



Minnesota Law Enforcement

Communications Best Practice Guide

**Statewide Radio Board, Operations & Technical Committee, Interoperability
Committee, Law Enforcement Best Practices Workgroup**

Approved by the Statewide Radio Board

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This document describes the recommended best practice, standards, and contact information for Minnesota law enforcement agencies to assist in planning for interoperability with law enforcement and other public safety disciplines.



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DOCUMENT REVISION HISTORY

Date	Revision	Notes	Name
5-17-2013	Removed Tom Johnson Added NWS standard info	Replaced with Brandon Abley	Cathy Anderson



Section I: Introduction

The Law Enforcement Best Practices Workgroup was created in 2012 to develop a Best Practice Guide for those who serve in the public safety field. Law enforcement officers provide a vital role in the delivery of public safety services. This guide is designed to serve as both a training plan and a resource document.

As ARMER grows throughout the state, law enforcement personnel will need assistance, clarification, coordination, and direction. This document is meant to specifically address law enforcement best practice guidance and assist agencies in planning for interoperability needs, including those common law enforcement communications pathways such as:

- Law enforcement unit to law enforcement unit
- Law enforcement unit to PSAP (dispatch)
- Law enforcement to other disciplines
- Law enforcement to aircraft

The highest and most effective level of interoperability is achieved when users share the same radio system and have shared talkgroups directly accessible to them in their radios. A best practice recommendation would be for all users to operate on and share the same radio system. Realizing the difficulty in meeting this goal statewide, this guide will set forth best practices using the current systems for the best interoperability solutions to address incidents and events. The Minnesota Law Enforcement Communications Best Practice Guide is a living document, and suggested changes may be submitted to the Statewide Interoperability Committee through the Statewide Interoperability Program Manager, Brandon.Abley@state.mn.us, or by calling 651-201-7554.

NOTE: Questions regarding State Standards or clarification of these standards should be directed to your County System Administrator or the Statewide Interoperability Program Manager.

Section II: Participation in ARMER

Should jurisdictions choose to participate, State Standard 1.10.0, Requesting and Configuring Participation, details the requirements for participation. State Standards may be found on the Statewide Radio Board (SRB) website at <https://dps.mn.gov/entity/SRB>

Law enforcement agencies planning to participate in ARMER must realize that ARMER is a statewide, interoperable communications system built to a project 25 standard. ARMER's goals and vision include the ability of public officials to communicate via voice and data, on demand, in real time, as needed and as authorized. A formal governance structure does exist. General expectations and standards for use are intended to enhance incident communications through the sharing of resources. For questions, please utilize the points of contact in this document.

The Workgroup recommends that each agency either link to or attach their limited or full ARMER Participation Plan to this document.

Copies of County Participation Plans may be obtained from the Director or Supervisor of the County Dispatch Center, PSAP, or from the Regional Advisory Committee (RAC).



Section III: ARMER Basics for Law Enforcement

State Standard 1.11.4, Field User Training

All users of the ARMER system need proper training on the use of the system and equipment. Applicable state, regional, and local standards/ policies should be addressed to provide users of the ARMER system an understanding of how the system works, its features and limitations, and proper use to maximize system and equipment potential.

Each agency should customize their training plan to fit their own unique situation. It is recommended that all training be completed by a qualified ARMER trainer.

Federal Emergency Management Agency (FEMA)/National Incident Management system (NIMS): NIMS provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment. Each agency should design ongoing NIMS training, which should complement other training initiatives. NIMS should not be considered a stand-alone training curriculum.

NIMS training courses can be found at:

<http://www.fema.gov/emergency/nims/NIMSTrainingCourses.shtm>

Suggested supplemental training beyond the required training listed in State Standard 1.11.4

Alexandria Technical & Community College Training Modules

- Radio 101
- History of ARMER
- Interoperability 101
- Interoperability: How to Communicate Outside Your Agency
- Other relevant modules as developed

FEMA/NIMS Courses

- IS-100.b – (ICS 100) Introduction to Incident Command System
- IS-100.LEb - Introduction to the Incident Command System for Law Enforcement
- IS-700.a - NIMS, An Introduction

State, regional, local sponsored training

ARMER End-User Radio Training



Section IV: Law Enforcement Related Statewide Standards

State Standard 2.8.0, Talkgroup and Radio User Priority

In the ARMER system, priority levels can be set at the radio user level and at the talkgroup level. Per State Standard 2.8.0, all radio user priorities will be set to the lowest priority of 10. Priority levels on the ARMER system will be managed at the talkgroup level. The following are some of the pertinent priority levels:

- Priority 1:** Only emergency alert calls (emergency button activation) will be allowed to use this status.
- Priority 3:** Used for shared mutual aid talkgroups, such as State IC Zone and regional level talkgroups.
- Priority 5:** Used in dealing with the safety and protection of life and property. Some examples would be public safety main dispatch talkgroups and those used by personnel involved in high-risk and mission-critical field operations.
- Priority 7:** Used for non-mission-critical talkgroups such as: “secondary,” “administrative,” and “nonessential” talkgroups for both public safety and general government.
- Priority 10:** Used for telephone interconnect calls and private calls that are carried out within a talkgroup. It is also used for talkgroups that are established for system testing.

State Standard 2.14.0, Private Call

A Private Call is a radio-to-radio call. While it is called “private,” the call is NOT encrypted unless the end-user activates encryption. Per State Standard 2.14.0, the priority level for these calls is set at the lowest level of 10. One issue to be aware of is that a private call ties up channels on the system (towers) from inception to conclusion of the call.

State Standard 2.16.0, Emergency Button

The ARMER system allows for the “Emergency Button” on a subscriber radio to send an “Emergency Alert” to a dispatch console. Emergency button usage must be directed to a predefined talkgroup in the radio programming. It is recommended for officer safety that when reverting the Emergency Button to a specific “emergency” talkgroup, it should be assigned to a talkgroup with statewide access. If it is assigned to a local talkgroup, such as a main, and the radio user is outside of the talkgroup range, the Emergency Button will not work. Emergency Button activations can audibly and visually alert all dispatch console positions that have the predefined talkgroup programmed in them. Emergency calls are also automatically assigned the highest system priority available. Subscribers’ radios can optionally be configured to automatically key the push-to-talk (PTT) for a programmed period of time if the emergency button is pressed. The local System Administrator should ensure that all users are properly trained on the operational usage and programming features.

Encryption

The use of encryption for some law enforcement traffic is a valuable tool for maintaining the security of critical communications. There are important things to consider when using encryption and designing systems and fleetmaps that include encryption.



Selectable encryption

This refers to the method of encryption that is done on an as-needed basis by users and dispatchers operating a control on the radio or console to enable this feature on any talkgroup. The disadvantage of this method is that unless all users correctly operate the control, some traffic may be broadcast in clear mode. This becomes a problem when users need to rely on all traffic being encrypted. Additionally, if the talkgroup has been shared with other users, including neighboring or state agencies, encrypted traffic may not be available to them unless radio equipment specifications and encryption keys have been shared, as well. This creates a safety concern for anyone in the area of an encrypted call who cannot hear the traffic.

Strapped encryption

This refers to programming done at the time of talkgroup creation that requires the talkgroup always operate in an encrypted mode. This is the recommended method of encryption, as it eliminates concern about inadvertent, clear communication. Any sharing would be done only with those users that have the capability of using it.

Equipment considerations

There are two types of encryption supported on the ARMER system, ADP and DES-OFB.

- Advanced Digital Privacy (ADP) encryption is Motorola proprietary and will only work with Motorola radios and consoles. The keys can only be loaded into the radios using software CPS. This format can only be used between Motorola radios.
- Data Encryption Standard-Output Feedback Mode (DES-OFB) Multi-key encryption is approved by the Statewide Radio Board (SRB), Minnesota Department of Transportation (MnDOT), and Motorola as the P25 compliant encryption for utilization on the ARMER System and State-level encrypted talkgroups. It can be utilized in all ARMER approved vendor subscribers able to support and utilize DES-OFB encryption on the ARMER system. Encryption keys can be loaded into radios with a keyloader. DES-OFB is also approved for consoles. The encryption package must be ordered at the time of radio purchase or the radios will need to be upgraded by the manufacturer.
- The “Multi key” option will allow the use of multiple DES-OFB encryption keys on talkgroups. The talkgroup owner controls the encryption key for their talkgroup.
- It is recommended that all subscriber units used for law enforcement be DES-OFB Multi-key capable.
- Advanced Encryption Standard (AES) is the Federal Government level of accepted encryption format for utilization in federal resources.
- Ref: ARMER approved equipment list.

Statewide encrypted resources

There are four LE TAC (Law Encrypted) talkgroups that can be used for general law enforcement and can be programmed in any law enforcement radio, including PSAP consoles connected directly to the ARMER System. There are four LE SIU (Law Encrypted Special Investigations Unit) talkgroups that may only be programmed into specific law enforcement radios, such as tactical teams, drug task force units, etc. Subscribers/radios using any of the statewide, encrypted talkgroups must have the DES-OFB multi-key capable radios. These resources must be reserved for the user on the StatusBoard by dispatch. (Ref: State Standard 3.19.0)



Operations

The SRB has identified that the best practice is to not encrypt all law “main” traffic. It is recognized that there are circumstances which may dictate the use of encryption to provide for covert and /or tactical necessity.

It is recommended in those cases that the preferred method would be for dispatch to assign the units involved to a strapped, encrypted talkgroup for that call. In this way, others that normally monitor the main would be put on notice there is a call operating on the encrypted talkgroup. This would allow them to take whatever precautions may be needed or arrange for another secure way of receiving the information - i.e., over a Mobile Digital Terminal (MDT). Local agencies maintain the ability to control their own talkgroups, but excessive use of encryption may create undue burdens for neighboring agencies or state units who have a need to know. The best practice is to develop local policy and share it with any other agencies that may be involved.

Law Enforcement ARMER Fleetmap Planning Guidance

State Standard 1.7.0, Subscriber Radio Standards

Participants utilizing the system need access to radios that will meet their operational needs for the lowest cost. It is anticipated that radios capable of operation on the system will be available from multiple and different vendors over the life of the system. Users need the flexibility and knowledge to optimally choose from the available “universe” of radios available in the marketplace and, at the same time, be discouraged from purchasing and using radios which would be operationally undesirable or problematic. radios without SRB approval for use on the system are prohibited.

Equipment authorized for use on the ARMER radio system is outlined on the ARMER web site: <https://dps.mn.gov/entity/SRB>. Also available on the web site is the state contract, R-651, for communications vendors and equipment suppliers.

State Standard 1.13.0, ARMER Aircraft Radio Installation and Operations:

The purpose of this standard is to set a policy regarding aircraft subscriber radio installation, programming and operation on the ARMER system.

State Standard 2.6.0, Fleetmap Standard

For the effective management of the system, a defined process needs to be used to document the fleetmap information that each administrating agency is supporting. This information needs to be in a format that is shared with the other administrators. This also provides a resource for the subscribing agencies to reference when planning interagency communications. System fleetmap contains configuration information that is classified as “Security Information” and “General Non-Public Data,” pursuant to Minn. Stats. § 13.37, Subd. 1a.

State Standard 2.7.0, Use of Shared Talkgroups

The intent of this standard is to provide an option to the users of the Allied Radio Matrix for Emergency Response System (ARMER), which will allow the talkgroup owners to predefine sharing authorizations for other agencies.



Mobile and portable radio fleetmaps must be coordinated with the county and regional radio coordinators to ensure cooperative planning with mutual aid, fire, Emergency Medical Services (EMS), and other partners. The following fleetmap is a best practice example of a typical mobile and portable radio fleetmap.

	Main	Regional *	National **	IC ZONE***
1	Dispatch	Regional Call	8Call90 D	STAC1
2	Local Choice	Regional	8TAC91 D	STAC2
3	Local Choice	Regional	8TAC92 D	STAC3
4	Local Choice	Regional	8TAC93 D	STAC4
5	Local Choice	Regional	8TAC94 D	LTAC1
6	Local Choice	Regional	8CALL90 R	LTAC2
7	Local Choice	Regional	8TAC91 R	LTAC3
8	Local Choice	Regional	8TAC92 R	LTAC4
9	Local Choice	Regional	8TAC93 R	FTAC1
10	Local Choice	Regional	9TAC94 R	FTAC2
11	Local Choice	Regional	ASOA1	FTAC3
12	Local Choice	Regional	ASOA2	FTAC4
13	Local Choice	Regional	PSOA1	ETAC1
14	Local Choice	Regional	PSOA2	ETAC2
15	Local Choice	Regional	FSOA1	ETAC3
16	Dispatch	Regional	FSOA2	ETAC4

*The layout of the Regional Zone will be determined by each of the Regional Radio Boards.

**[State Standard 3.15.0, Use of Scene of Action \(SOA\)](#), details the proper use of the SOA channels.

***[State Standard 3.16.0, 800 MHz Statewide incident Response Talkgroups: STACs, ETACs, FTACs, & LTACs](#), details both the layout and proper use of the Statewide IC talkgroups.



The above table shows the minimum of recommended zones in subscriber radios. If a county is on a border with another radio region, it is recommended that they also put in the zone for that region. Another common idea is to put in a zone for each of your surrounding counties.

Section V: Law Enforcement Interoperability

Minnesota Public Safety VHF Interoperability Frequency Plan

The Minnesota VHF Interoperability Frequency plan may be found on the SRB website at <https://dps.mn.gov/entity/SRB>.

Excerpt from the SRB MN VHF Interoperable Frequency Plan – Dated 12-2-2010

The Statewide VHF Interoperable Frequency Steering Committee established the final revision of the VHF plan on 12-2-2010. This plan describes the primary channel for interagency law enforcement communications in the state as 155.4750 MHz, commonly referred to as MINSEF. The national naming convention for this channel is VLAW 31. Use of this channel is widespread in Minnesota, and permission from the SRB and previous authorities to utilize VLAW 31 outside law enforcement disciplines has been limited. The current standard operational mode for this channel is wideband analog, but this channel is subject to the FCC mandated narrowbanding deadline.

VHF Narrowbanding (Excerpted from the SRB MN VHF Interoperable Frequency Plan)

The Department of Public Safety (DPS), in conjunction with the SRB, has recommended that, in order to preserve interoperability, agencies continue to maintain wideband capability on these channels in mobile and portable radios until the narrowbanding deadline of January 1, 2013. This could be accomplished by programming or updating the four current, statewide interoperability channels in existing radio modes and zones using wideband names, as shown in the table, adding the Statewide VHF interoperability zone with narrowband channels into their radios prior to the 60-day transition period.

DPS proposes that users should proceed with reprogramming base stations on these four statewide channels beginning on October 1, 2012. Reprogramming of mobile and portable radios could begin before that date if users retain wideband capabilities, as well. DPS also urges all users to complete narrowbanding these channels in all their radios no later than November 30, 2012. All wideband operations on these channels must cease as of January 1, 2013.

During this 60-day narrowbanding transition period, significant difficulties communicating on these four primary statewide mutual aid channels may occur if users at an incident are attempting to communicate from a narrowband channel to a wideband channel and vice versa. Even though the operating frequency is unchanged, the substantial differences in operating bandwidth between these modes can cause low or muted audio and/or significant distortion of radio communications.

Regional Tactical Interoperable Communications Plan (TICP)

Tactical Interoperable Communications Plans are used by jurisdictions to document interoperable communications governance structures, technology resources, and usage policies/procedures. The TICP describes what interoperable communications assets are available in an area, how those assets are shared and prioritized, and the steps that individual agencies should use to request, activate, and deactivate them.



Law Enforcement personnel should be aware of the regional communications resources that are available to their jurisdiction, as well as the process they must follow to request them. These resources are available through the county dispatch center or the Minnesota State Patrol Dispatch Center.

Standard Minnesota VHF Interoperability Resources*

Table 1 - Statewide VHF Interoperability Zone

CH #	Channel Name	Short Name ²	Mobile TX	Mobile RX	TX/RX Mobile CTCSS ³	TX/RX Base CTCSS ⁴
1	VCALL10	VCAL10	155.7525	155.7525	156.7/CSQ	156.7/156.7
2	VTAC11	VTAC11	151.1375	151.1375	156.7/CSQ	156.7/156.7
3	VTAC12	VTAC12	154.4525	154.4525	156.7/CSQ	156.7/156.7
4	VTAC13	VTAC13	158.7375	158.7375	156.7/CSQ	156.7/156.7
5	VTAC14	VTAC14	159.4725	159.4725	156.7/CSQ	156.7/156.7
6	MNCOMM	MNCOMM	155.3700	155.3700	156.7/156.7	156.7/156.7
7	VFIRE23	VFIR23	154.2950	154.2950	156.7/156.7	156.7/156.7
8	MNFIRG2	MNFG2	154.0100	154.0100	156.7/156.7	156.7/156.7
9	MNFIRG3	MNFG3	153.8300	153.8300	156.7/156.7	156.7/156.7
10	DNRTAC1	DNRT1	151.4750	151.4750	156.7/156.7	156.7/156.7
11	VLAW31	VLAW31	155.4750	155.4750	156.7/156.7	156.7/156.7
12	VMED28	VMED28	155.3400	155.3400	156.7/156.7	156.7/156.7
13	IR 2	IR 2	165.9625	170.4125	167.9/167.9	167.9/167.9
14	VTAC14R	TAC14R	154.6875	159.4725	156.7/156.7	156.7/156.7
15	NGRPTR*	NGRPTR	Rest.	Rest.	Rest.	Rest.
16	LE 2*	LE 2	162.2625	167.2500	\$68F/\$68F	\$68F/\$68F

² For use with limited character display radios

* Local option channel if not implemented with LOA or MOU for use of federal channels.

³ CTCSS or NAC for subscriber radios. For VCALL 10, VTAC11, VTAC12, VTAC13, and VTAC14, use receive CTCSS of 156.7 if needed to mitigate interference.

⁴ CTCSS or NAC for fixed stations.

VLAW 31 (National Law Enforcement Frequency)

The workgroup recommends that law enforcement users maintain VHF radio capability if there is a need for continued interoperability with other states or Minnesota VHF users at least until January 1, 2013, or until they have access to the VHF Cross Spectrum Overlay.



State Standard 3.5.0, National/Statewide VHF Interoperability Resources (MINSEF/VLAW31, EMS HEAR/VMED28, Statewide Fire/VFIR23, MIMS/MNCOMM)

The most common VHF channels that are available to Law Enforcement are:

- VLAW31 (previously MINSEF)
- VFIR23 (previously Statewide Fire Mutual Aid)
- VMED28 (previously Statewide EMS)
- MNCOMM (previously MIMS, or Point-to-Point)

Others may be available as well, such as the National Interoperability Channels VCALL10 and VTAC11-14. Local procedures should be developed that list the specific scenarios in which VHF channels would be needed.

State Standards 3.12.0, Talkgroup and Multigroup Ownership

The purpose of this standard is to define the ownership of private, shared, and interoperability talkgroups and multigroups. This provides standard, written documentation so that System Managers have firm guidelines as to who is permitted to have particular talkgroups and multigroups programmed into their radios.

State Standard 3.16.2, Use of Statewide 800 MHz STAC 1-4 Talkgroups - Air Ambulance Emergency Landing Zone Coordination

The purpose of this standard is to specify the use of the statewide 800 MHz S-TAC talkgroups for establishing and maintaining air ambulance emergency landing zones.

Responder and/or Aircraft that have ARMER radios

If the aircraft and personnel on scene coordinating the landing both have STAC talkgroups, they may use the STAC that has been assigned to them by the appropriate controlling, primary PSAP.

Responder and/or Aircraft that do NOT have ARMER radios

If the aircraft does not have an ARMER radio, but personnel on scene coordinating the landing does, then the controlling, Primary PSAP will assign the first available STAC and patch the responding air ambulance to MINSEF (VLAW31) if being landed by law enforcement personnel.

State Standard 3.16.3, Cross Spectrum Interoperability System (CSIS) 800 MHz National Mutual Aid Resources

The purpose of this standard is to establish procedures for use and patching of 800 MHz national mutual aid resources included in the ARMER Cross Spectrum Interoperability System for interagency communications.

State Standard 3.16.4, Cross Spectrum Interoperability System VLAW31 Resources

The purpose of this standard is to establish procedures for use and patching of VLAW31 resources included in the ARMER Cross Spectrum Interoperability System for interagency communications.

State Standard 3.16.5, Cross Spectrum Interoperability System Very High Frequency (VHF) Variable Frequency Station (VFS) Resources

The purpose of this standard is to establish procedures for use and patching of VHF Variable Frequency Station resources included in the ARMER Cross Spectrum Interoperability System for interagency communications.



State Standard 3.19.0, Use of Statewide 800 MHz Common Pool Talkgroups – LE_TACS & LESIU_TACS

The purpose of this standard is to establish policy and procedures for use of the statewide 800 MHz common pool talkgroups. The common pool talkgroups are a system wide resource to facilitate communications between agencies with Special Investigative Units that typically do not communicate with each other on a regular basis.

The highest and most effective level of interoperability is achieved when users share the same radio system and have shared talkgroups directly accessible to them in their radios. Shared, interoperability talkgroup resources exist in a variety of forms and may be called common, pool, or tactical. It is imperative that law enforcement agencies plan effectively with mutual aid, fire, EMS, and hospital partners. Law enforcement must be aware of local, regional, and statewide interoperability radio resources and procedures. It is recognized that not all users will have access to ARMER radios. Local planning must provide for how to integrate those users who have access only to VHF radios through patching, use of cache radios, etc.

Best practice is to use shared, interoperable resources by progression. Use of the resources should begin internally, progressing to local/county, and then to regional and statewide resources. Some progression may need to be skipped, as with the example of using an LTAC for law enforcement mutual aid or an STAC for an air ambulance landing.

Emergency Incidents

Emergency response communications also require pre-planning. Talkgroup progression should be used, and talkgroups must be assigned by the controlling dispatcher. Incident commanders must work closely with the dispatch center. Some local and all regional and statewide talkgroups need to be reserved by a dispatcher on the StatusBoard.

Based on the scope of the incident, the controlling dispatcher and the incident command structure must communicate effectively to ensure the most appropriate resource is assigned and matches the radio resource requirements of all responders. Dispatchers and incident commanders may choose to patch local resources or VHF and ARMER resources to manage an incident.

Planned Events

Planned events require consideration for the jurisdictions that will require communication. If shared, interoperable resources are required, planners should start by considering local/county talkgroups first, progressing to regional/statewide talkgroups as necessary and appropriate, given the agencies involved and the type of communication needed. This planning must be coordinated with the controlling dispatch center. Regional and statewide talkgroups need to be reserved by a dispatcher on the StatusBoard.

System Failure

Law Enforcement ARMER System users should receive training to recognize failures, such as Site Trunking and Failsoft, and what to do if any failure occurs. All users should consult with their local System Administrator to learn how to recognize failures. All users should also learn what processes are in place that will enable them to communicate during these failures, either within their home area or outside it.

State Standard 3.31.0, ARMER System StatusBoard

The StatusBoard Application, maintained by MnDOT Electronic Communications, is a statewide dispatch console tool installed on all ARMER System consoles and is intended to



help facilitate and advise what interoperable talkgroup or channel may be in use for an urgent, emergent, or preplanned event.

This standard will give guidance to all ARMER dispatch centers as to what talkgroups or channels should be on their StatusBoard Application and will serve to minimize usage conflicts when multiple incidents may be occurring simultaneously.

State Standard 3.32.0, Statewide Interoperable Plain Language Policy

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 National Incident Management System and the Incident Command System (ICS) is seeking to achieve.

State Standard 3.44.0, Statewide Pursuit Communications

The purpose of this standard is to establish the guidelines and procedures for pursuit communications.

Use of Minnesota State Patrol Call Talkgroup

All law enforcement radios should be programmed with the Minnesota State Patrol (MSP) Statewide Call Talkgroup. The MSP–CALL General Order may be found on the SRB website at <https://dps.mn.gov/entity/SRB>. Once at the website click on ARMER and then click on Guide Books and Best Practices.

Use of Regional Hailing Talkgroups

Each of the seven Radio Regions has a Regional Hailing Talkgroup that is available for any public safety discipline to use:

- NWCALL
- NECALL
- SWCALL
- SRCALL
- SECALL
- CMCALL
- MSPCALL

Each County is to monitor their Regional Call Talkgroup and respond to calls for assistance. The Metro area uses MSPCALL, which is available statewide, to contact the Minnesota State Patrol.



Bordering States Considerations

VHF frequencies, such as VLOW 31, are widely used by law enforcement in the adjacent states of North Dakota, South Dakota, Wisconsin, and Iowa. Each of these states' interoperability plans includes some provisions for use of the national VCALL and VTAC channels, as well as all the current, primary VHF interoperability channels used in Minnesota. The one exception is MIMS (155.370 MHz), which is not widely licensed or used in South Dakota.

State Standard 3.43.0, Use of National Weather Service Standard

The purpose of this standard is to define the ARMER talkgroups and procedures to be used by the National Weather Service (NWS) offices that serve the various ARMER regions of the state for NWS to county and local agency communications during severe weather events.

Section VI: State Standard 3.33.0, Establishment of Strategic Technology Reserve; 3.33.1, STR Radio Cache; and 3.33.2, STR Transportable Tower/Repeater

The purpose of this standard is to establish an organizational structure for the coordination of and access to public safety communication resources incorporated into Minnesota's Strategic Technology Reserve (STR). The concept of an STR was established as a requirement to the Public Safety Interoperable Communication (PSIC) grant program in 2007, where federal grant funds were specifically earmarked for the establishment of an STR capability in each state. The basic purpose of the STR, as articulated in the PSIC grant, was to provide communication resources that can be deployed in situations where there is a catastrophic loss of the existing public safety communication capabilities. In establishing this STR capability, the Statewide Radio Board seeks to coordinate new and existing resources to address the following requirements:

- Provide communication resources that can be deployed in situations where there is a catastrophic loss of existing public safety communication capabilities.
- Provide communication resources that can be used to supplement existing public safety communication resources where an event or natural disaster requires more resources and capability that are currently available locally or regionally.
- Provide a transportable communications resource that can be used to support operations of local public safety officials responding to a serious event or natural disaster to another state.

To accomplish these purposes and objectives, this standard seeks to identify communication resources (existing and new) that will be considered part of Minnesota's STR capability and articulate procedures for the maintenance and deployment of those resources.

Law enforcement officials should be cognizant of the fact that the STR Tower is not an ARMER trunked resource. It is designed to operate on a conventional 800 and VHF resource. The repeater has the following features:

- 800 MHz 8CALL/8TAC Repeater
- VHF VTAC14R and IR2/LE2 Repeater
- AC or DC Power
- Standalone Repeater modes for both bands simultaneously, or crossband "patch" 800 to VHF



The workgroup suggests that each agency insert or link the applicable Regional STR Standard to this document.

Section VII: COML and COMT State Standards 3.17.0, Criteria for State Certification as a COML; 3.17.1, Criteria for Certification as a COML Instructor; and 3.17.3, Criteria for State Certification as a Communications Unit Technician

During all-hazards emergency response operations, communications among multiple jurisdictions and disciplines, including emergency medical, fire, and law enforcement, is essential. Unfortunately, the absence of on-scene communications coordination has often compromised critical operations. To close this gap, the Department of Homeland Security's (DHS) Office of Emergency Communications (OEC), in partnership with the Office of 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 & COMT, formulating the curriculum and comprehensive All Hazards Type III COML & COMT courses.

Communications Unit Leader (COML)

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. See State Standard 3.17.1 for more information.

Communications Unit Technician (COMT)

The All-Hazards Communications Technician, or COMT, is responsible for practices and procedures common to radio communications technicians during all-hazards emergency operations. COMTs work within the Incident Command System (ICS) organizational structure. See State Standard 3.17.3 for more information.

COMTs may be federal, state, local, tribal emergency response professionals, and/or coordination/support personnel with communications backgrounds. COMTs have a technical aptitude and are responsible for managing a Strategic Technology Reserve (radio cache, mobile communications vehicle, or other deployable communications assets).

The major responsibilities of the COMT are:

- Support COMLs in the design of the communications plan.
- Stand up equipment in support of the communications plan.
- Assign and track radio caches.
- Document all communications activities.

Incident Management Team (IMT)

An Incident Management Team, or IMT, is a multi-agency/multi-jurisdiction team for extended incidents, formed and managed at the state, regional, or metropolitan level. An IMT is deployed as a team of 8-24 trained personnel to manage major and/or complex incidents requiring a significant number of local, regional, and state resources, as well as incidents that extend into multiple operational periods and require a written Incident Action Plan (IAP).



What An IMT Can Do For You

Provide individuals or an entire team with expertise in the following areas:

- Operations
- Logistics
- Incident Commander – Liaison officer
- Planning – Safety
- Finance- personnel cost, equipment cost, etc.
- Public Information Coordinator
- Perform specific functions, manage a designated part of an incident, or manage the entire incident through a Delegation of Authority.

Provide the following to your jurisdiction:

- Frequent updates on activities
- Detailed records of incident costs
- Tracking of resources
- Documentation of expenditures, claims, labor, and legal issues for the incident
- A written incident action plan for each operational period that includes objectives, strategies, tactics, current resources, and plans for communications, safety, and logistics for the incident.

Section VIII: Compliance & Conflict Resolution, State Standard 7.1.0, Audit/Monitoring Process; 7.2.0, Response to Non-Compliance; and 7.3.0, The Appeal Process

The suggested method for reporting conflicts noticed by end users in the field is to attempt a resolution through direct contact with the PSAP or dispatcher involved. If direct contact with the PSAP or dispatcher is not an option, the issue should be documented and forwarded to your supervisor. The supervisor should contact the PSAP manager, who should attempt to obtain a resolution to the issue and report back to the reporting supervisor. If this issue is with an outside PSAP, the issue should be discussed by the PSAP supervisors of both PSAPS, and a resolution to the issue should be found. However, if a conflict is not able to be resolved at this level, the issue should be brought to the regional user/owner and operator committee level. For more information, see State Standards 7.1.0, 7.2.0, and 7.3.0.

Section IX: Refresher Training Plan

While it is the responsibility of each agency to establish their own refresher training, it is imperative to keep personnel up-to-date on the latest technological innovations, as well as applicable local, regional, and state guidelines/mandates.

It is the workgroup's best practice recommendation that ARMER online equipment modules be reviewed annually, at a minimum. In addition, the Best Practice Guide should become part of every agency's new trainee curriculum, and it should also be reviewed periodically in training sessions for current employees.

Online training may be obtained through the Alexandria Technical & Community College website at <http://www.alextech.edu/static/d2l.html?logout=1>, or by contacting the Statewide Interoperability Program Manager at Brandon.Abley@state.mn.us. To obtain user name and password information for the Alexandria Technical & Community College online training, please contact Linda Muchow at 320-762-4539, 1-888-234-1313, or via email at lindac@alextech.edu.



Section X: Other Best Practices Guides

Fire
Emergency Management/Public Health
Dispatch
Public Works
EMS/Hospitals

These guides have been created as a result of diligent work by the groups involved. These guides provide direction for their respective public safety disciplines and are available online. Access to completed Best Practice Guides is available at: <https://dps.mn.gov/entity/SRB>

Section XI: Minnesota Emergency Communication Networks Contacts

Jackie Mines, Director, DECN
jackie.mines@state.mn.us, 651-201-7550

Brandon Abley, DECN Statewide Interoperability Program Manager
brandon.abley@state.mn.us, 651-201-7554

Bill Bernhjelm, DECN North Regional Interoperability Coordinator
william.bernhjelm@state.mn.us, 218-349-3531

John Tonding, DECN Central/Metro Regional Interoperability Coordinator
john.tonding@state.mn.us, (763) 587-8234

Steve Borchardt, DECN South Regional Interoperability Coordinator
steven.borchardt@state.mn.us, 507-398-9687

DECN Grants Project Coordinator, 651-201-7555

Dana Wahlberg, 911 Program Manager, DECN
dana.wahlberg@state.mn.us, 651-201-7546

Section XII: Regional Radio and Advisory Committee Contacts

Law enforcement across Minnesota must be involved with their respective radio regional governance structure. Be aware of which regions may affect your primary response area.

Contacts for the Regional Radio Boards (RRB) and Regional Advisory Committees (RAC) can be found on the ARMER web site here: <https://dps.mn.gov/entity/SRB>

Section XIII: Law Enforcement Best Practice Workgroup

Brian Smith – Brian.Smith6@usdoj.gov
Cathy Anderson – Cathy.Anderson@state.mn.us
Heath Landsman – hlandsman@co.murray.mn.us



John Tonding – John.Tonding@state.mn.us

Keith Ruffing – keithr@saintpetermn.gov

Randy Donahue – rdonahue@co,murray.mn.us

Scott Camps – camps@co.st-louis.mn.us

Curt Meyer – Curtis.meyer@co.hennepin.mn.us

Stacey “Ace” Bonnema – 3501@co.kandiyohi.mn.us

Thomas Justin – Thomas.Justin@ci.stcloud.mn.us

Troy Langlie – Troy.Langlie@co.grant.mn.us

William Bernhjelm – William.Bernhjelm@state.mn.us

Tom Johnson

Section XIV: Radio Affiliated Acronyms

Link to commonly used radio affiliated acronyms – <https://dps.mn.gov/entity/SRB> , click on ARMER, then click on Acronyms.