeting was adjourned at 2:03 p.m.

Meeting Minutes recorded by Jennifer DiOttaviano

Emergency Communication Networks
445 Minnesota Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.201.7547 • Fax: 651.296.2665 • TTY: 651.282.6555
www.ecn.state.mn.us

Alcohol and Gambling Enforcement

Bureau of Criminal Apprehension

Driver and Vehicle Services

Emergency Communication Networks

Homeland Security and Emergency Management

Minnesota State Patrol

Office of Communications

Office of Justice Programs

Office of Traffic Safety

State Fire Marshal

MEMO

Date: July 1, 2009

To: Asst. Commissioner Tim Leslie, Chair Statewide Radio Board

From: Thomas Johnson, Statewide Interoperability Program Manager

Subject: Request for approval of COML State Certification Standard Number 3.17.0

On March 17 – 19, 2009 Minnesota trained its initial group of Communication Unit Leaders (COML) in St Cloud, Minnesota. During this training we were advised by the instructors that it is up to each state to develop a process to certify the COML within their state. The trained COML had a lengthy discussion on how we should go about this process and we determined that the process should be in the form of a standard so that it may be readily available to anyone that would like to become a COML.

After much work and review on July 21, 2009 the attached Standard 3.17.0 was brought before the Statewide Interoperability Committee for review, approval, and recommendation to the Statewide Radio Board (SRB) for their approval. We are now asking the Statewide Radio Board to review and approve Standard 3.17.0.

Suggested Motion: Move to approve Standard 3.17.0, COML State Certification.

Allied Radio Matrix for Emergency Response (ARMER)
Standards, Protocols, Procedures

Document Section:	**3 – Interoperability Standards–**	**Status:** Pending Interoperability Committee Approval
Sub-Section:	**State 3.17.0**	
Procedure Title:	**Criteria for State Certification as a Communications Unit Leader type III**	
Date Established:	**04/30/09**	SRB Approval:
Replaces Document Dated:	**n/a**	
Date Revised:	**n/a**	

1. Purpose or Objective:

The intent of this standard is to establish protocols and procedures to be used for certification and re-certification of Communications Unit Leaders Type III (COML) in the state of Minnesota.

2. Background:

During all-hazards emergency response operations, communications among multiple jurisdictions and disciplines, including emergency medical, fire, and law enforcement services, is essential. Unfortunately, the absence of on-scene communications coordination has often compromised critical operations. To close this capability gap, the Department of Homeland Security's (DHS) Office of Emergency Communications (OEC) in partnership with the Office for Interoperability and Compatibility (OIC), the Federal Emergency Management Agency (FEMA), National Integration Center (NIC), and practitioners from across the country developed performance and training standards for the All Hazards Type III COML as well as formulated a curriculum and comprehensive All-Hazards Type III COML Course.

COML responsibilities include developing plans for the effective use of incident communications equipment and facilities, managing the distribution of communications equipment to incident personnel, and coordinating the installation and testing of communications equipment.

As representatives of the Minnesota Public Safety Community complete COML training, the Federal Government has left it up to each state as to determine how the COML will be certified. This standard will lay out the certification process for Minnesota.

3. Recommended Procedure:

The following procedure shall be followed in order to be initially certified as a Communications Unit Leader Type III (COML) and in order to be recertified:

1. Attend and successfully complete a three day COML training session taught by a certified COML instructor.

2. Complete the COML Task Book by demonstrating satisfactory performance of each of the 26 tasks as witnessed by qualified evaluator(s) within three years of COML Training. It is acceptable to use an incident that occurred up to three years prior to the COML training. (See attachment "A" Evaluation Form)

3. Participate as the COML in at least one NIMS Type III training drill, functional exercise, full scale exercise, incident or preplanned event. Provide a copy of one of the following: (1) Incident Action Plan; (2) Incident Communications Plan; or (3) After Action Report.

4. Obtain the "Final Evaluator's Verification" from one of the following: (1) A NIMS trained COML; (2) A Designated Agency Head; or (3) An Incident Commander. (See attachment "D" Verification / Certification of completed task book Form)

5. Obtain "Agency Certification" from the Designated Agency Head indicating that the candidate has met all qualifications for COML certification. (See attachment "C" Agency Certification Form)

6. Submit the signed off Task Book, NIMS course certificates (a printout from the HSEM training repository will suffice) and copies of relevant Incident Action Plans, Incident Communications Plans, and After Action Reports to the Regional Interoperability Coordinator in your region (for the Metropolitan Emergency Services Board Region the documents will be submitted to the Metropolitan Interoperability Coordinator to be brought before the MESB RTOC (Radio Technical Operations Committee) for approval).

7. The Regional Interoperability Coordinator (for the MESB Region, the Metropolitan Interoperability Coordinator) will review the qualification documents to make sure they meet the requirements as set out in this certification process and then go before the Regional Advisory Committee (RAC) or Regional Radio Board (RRB) (for the MESB Region the MESB RTOC) presenting the COML candidate's credentials and requesting a resolution that the COML candidate be recommended to the Statewide Interoperability Program Manager for final review and certification. (See attachment "B" check-off template)

8. The Statewide Interoperability Program Manager will review the qualification documents, copy the Task Book and relevant documents for filing and sign off on the original Task Book and return it to the COML. This will serve as State Certification of the COML and will be good for three years. (Submitting these documents by mail is acceptable. If the documents are lost a copy will be deemed the original and marked as such)

9. Recertification will be accomplished by participation in a NIMS Type III training drill, functional exercise, full scale exercise, incident or pre planned event at least once every three years to keep the COML qualifications and skills up to date.

10. Prior to certification the TIC Plan should designate COML in Training by: COML (T).

11. Certification will be recorded and kept on file by the State Interoperability Program Manager, the Regional Radio Board, and the COML agency. A list of certified COML with their certification expiration date will be maintained on the Statewide Radio Board website by the State Interoperability Program Manager.

4. Management:

The State Interoperability Program Manager will manage the COML certification and re-certification process in Minnesota.

This form must be filled out by evaluators, when sign offs are done for COML Task book

Evaluation # 1 - ?? (write over)	Name of Evaluator:	Title:	Agency:
Evaluator's Address			

Name & Location of Incident - Agency and Area	Kind of Incident	Number and Type of Communication Resources	Duration of Incident	Management Level or Complexity Level

Name of Trainee_____

- ☐ **The tasks initialed & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee.**
- ☐ **I recommend the following for further development of this trainee.**
- ☐ **The individual has successfully performed all tasks for the position and should be considered for certification.**
- ☐ **The individual was not able to complete certain tasks (comments below) or additional guidance is required.**
- ☐ **Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.**
- ☐ **The individual is severely deficient in the performance of tasks for the position and needs further training (both required & knowledge and skills needed) prior to additional assignment(s) as a trainee.**

Recommendations:_____

Date:_____ **Evaluator's initials:**_____

Evaluator's relevant agency certification` rating:_____

Minnesota COML Team
Metro Region Communications Unit Leader
Type III COML CERTIFICATION CHECK OFF

The following items checked are included in this packet

☐ All Prerequisite Training Completed

- ☐ ICS 700 (Printout attached)
- ☐ ICS 800 (Printout attached)
- ☐ ICS 100 (a or b) (Printout attached)
- ☐ ICS 200 (Printout attached)
- ☐ ICS 300 (Printout attached)

If you are part of the Minnesota training Website, A print of the HSEM Certification Record Completed courses main page with the above courses listed will be sufficient.

☐ Copy of Certificate from COML training

☐ Agency Certification (attached)

☐ Completed Task Book (with evaluator reviews)

☐ Copy of an Incident Action Plan, Incident Communications Plan, or After Action Plan (only one needed)

☐ Final Evaluator Certification (attached)

☐ Regional Interoperability Coordinator review

_____ _____
(Signature) (Printed Name)

☐ Regional Radio Board – Technical Operations Committee Review

_____ _____
(Chair of Radio-TOC Signature) (Printed Name)

☐ Statewide Interoperability Program Manager Review

_____ _____
(Statewide Interoperability Program Manager Signature) (Printed Name)

VERIFICATION / CERTIFICATION OF COMPLETED TASK BOOK
FOR THE POSTION OF TYPE III COML (All Hazards)

Agency Certification

I certify that _____ has met all requirements for qualifications in this position and that such qualification has been issued.

Certifying Official's Signature _____ Date_____

Printed Name _____ Agency _____

Title _____ Phone Number _____

Pre Qualifications for COML Training are but not limited to:

- **A public safety communications background with exposure to field operations; this experience should be validated by the authority who supervised the student.**
- **Fundamental public safety communications technology, supervisory, and personnel management skills. These must be validated by the authority who supervised the student and include, but are not limited to:**
    - **Knowledge of local communications systems**
        - **Frequencies and spectrum**
        - **Technologies**
    - **Knowledge of local topography**
    - **Knowledge of system site locations**
    - **Knowledge of local, regional, and state communications plans**
    - **Knowledge of local and regional Tactical Interoperable Communications Plans, if available**
    - **Knowledge of local, regional and national communications and resource contacts**
- **Completion of the following training courses:**
    - **IS-700, IS-800b, ICS-100, ICS-200, and ICS-300**

TO BE ATTACHED TO COMPLETED TYPE III COML (ALL HAZARDS) TASK BOOK

VERIFICATION / CERTIFICATION OF COMPLETED TASK BOOK
FOR THE POSTION OF TYPE III COML (All Hazards)

Final Evaluator's Verification

I verify that all tasks have been performed and are documented with appropriate initials.

I also verify that _____ has performed as a trainee and should therefore be considered for certification in this position

Final Evaluators Signature _____ Date_____

Printed Name _____ Agency _____

Final Evaluators Highest NIMS Qualification _____

Phone Number _____ email address _____

Compiled training information:

Number and Type of Resources: _____
Enter the number of resources and types assigned to the incident pertinent to the trainee's task book position.

Duration: _____
Enter the inclusive dated during which the trainee was evaluated.

Management Level or Fire Complexity Level: _____
Indicates ICS organization level, i.e., Type 5, Type 4, Type 3, Type 2, Type 1, Area Command.

Date: _____
List the date the record is being completed.

Evaluator's initials: _____ _____ _____ _____
Initial here to authenticate your recommendations and to allow for comparison with initials in the Qualification Record.

To be attached to completed Type III COML (All Hazards) Task Book

Attachment D

ARMER Public Safety Communications System
Standards, Protocols, Procedures

Document Section:	**6 – Board Financial Policies and Procedures**	**Status:** Reccomended by Finance Cmte: 7/9/09 OTC: 7/14/09 Interop Cmte: *pending*
Sub-Section:	**State 6.5.0**	
Procedure Title:	Prioritizing Capital and other Spending	
Date Established:		**SRB Approval:**
Replaces Document Dated:	5/28/03	
Date Revised:	**7/10/08**	

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1. Purpose or Objective

To establish a policy that will provide criteria and a process for determining how the Statewide Radio Board (SRB) allocates its funds and certain grant funding allocated for interoperable communications, including the ARMER statewide communications system.

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2. Technical Background

- **Capabilities**

  Capabilities are based on the current platform (version) of the system backbone and/or compatibility with the system if applicable.

- **Constraints**

  Subject to the availability of funds, vendor products and services and other pertinent personnel, such as those at the Minnesota Department of Transportation

3. Operational Context

The Statewide Radio Board is empowered by statute to set its budget for capital improvements to the system. Acting as the State Interoperability Executive Committee (MSA 403.36 subd. 1g) the Statewide Radio Board also makes recommendations on the allocation and use of various grant funds. This standard provides a methodology for the Statewide Radio Board Finance, *Interoperability* and Operations and Technical Committees to make recommendations to the Statewide Radio Board in determining priorities and timing for such expenditures.

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4. Recommended Protocol and Standard

The proposal for determining spending is comprised of three main evaluations. The first evaluation "Project Scope" is a series of questions regarding the effect on the overall system. In this step a proposed project will receive a pass, fail or deferred result. The second evaluation determines a priority consistent with the adopted Investment Hierarchy of the Statewide Radio Board and gives proposed projects a priority rating of 1-~~6~~ *7*. The third evaluation is the feasibility of the project to meet funding timelines and vendor capabilities.

All funding requests, whether from the SRB allocated funds, grants, or other sources of funding the SRB has been asked to provide recommendations for, shall ~~originate at the Finance Committee~~ *be reviewed by the Finance, Interoperability and Operations and Technical Committees*. The Committee Chairs shall determine the order of review. ~~The Finance *and Interoperability* Committee*s* shall complete the first two evaluations. and forward its report to the *The* Operations and Technical Committee (OTC). The OTC shall review the Finance Committee report and~~ All committees *will* complete evaluations 1-3 on all projects. ~~The OTC shall provide a report with its funding recommendations back to the Finance Committee~~. With respect to grant funds made available for interoperable communications, the Interoperability Committee will take primary responsibility for accepting proposals from various sources, developing those proposals and completing the ~~first two~~ evaluations before reporting it's recommendations to the ~~Operations and Technical Committee.~~ other committees. The Interoperability Committee's recommendation may also include specific recommendations of how available grant funds should be allocated among the various proposals.

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~~The Finance Committee shall review the OTC report and funding recommendations and prepare a recommendation for the Statewide Radio Board.~~

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The last committee to review the funding proposals and the other committee recommendations shall be charged with reporting the item to the SRB. Disagreements between the committees will be discussed by the committee chairs and if necessary brought back through the process until a final consensus can be reached. If no consensus can be reached the matter will be referred to the SRB for a final determination on the allocation of funds.

It should be understood that this procedure is a guide for allocating funding that is made available to the SRB for distribution to various units of government or eligible entities. Recommendations will be made with the emphasis that the funds made available to the SRB for allocation are dispersed in a manner that ensures the best possible use of funds to promote the ARMER System and provide for interoperability between ~~and coordinate those efforts with~~ users of the ARMER System and non ARMER System Users.

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5. Recommended Procedure

Evaluation #1 - Project Scope

In this first evaluation a proposed project must receive a yes answer to at least one of the following questions. If no "yes" is received the project will still be forwarded to the OTC and listed as "Deferred". The OTC may consider the project if it is anticipated that the project will receive at least one yes answer within the time constraints of the available funding or provide a reason to the Finance Committee as to why they think a project should have received a "yes" response.

Questions:

- Does the project add needed capacity to the system?
- Does the project add needed coverage to the system?
- Is the project a required system change (as required by the legislature or a vendor)?
- Does the project improve identified system degradation?
- Does the project provide improved system reliability?
- Is the project an approved sub-system plan?
- Does the project provide needed interoperability?
- Has the project been requested by the OTC?
- Does the project meet the funding criteria for the source of funds?

Evaluation #2 – Investment Hierarchy

For those instances in which the legislature has directed funding for a specific purpose, has imposed explicit restrictions, or the Commissioners of Public Safety or Transportation have direct spending authority, this hierarchy will not apply. It is given that all investment decisions must be consistent with legislative direction.

In those cases where the Statewide Radio Board has explicit decision making authority or broad discretion in establishing spending priorities this hierarchy should be used to provide direction and aid in decision making.

This investment hierarchy is intended to provide guidance and is intended as a tool in priority setting. The committee understands that this tool will not fit every investment scenario or decision process.

- Priority 1 – Backbone Infrastructure Construction
- Priority 2 – Operation and Maintenance of Existing Backbone Infrastructure
- Priority 3 – Local Enhancements (% Matching)
- Priority 4 – Major System Wide Improvements or Upgrades
- *Priority 5 – Interoperability Projects consistent with the SCIP Plan*
- Priority 6 – Programmed System Replacements
- Priority 7 – New Project Goals (i.e. Data, CriMNet, Communications Centers, 911, etc)

Evaluation #3 – Feasibility

In this evaluation a project must demonstrate that it can be accomplished within any time constraints imposed by either the funding source or the availability of technology. A project must receive a yes to all of the questions below:

- Is funding available?
- Does the vendor have the capability to provide the product or meet the deadline?
- Are all pre-requisites met? (i.e. are frequencies available?, are software upgrades required?, resources available?, other standards or dependencies?)
- If applicable – Does Mn/DOT approve of the change to the backbone?

6. Management

The Statewide Radio Board Chair shall manage the administration of this standard.

This policy shall be reviewed for possible revision or cancellation as required.

Deleted: The Finance Committee Chair shall report the recommendations of the Finance Committee and the OTC to the SRB for action.

Emergency Communication Networks
445 Minnesota Street • Suite 137 • Saint Paul, Minnesota 55101-5137
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Homeland Security and Emergency Management

Minnesota State Patrol

Office of Communications

Office of Justice Programs

Office of Traffic Safety

State Fire Marshal

MEMO

Date: July 1, 2009

To: Asst. Commissioner Tim Leslie, Chair Statewide Radio Board

From: Thomas Johnson, Statewide Interoperability Program Manager

Subject: Request for a five year MOU between the State of Minnesota and the U.S. Fish and Wildlife Service for use of Fire Mutual Aid Channel

On May 18, 2009 the Sherburne National Wildlife Refuge requested that the Statewide Radio Board (SRB) update the current MOU between the State of Minnesota and the Department of the Interior, U.S. Fish and Wildlife Service, Sherburne National Wildlife Refuge to obtain access to the State of Minnesota Radio System for Joint Operations or Mutual Aid. This MOU which had previously been approved by the State Fire Chiefs Association is now under the authority of the SRB.

Since the next meeting of the SRB would not take place until July 23, 2009 and since the forest fire season is upon us the Chair of the SRB entered into an interim MOU which will be in place until August 1, 2009 prior to which time the SRB will meet and approve the five year MOU.

The Statewide Interoperability Committee was requested to review this MOU and passed a motion to Recommend Approval of the request to the SRB.

Suggested Motion: Move to recommend to the SRB that the five year MOU between the State of Minnesota and the Department of Interior, U.S. Fish and Wildlife Service, Sherburne National Wildlife Refuge to obtain access to the State of Minnesota Radio System for Joint Operations or Mutual Aid be approved.

Usage of the Fire Mutual Aid Channel is to be in compliance with FCC regulations and SRB Standards. The Standards may be found on the SRB website at http://www.srb.state.mn.us/.

INTERIM NON-FEDERAL GOVERNMENT RADIO FREQUENCY USE AGREEMENT
This MOU is in effect until August 1, 2009

To Allow Department of the Interior, U.S. Fish and Wildlife Service, **Sherburne National Wildlife Refuge**
Access to the **State of Minnesota** Radio System for Joint Operations or Mutual Aid.

This agreement is executed to comply with Sections 2.103 and 90.421 of the Federal Communications (FCC) Rules and Regulations and Chapter 8.4.3. of the National Telecommunications and Information Administration Manual of Regulations and Procedures for Federal Radio Frequency Management (NTIA Manual). It provides for joint operations on non-government frequencies on a planned or scheduled basis in accordance with the following stipulations:

1. The U.S. Fish and Wildlife Service will submit a copy of this agreement through their authorized Radio Liaison Officer requesting issuance of a radio frequency authorization (RFA) for each frequency to be utilized. Operation on any cooperator frequency is not authorized until the RFA for that frequency is approved.

2. The U.S. Fish and Wildlife Service may utilize not more than 3 base stations(s) and 20 portable/mobile radio(s) capable of operation on the following frequencies:

Channel	Transmit Frequency (MHz)	Transmit Tone (Hz)/NAC	For Access To (Repeater Site Name) (Leave blank if not rptr)	FCC Call Sign Authorizing Frequency	Receive Frequency (MHz)	Receive Tone (Hz)/NAC
1	154.295	n/a	Mutual Aid	KH9726	154.295	n/a
2						
3						
4						
5						

3. Use of authorized frequencies is restricted to intercommunications between the **State of Minnesota** and the U.S. Fish and Wildlife Service for the purpose of cooperative assistance during emergency, fire, and natural disaster activities.

4. Net control is maintained by the **State of Minnesota**.

5. Federal Government operations under this agreement must conform in all respects to any restriction or limitation imposed by the FCC on the principal licensee.

6. This agreement may be cancelled by either party on 30 days' written notice.

7. This agreement will be reviewed/recertified every 5 years to validate continued operation requirements.

Signatures:

State of Minnesota:

Contact Name (print): Timothy Leslie Contact Telephone Number: 651-201-7176

Timothy Leslie — Asst. Commissioner — 6/17/09

Signature / Title / Date

U.S. Fish and Wildlife Service:

Contact Name (print): Russ Longsdorf Contact Telephone Number: 763/389-3323 x 16

[signature] — DFMO — 24 JUN 09

Signature / Title / Date

When both signatures have been affixed, please fax to BCT at (303) 236-5010.

NON-FEDERAL GOVERNMENT RADIO FREQUENCY USE AGREEMENT

To Allow Department of the Interior, U.S. Fish and Wildlife Service, **Sherburne National Wildlife Refuge**
Access to the **State of Minnesota** Radio System for Joint Operations or Mutual Aid.

This agreement is executed to comply with Sections 2.103 and 90.421 of the Federal Communications (FCC) Rules and Regulations and Chapter 8.4.3. of the National Telecommunications and Information Administration Manual of Regulations and Procedures for Federal Radio Frequency Management (NTIA Manual). It provides for joint operations on non-government frequencies on a planned or scheduled basis in accordance with the following stipulations:

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2. The U.S. Fish and Wildlife Service may utilize not more than ___3____ base stations(s) and __20____ portable/mobile radio(s) capable of operation on the following frequencies:

Channel	Transmit Frequency (MHz)	Transmit Tone (Hz)/NAC	For Access To (Repeater Site Name) (Leave blank if not rptr)	FCC Call Sign Authorizing Frequency	Receive Frequency (MHz)	Receive Tone (Hz)/NAC
1	154.295	n/a	Mutual Aid	KH9726	154.295	n/a
2						
3						
4						
5						

3. Use of authorized frequencies is restricted to intercommunications between the **State of Minnesota** and the U.S. Fish and Wildlife Service for the purpose of cooperative assistance during emergency, fire, and natural disaster activities.

4. Net control is maintained by the **State of Minnesota**.

5. Federal Government operations under this agreement must conform in all respects to any restriction or limitation imposed by the FCC on the principal licensee.

6. This agreement may be cancelled by either party on 30 days' written notice.

7. This agreement will be reviewed/recertified every 5 years to validate continued operation requirements.

Signatures:

State of Minnesota:

Contact Name (print): _____ Contact Telephone Number:_____

_____ _____ _____
Signature Title Date

U.S. Fish and Wildlife Service:

Contact Name (print): _____ Contact Telephone Number:_____

_____ _____ _____
Signature Title Date

When both signatures have been affixed, please fax to BCT at (303) 236-5010.

STATEWIDE RADIO BOARD
Interoperability Committee

Wednesday, September 23, 2009
1:30 p.m. – 3:30 p.m.
Chair: Colonel Mark Dunaski

MnDOT Water's Edge
1500 W. County Road B2
Roseville, MN 55113

Meeting Agenda

Call meeting to order
Approval of Agenda
Approval of Meeting Minutes of July 21, 2009
Approval of Meeting Minutes of August 25, 2009

Old Business

- Infrastructure Planning (FE: B. Barber).....Action Required
- MnDOT's Infrastructure Recommendations (T. Lee)

New Business

- Standard 1.13.0.....Action Required
  ARMER Aircraft Radio Installations and Operations
- Standard 3.16.2.....Action Required
  Use of Statewide 800MHz STAC 14 Talkgroup Air Ambulance Emergency Landing Zone Coordination
- Narrowbanding Deadline -discussion

Standing Reports

- Grant Workgroup (R. Whitehead)
- Interoperability Workgroup (T. Johnson)
- Training Advisory Group (TAG) (P. Biladeau)

Adjourn

STATEWIDE RADIO BOARD

Interoperability Committee

Tuesday, July 21, 2009, 1:00 – 3:00 p.m.

League of Minnesota Cities
145 University Ave. W.
St. Paul, MN 55103

Meeting Minutes

Members/alternates present:

Chair: Col. Mark Dunaski
Tim Lee – Mn/DOT
Lance Ross – MAA
Chris Kummer – MESB
Greg Nelson (alt)
Dan Bullock (alt) – Met. Council
Bill Hughes – MEMA
Terry Stoltzman (alt)
Ulie Seal – MN Fire Chief's Assoc
Jon Priem – Prairie Island Tribal Police
Cari Gerlicher – MN Chiefs of Police Assoc
Pat Coughlin – MIFC
B.J. Battig – UASI
Nikia McKinney (alt) – MN National Guard
John Dooley – HSEM
Micah Myers – Central MN RAC
Jay Sikkink (alt)
Brett Miller – South Central MN RAC

Members Excused:

Myrlah Olson – MN Department of Health
Jim Halstrom – AMEM
Mark Holston – DNR
Bob Norlen – MN EMSRB
Steve Pott – 700 MHz Planning Committee
John Sanner – MN Sheriff's Association
Jeff Karel – ICE
Brian Zekus – U.S. Coast Guard
Mike Martin – FBI
David Mercer – U.S. Border Patrol
Robert Graves – U.S. Secret Service
Scott Camps – HSEM Region 2
Pat Novacek – HSEM Region 3
Dan Anderson – HSEM Region 5
Gary Peterson – HSEM Region 6
Scott McNurlin – SE RAC

Chair Dunaski calls the meeting to order at 1:03 p.m.

Lance Ross moves to approve today's agenda. B.J. Battig seconds the motion. The motion carries.

Lance Ross moves to approve the SRB Interoperability Committee Meeting Minutes of April 21, 2009. The motion is seconded by Brett Miller. The motion carries.

New Business

Appointment of Vice Chair

Chair Dunaski announces the appointment of Lance Ross to serve as the Vice Chair of the Interoperability Committee, effective immediately.

Standard 3.17.0; *State Certification as a Communications Unit Leader Type III*
Mr. Johnson explains that the COML training occurred in St. Cloud, Minnesota on March 17 through March 19, 2009 and at this time, train-the-trainer sessions are being developed. It was advised that a certification was needed in the state of Minnesota. In response to that request, Standard 3.17.0; *State Certification as a Communications Unit Leader Type III* was developed. The committee reviews the standard and some suggestions were made on verbiage. The language "employing candidate" was added to page two, number five.

A discussion occurred regarding the use of the word, "employee" though some of the referenced individuals are volunteers. It is determined that the term, "employee" is appropriate.

Lance Ross moves to approve Standard 3.17.0; State Certification as a Communications Unit Leader Type III. Bill Hughes seconds the motion. The motion carries.

Standard 6.5.0; *Prioritizing Capital Spending*
Chair Dunaski explains the process that was involved in rewriting Standard 6.5.0; *Prioritizing Capital Spending.* He indicates that it was determined that the standard was not applicable to all grant programs that come before the SRB committees. The rewrite was accomplished by Joe Glaccum – OTC Chair, Chief Bill Mund – Finance Committee Chair, Colonel Mark Dunaski – Interoperability Committee Chair, Scott Wiggins – Director of the DPS-DECN and Ron Whitehead – Chair of the Interoperability Committee Grant Workgroup.

Bill Hughes moves to approve the changes to Standard 6.5.0; Prioritizing Capital Spending. *Brett Miller seconds the motion. The motion carries.*

Memorandum of Understanding between the state of Minnesota and the U.S. Fish and Wildlife Service
Mr. Johnson explains the MOU. Sherburne National Wildlife Refuge is requesting use of the statewide fire mutual aid frequency for five years.

Ulie Seal moves to approve the five year MOU between the state of Minnesota and the Department of Interior, U.S. Fish and Wildlife Service, and Sherburne National Wildlife Refuge to obtain access to the state of Minnesota radio system for joint operations or mutual aid. Dan Bullock seconds the motion. The motion carries.

P25 Presentation
Mr. Johnson provides a presentation on P25 requirements and compliance and the impact of analog vs. digital when dealing with P25 recommendations and requirements. A discussion follows as the committee determines how mandates relate to P25. It is determined that the committee will seek feedback from the SRB regarding mandates for P25.

Old Business
None

Standing Reports

Grant Workgroup
Mr. Whitehead indicates that the workgroup discussed the process utilized for the HSEM grants. He indicates that next year's grants need to be more specific. He also states that the workgroup discussed an MOU with the regional radio boards, HSAC recommendations.

Interoperability Workgroup
Mr. Johnson reports that the workgroup discussed the development of train the trainer sessions and RIC Tom Justin will develop and annual refresher training. Mr. Johnson also indicates that TIC Plans are being programmed

Training Advisory Group (TAG)
Mr. Wiggins reports on behalf of Pam Biladeau. The TAG has developed four smaller workgroups as their focus; Governance, Dispatch, Users, and System Administrators. The TAG will define specific areas in which training will be offered.

For Future Discussion

Narrowbanding Date
It is requested that the Interoperability Committee discuss a date for narrowbanding prior to the FCC mandate.

The meeting was adjourned at 2:37 p.m.

Meeting Minutes recorded by Jennifer DiOttaviano

STATEWIDE RADIO BOARD

Interoperability Committee

Tuesday, August 25, 2009, 1:00 – 3:00 p.m.

Metro Counties Government Center
2099 University Ave. W.
St. Paul, MN 55104

Meeting Minutes

Members/alternates present:
Vice Chair: Lance Ross - MAA
Tim Lee – Mn/DOT
Chris Kummer – MESB
Greg Nelson (alt)
Dan Bullock (alt) – Met. Council
Bill Hughes – MEMA
Terry Stoltzman (alt)
Ulie Seal – MN Fire Chief's Assoc
Jon Priem – Prairie Island Tribal Police
Cari Gerlicher – MN Chiefs of Police Assoc
Pat Coughlin – MIFC
B.J. Battig – UASI
Nikia McKinney (alt) – MN National Guard
John Dooley – HSEM
Micah Myers – Central MN RAC
Jay Sikkink (alt)
Darrin Haeder – South Central MN RAC
Bill Schmidt – MN Department of Health

Vice Chair Ross calls the meeting to order at 1:10 p.m.

Presentation

Federal Engineering; Minnesota VHF/UHF Interoperability Infrastructure Planning Project
Brad Barber presents a PowerPoint slideshow of Deliverable Number 6 of the Infrastructure Planning Project. He explains that he will be taking recommendations from today's meeting and using those suggestions, questions and feedback to develop the final report that will be presented to the Statewide Radio Board at their October meeting.

Several committee members indicate that there may be better options than what FE is indicating. A discussion occurs regarding the possible avenues for achieving the interoperability desired and a reminder is issued that although seamless interoperability is the end result, cost must also be taken into consideration.

It is requested that Tim Lee come forward with a conceptual plan that he developed. He indicates that he would like the input of the SMG before coming forward with his conceptual plan.

Vice Chair Ross requests all questions and suggestions are forwarded to Mr. Barber. Mr. Barber is asked to return to the September Interoperability meeting to present the final report after incorporating any feedback he receives.

Mr. Lee is also asked to present his conceptual plan in September.

Roger Laurence moves to approve the request that Mr. Lee provides a refined concept in terms of the proposal into a conceptual description of operational capabilities including what channels will be used, how many will be used, and a cost estimate. Pat Novacek seconds the motion. The motion carries.

Due to a scheduling conflict of several members and the FE representative, the September meeting is rescheduled from September 15, 2009 to September 23, 2009.

Bill Hughes moves to adjourn. Scott Camps seconds the motion. The motion carries.

The meeting was adjourned at 2:55 p.m.

Meeting Minutes recorded by Jennifer DiOttaviano

Allied Radio Matrix for Emergency Response (ARMER)
Standards, Protocols, Procedures

Document Section:	**1 – Management of System**	**Status:** OTC Approval Date: 8/11/09 Interoperability Committee Approval Date: ***Pending***
Sub-Section:	**State 1.13.0**	
Procedure Title:	**ARMER Aircraft Radio Installations and Operations**	
Date Established:	**08/01/09**	SRB Approval: Date:
Replaces Document Dated:	**n/a**	
Date Revised:		

1. Purpose or Objective

The purpose of this standard is to set a policy regarding aircraft subscriber radio installation, programming and operation on the ARMER system.

2. Technical Background

Due to the elevated altitude of operation, aircraft radios have a greater coverage footprint. This allows a radio operated in the air to be able to talk into sites as far away as 150 to 200 miles. While mobile radios operated in vehicles on the ground typically have ranges limited to 30 to 40 miles. With this larger coverage footprint radios operated in aircraft operate with the ARMER system slightly different than radio operated on the ground.

Due to the interference potential from the larger coverage footprint of aircraft operated radios the FCC rules for operation of these radios limits the output power to help reduce interference as frequency reuse is applicable in the ARMER system.

The ARMER sites transmit a list of adjacent control channels to the subscribers registered to the site. This list is limited to 16 adjacent control channels. The aircraft radio could stay affiliated with a site and never be aware of a closer sites control channel.

There are only a limited number of radios available for permanent aircraft mounting. The aircraft instrument panel has limited space and only a limited number of aircraft avionics manufactures are available for panel mounted ARMER radio installs.

Installation of aircraft mounted radios is governed by the FAA and permanent installations must be performed by FAA certified personnel.

Flight tests of aircraft radios on ARMER system were conducted by the State Patrol aircraft and MnDOT technical staff using various BER setting, output power and in line attenuators in the antenna feed line. These tests were conducted with the aircraft flying across multiple sites and making a number of landings along the flight test route.

The best overall aircraft operation was observed with use of a radio set for 2.5 watts into an antenna without an inline attenuator with a radio BER setting of 2.5% and the radio set to no site preferences. These setting apply for both aircraft installed ARMER radios using remote mounted mobile radios and Technasonic type aircraft control panel mounted avionics packages using internal portable radios.

3. Operational Context

Subscribers that acquire a large coverage foot print due to high altitude operations need to take the following into consideration:

- Potential interference due to frequency reuse throughout the ARMER system. This could cause interference to other ARMER system users. This interference could appear as an interruption or loss of communications or as tailgating to other TG transmissions on other sites.

- Aircraft radios will potentially cling to distant sights and out fly the adjacent control channel list of the site that the radio is affiliated to. This could cause short losses of ARMER system while radios search for new sites. This loss could be as long as 5 to 10 minutes while the radios searches all 800 MHz frequencies looking for a control channel.

- Loss of ARMER site affiliation during aircraft descent.

4. Recommended Protocol/Standard

All permanently aircraft installed ARMER radios shall comply with FCC power output limitation of 1 watt ERP. This is achieved by limiting the mobile radio power to its minimal setting of 2 to 3 watts; the antenna feed line loss and use of a unity gain antenna.

Permanently mounted aircraft ARMER radios should be programmed with a bit error rate of 2.5%.

Permanently mounted aircraft ARMER should be programmed for no site preference.

For aircrews that are assigned portable radios these portable radios should be programmed with 2.5 or 2.9% BER and no site preferences.

Procedures for landing zone areas where communications with ground personnel are conducted on the ARMER system should be in compliance with state standard 3.16.2.

In addition to the subscriber radio user training requirement of state standard 1.11.4, the training of users of aircraft ARMER radios shall include description of the issues

surrounding airborne operation of ARMER radios:

- Site selection issues, especially the issue that could arise in descent and the loss of site affiliation.

- Issues of potential interference to ARMER users due to system frequency reuse.

- Personnel using portable radios in aircraft in a limited capacity (observers, guests, etc.) and the potential for slower site switching, potential FAA and FCC rule violation, and interference.

5. Recommended Procedure

- Installation and programming as outlined in section 4 of this standard.

- Operation of Aircraft landing zone coordination as described in standard 3.16.2

- In flight communications should keep transmissions as brief as possible due to the potential interference as outlined in section 3 of this standard.

6. Management

The system administrators of the regions where ARMER equipped aircraft are based will be responsible for the oversight and compliance of this standard. Due to the potential of interference issues to expand beyond a specific region, MnDOT personnel should also be notified if any interference is detected and it is believed to have been originated by an ARMER equipped aircraft.

Allied Radio Matrix for Emergency Response (ARMER)
Standards, Protocols, Procedures

Document Section:	**3 – Interoperability Standards**	**Status:** OTC Recommendation
Sub-Section:	**State 3.16.2**	
Procedure Title:	**Use of Statewide 800MHz STAC 1-4 Talkgroups - Air Ambulance Emergency Landing Zone Coordination**	
Date Established:	**07/11/07**	SRB Approval – Signature:
Replaces Document Dated:	**07/11/07**	
Date Revised:	**07/02/08**	

Deleted: TOC

Deleted: 6/27/07

Deleted: METRO

Deleted: MESB

Deleted: 07/11/08

1. Purpose or Objective
To specify the use of the statewide 800 MHz S-TAC talkgroups for establishing and maintaining air ambulance emergency landing zones in the nine county metropolitan area.

2. Technical Backgrounds
- **Capabilities**

The Statewide Radio Board has established a standard for use of the statewide incident response talkgroups in ARMER Standard 3.16.0. This Standard encourages communications interoperability among first responders and establishes common statewide talkgroups to facilitate interoperability. The statewide talkgroups authorized for communication between service branches are S-TAC1, 2, 3 and 4.

- **Constraints**

Experience has shown that all agencies have used many different processes in the past. This Standard strives for consistency among all metro agencies.

3. Operational Context
Not immediately pertinent – See ARMER Standard 3.16.0

4. Recommended Protocol
NOTE: This standard changes the STAC TG requirements for 9-1-1 PSAPs, from recommended to required. Any other information can be referred to ARMER Standard 3.16.0.

5. Recommended Procedure
If a scene landing is required, then it is imperative to allow for communication between the responding aircraft and a qualified person (typically law enforcement, fire personnel, first responders, etc) on the ground that will be coordinating the landing zone (LZ). The exact location of the LZ, any hazards, wind direction and any other pertinent information needs to be communicated to the aircraft to allow for a safe scene landing. If it becomes necessary

to abort the landing, the individual on the ground will need to be able to quickly communicate this information to the aircraft.

For Aircraft that are equipped with ARMER radios:

If the aircraft and the personnel on the scene that will be coordinating the landing both have STAC talkgroups, they may use the STAC that has been assigned to them by the appropriate controlling Primary PSAP.

In the event of a technical constraint, the incident may be switched over to other talkgroups as appropriate.

For Aircraft that are NOT equipped with ARMER radios:

If the aircraft does not have ARMER radios, but the personnel on the scene that will be coordinating the landing do, then the controlling Primary PSAP will assign the first available STAC and patch the responding air ambulance operating to MINSF VLAW31 if being landed by law enforcement personnel. If being landed by fire personnel, then SwFIRE VFIRE23 is also an option.

Note: An announcement on the patched resources will be made at the time of the patch origin AND just prior to the patch removal.

6. Management

Nothing in this standard shall be construed as a limitation of use of the STAC talkgroups for incidents other than air ambulance emergency landing zone coordination.

Nothing in this standard shall be construed as a limitation of use of the conventional resource MINSF VLAW31 or SwFIRE VFIRE23 or any other appropriately assigned conventional resource for an air ambulance emergency landing zone coordination by non-ARMER users.

For Management, please see ARMER Standard 3.16.0 for any additional information.

STATEWIDE RADIO BOARD
Interoperability Committee

Tuesday, D, 2009
2:00 p.m. – 3:30 p.m.
Chair: Colonel Mark Dunaski

Mn/DOT Water's Edge
1500 W. County Road B2
Roseville, MN 55113

Meeting Agenda

Call meeting to order
Approval of Agenda
Approval of Meeting Minutes of September 23, 2009

Old Business

- Narrowbanding Deadline (T. Johnson)

New Business

- FY2008, State Homeland Security Program (SHSP) Grant (R. Whitehead) Action
- STR Benchmarks for SCIP to Interop (R. Whitehead) Action
- Regional Talkgroup (A. Smith)

Standing Reports

- Grant Workgroup (R. Whitehead)
- Interoperability Workgroup (T. Johnson)
- Strategic Technology Reserve (R. Whitehead)

Adjourn

STATEWIDE RADIO BOARD

Interoperability Committee

Tuesday, September 23, 2009, 1:00 – 3:00 p.m.

MnDOT Water's Edge
1500 W. County Road B2
Roseville, MN 55113

Meeting Minutes

Members/alternates present:
Chair: Colonel Dunaski
Lance Ross – MAA
Tim Lee – Mn/DOT
Greg Nelson - MESB
Dan Bullock (alt) – Met. Council
Bill Hughes – MEMA
Cari Gerlicher – MN Chiefs of Police Assoc
Pat Coughlin – MIFC
Brian Zekus – U.S. Coast Guard
Dale Gannott – FBI
Roger Laurence – UASI
Troy Tretter – MN National Guard
Nikia McKinney (alt)
Micah Myers – Central MN RAC
Jay Sikkink (alt)
Darrin Haeder – South Central MN RAC
Pat Novacek – HSEM Region 3

Chair Dunaski calls the meeting to order at 1:35 p.m.

Federal Engineering; Minnesota VHF/UHF Interoperability Infrastructure Planning Project
Brad Barber presents a PowerPoint slideshow of Deliverable Number 6 of the Infrastructure Planning Project; highest level of interoperability.

He explains the changes made and how they were based on the feedback from the previous meeting.

Bill Hughes moves to approve the final report as presented by Federal Engineering. Cari Gerlicher seconds the motion. The motion carries.

Mn/DOT Conceptual Plan
Tim Lee presents a conceptual plan that he prepared that relates to the recommendations of Federal Engineering. The committee offers feedback and a discussion ensues regarding the use of MINSEF versus VCALL.

The committee is split in their support of either channel as a statewide resource. Mr. Wiggins reminds the committee that MINSEF was recently taken over by the SRB and is apprehensive of the message it will send if it is immediately converted to a state resource.

Varying points of view are presented from various members, but no decision is made at this time.

Standard 1.13.0
Jay Sikkink explains the standard that was passed on to the Interoperability Committee from the Operations and Technical Committee. He explains the purpose for the standard drafted by the OTC.

Lance Ross moves to approve Standard 1.13.0. Greg Nelson seconds the motion. The motion carries.

Standard 3.16.2
Mr. Sikkink presents the second standard forwarded from the Operations and Technical Committee.

Lance Ross moves to approve Standard 3.16.2. Greg Nelson seconds the motion carries

Narrowbanding
The Interoperability Workgroup is tasked with determining a date for Minnesota to be completely narrowbanded prior to the FCC mandated requirement of January 1, 2013. The Interoperability Workgroup plans of presenting a final date and a draft letter for statewide distribution at the next Interoperability Committee meeting.

Grant Workgroup
Ron Whitehead reports that the 2209 IECGP and SHSP have just finished and letters will be sent to the RRBs. He indicates that the 2010 process has been released and it is proving to be similar to the past year's process.

Mr. Whitehead reminds the committee that tribal and non-governmental agencies must come through their RRB or HSEM Region.

Mr. Whitehead thanks the Grant Workgroup for their hard work. He indicates that the membership is very active and they continue to move the grant processes forward.

Interoperability Workgroup
Tom Johnson reports that Manitoba and Minnesota held their second meeting on interoperability. The committee is gathering ideas and concerns to facilitate in closing existing gaps and resolving interoperability issues between Manitoba and Minnesota.

Mr. Johnson reports that the goal is to resolve all interoperability issues with Canada and is currently pursuing meetings with his Ontario counterparts.

TIC Plan has been finalized in the southwest and is in process in the south central region, the southeast region and the northwest region.

Training Advisory Workgroup
Pam Biladeau reports on the progress of the TAG and shows some examples of the training curriculums the group is working on developing.

Greg Nelson moves to adjourn. Cari Gerlicher seconds the motion. The motion carries.

The meeting was adjourned at 3.31 p.m.

Meeting Minutes recorded by Jennifer DiOttaviano

Date:

To:

From: Colonel Mark Dunaski

Chair, Statewide Interoperability Committee

SUBJECT: Federal Communications Commission Narrowbanding Requirement

Dear XXX,

The purpose of this letter is to remind you of an upcoming mandate from the Federal Communications Commission (FCC). This mandated change will affect your use of portable and mobile Public Safety radios, Public Safety paging systems and Public Safety warning siren equipment that is in the VHF 150 MHz to 512 MHz spectrum.

The following information was obtained from the U.S. Department of Justice website: http://www.ojp.usdoj.gov/nij/topics/technology/communication/fcc-narrowbanding.htm

Key Points about FCC Narrowbanding Requirements

- 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.
- Agencies need to start planning now to migrate to narrowband systems by assessing their current radio equipment and applying for new or modified licenses.

Overview

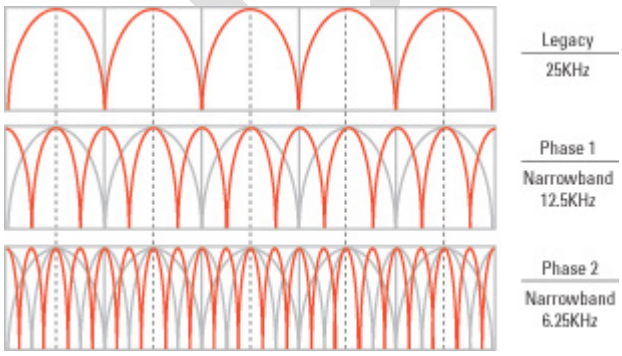

Figure 1: Narrowband channels allow additional channels to exist in the same spectrum.

Private land mobile radio (LMR) systems—including municipal government and State and local public safety systems—use blocks of radio spectrum called channels. Historically, LMR systems have used 25 kHz-wide channels. In December 2004, the Federal Communications Commission mandated that all private LMR users operating below 512 MHz move to 12.5 kHz narrowband voice channels and highly efficient data channel operations by January 1, 2013.

Using narrowband channels will ensure that agencies take advantage of more efficient technology and, by reducing channel width, will allow additional channels to exist within the same spectrum space, as illustrated in figure 1.

Deadlines

To phase in the migration deadline of January 1, 2013, the FCC has established interim deadlines. The first important deadline is January 1, 2011, after which:

- The FCC will not grant applications for new voice operations or applications to expand the authorized contour of existing stations that use 25 kHz channels. Only narrowband authorizations will be granted.
- The FCC will prohibit manufacture or importation of new equipment that operates on 25 kHz channels. This will reduce the availability of new equipment for legacy radio systems and will affect how agencies maintain and upgrade older systems.

Planning for the Move to Narrowband

Public safety agencies need to aggressively develop a strategy to meet narrowband deadlines to avoid cancellation of existing wideband FCC authorizations. Although the migration deadline may seem far off, the long lead time and interim deadlines make it necessary for agencies to plan well in advance.

Assess current equipment and start planning to prepare for the migration, public safety agencies should start assessing their radio systems and planning for replacements or upgrades. They should inventory their current equipment to ascertain what can be converted to 12.5 kHz and what will need to be replaced before January 1, 2013. Most new equipment has the capability for both 25 kHz and 12.5 kHz operation because any VHF/UHF radio equipment accepted by the FCC after February 14, 1997, had to have 12.5 kHz capability. The 2.5 kHz narrowband equipment is available in both conventional analog FM and digital formats (such as Project 25), so narrowband conventional FM systems will be compliant. Local governments should develop contingency plans to accommodate system changes for both public safety and nonpublic safety systems.

Obtain new or modified licenses to move to narrowband operations, agencies must apply for new frequencies or modify existing licenses. An agency that is licensed for a 25 kHz-wide channel is not guaranteed two 12.5 kHz channels. Licensees will have to justify to the FCC why they need additional channels. Consideration of applications for new narrowband licenses will

follow the same process as a new license application. As agencies migrate to narrowband operation, however, the pool of available frequencies will increase.

The Statewide Radio Board has set a date of 11/xx/2013 for all VHF Channels in the State of Minnesota to be narrowbanded. By setting and adhearing to this date we will all be prepared for this mandatory FCC requirement.

If you have not researched your current radio position reference the FCC narrowbanding mandate we urge you to start now in order to be in compliance on January 1, 2013. If you need assistance we would refer you to your Regional Radio Board. You may find contact information for your Regional Radio Board at the Statewide Radio Board website: http://www.srb.state.mn.us/ go to the left of the page and click on Regions.

Sincerely,

Colonel Mark Dunaski

Chair, Statewide Interoperability Committee

EMERGENCY MANAGEMENT

315 Tenth Street
P.O. Box 757
Worthington, MN 56187-0757

Phone: 507-295-5212
Fax: 507-372-8358
danderson@co.nobles.mn.us

November 30, 2009

To: Col. Mark Dunaski, SRB Interoperability Committee Chair
From: Dan Anderson, STR Subcommittee Chair
RE: STR benchmarks for SCIP

Col. Dunaski,

In early November, the Minnesota Division of Emergency Communications Networks gathered a group of individuals from around the state to suggest revisions to the Statewide Communications Interoperability Plan. As part of that process, initiatives were set for several areas. The one specifically pertaining to Strategic Technology Reserve development is as follows:

> *"Develop a plan for the implementation, maintenance, and sustainability of an STR to pre-position or secure interoperable communications in advance for immediate deployment in an emergency situation or disaster."*

I attended the SCIP planning meeting on behalf of the STR Subcommittee and agreed to ask he subcommittee to establish benchmarks to achieve this initiative.

These benchmarks will serve as deliverables our Subcommittee needs to achieve in order to establish a Strategic Technology Reserve system throughout the state. They are as follows:

1. Identify specific technologies to be used in each regional STR based on need, cost, and time needed to implement a system based on PSIC-mandated timelines.

2. Advise and assist local and state agencies in choosing STR capabilities and consider current statewide capabilities into the overall planning process.

3. Identify how each region will manage, maintain, and sustain an STR as part of their governance structure.

4. Create a statewide training standard and standard operating procedures for operating, maintaining, and exercising an STR.

On Nov. 19, the STR Subcommittee voted unanimously to approve these benchmarks and submit them for approval by the Interoperability Committee. I ask that the Interoperability Committee approve these benchmarks and forward them to the Statewide Radio Board for their consideration to be approved and included into the SCIP.

I believe that these are the first of many very important steps in establishing strategic technology reserves at the regional level throughout Minnesota. I also believe that the SRB, through the Interoperability Committee, will be an important resource for other state and local agencies who wish to establish their own strategic technology reserves, thanks in part to the achievement of these benchmarks.

Thank you,

Dan Anderson, STR Subcommittee chair
SRB Interoperability Committee

Emergency Communication Networks
444 Cedar Street • Suite 137 • Saint Paul, Minnesota 55101-5137
Phone: 651.282.6565 • Fax: 651.296.2665 • TTY: 651.282.6555

MEMO

To: **Colonel Mark Dunaski, Chair**
SRB- Interoperability Committee

From: Ron Whitehead, Chair
Interoperability Committee- Grant Workgroup

Date: November 5, 2009

Subject: FY2008, State Homeland Security Program (SHSP) Grant

As part of the FY2008 SHSP Grant program, the SRB approved an Investment Proposal which included a provision to fund the implementation of a common VHF/UHF cross spectrum communication capability in connection with the ARMER implementation. The basic proposal stated the following:

"Coordination and implementation of common cross spectrum communication capability (VHF/UHF to 700/800 MHz) throughout the state using the backbone of Minnesota's statewide standards based trunked infrastructure as a "system of systems."

Under this project the funds were allocated to regional radio boards, as follows:

Region	Amount
Northeast MN RRB	$273,590
Central MN RRB	$771,026
Southeast MN RRB	$895,385

Funds were allocated among the regions based upon the number of active ARMER towers (Phase 3- Central & SE Minnesota and Itasca County in the NE). At the time, the extent of local participation was not known and there was no plan for VHF/UHF interoperability infrastructure.

Since that time, there has been extensive movement toward local participation and we have completed a VHF/UHF Interoperability Infrastructure plan that essentially indicates that between radio control stations provided under the PSIC grant and VHF overlay channel to be implemented with ARMER infrastructure funds we have addressed the issue of system based VHF Interoperability adequately. Note: The report and recommendations in the Federal Engineering report were approved by the Interoperability Committee at the October 2009 meeting.

Based upon these events, I would suggest and seek the approval of the Interoperability Committee to provide the following guidance to the Regional Radio Boards who received funding under the FY2008 SHSP grant as indicated above:

Funds allocated for this purpose may be used for the following purposes:

- To add capacity (channels) to the ARMER backbone in your region, thusly providing capacity that may be needed for patching legacy communication systems into ARMER backbones within the region. Noting: This approach may provide additional resources during the extensive transition period for many of the counties within the region.
- To add control stations, or as the region determines, VHF monitoring capabilities that might be linked into the ARMER backbone, as necessary, to create cross spectrum interoperability.
- To fund ARMER subscriber units for local governments, tribal governments or non-governmental public safety agencies within the state thusly eliminating the need to establish cross spectrum connectivity with legacy communication systems.

Of specific note is the fact that I am not suggesting the funds be made available for VHF subscriber equipment (portables and mobiles) as funds then should be used for cross spectrum interoperability resources where VHF systems predominate. Whereas, ARMER subscriber units provide the highest level of interoperability (SAFECOM Interoperability Continuum) at the highest spectrum efficiency. Where there is a high level of ARMER participation the best use of funds is for ARMER subscriber radios.

I would request approval of this recommendation and ask that the issue be forwarded to the SRB for follow up consideration and approval.