

STATEWIDE EMERGENCY COMMUNICATIONS BOARD

STEERING COMMITTEE

September 7, 2016 1 p.m.
Chair: Dan Hartog
by conference call only

Call-in number: 1-888-742-5095
Code: 2786437892#

Meeting Agenda

Call to order

Approval of Agenda

Approval of Previous Meetings' Minutes

- August 2016

Action Items

- Subsystem Roaming (Jim Stromberg)
- National Weather Service Participation and Standard (Jim Stromberg)

Discussion Items

Adjourn

STATEWIDE EMERGENCY COMMUNICATIONS BOARD

STEERING COMMITTEE

WEDNESDAY, AUGUST 10, 2016

1 P.M.

CHAIR: DAN HARTOG

by conference call

MEETING MINUTES

Attendance

Members:

Present

Member/Alternate

Dan Hartog, CHAIR

Joe Glaccum, Vice Chair

Mike Slavik/Tom Wolf/Troy Tretter

Mukhtar Thakur/Tim Lee/Jim Mohn

VACANT

VACANT

Tina Lindquist/Kristen Lahr

Representing

Minnesota Sheriff's Assn.

Minnesota Ambulance Association

Metropolitan Emergency Services Board

MnDOT OSRC

MN State Patrol

MN.IT

Central MN ESB

Guests:

Jim Stromberg, DPS ECN

Rick Juth, DPS ECN

Carol Salmon, DPS ECN

Jill Rohret, MESB

John Hyde, Duluth

CALL TO ORDER

Chair Hartog calls the meeting to order at 1:00 p.m.

APPROVAL OF AGENDA

Joe Glaccum makes a motion to approve the agenda.

Troy Tretter seconds the motion.

Motion carries.

APPROVAL OF PREVIOUS MEETING'S MINUTES

Tretter makes a motion to approve the May meeting minutes.

Glaccum seconds the motion.

Motion carries.

ACTION ITEMS

SUBSYSTEM ROAMING (JIM STROMBERG)

Jim Stromberg reports on a meeting of the Subsystem Roaming workgroup in St. Cloud on July 11. He thanks Brandon Larson for coordinating and hosting the meeting. In attendance were: Brandon Larson, Kristen Lahr, Troy Tretter, John Hyde, Jennifer Hauer-Schmidt and Dave Thomson.

The point of the meeting was to discuss the impact of non-subsystem user roaming on subsystem and how to evaluate if that is an issue and whether it should be allowable and how to measure it.

The group came up with three main points:

- Quantifying roaming is not the best approach;
- It should be addressed through a qualitative process;
- A Best Practices Radio Programming Guide should be created to help educate and establish a unified platform for all radio programmers.

The workgroup saw a lot of value to the reports that MnDOT provides as a quantitative measure but thought that this is not the only way to do it.

The responsibility for monitoring the subsystem roaming should not be on MnDOT. It should be on the individual subsystem owners.

The workgroup asked that Standards 2.9.0 and 2.11.0 be forwarded to the Standard workgroup for review.

It was noted that there is a Best Practices guide at MnDot and the workgroup should work with MnDot to update it and add more clarity as it relates to subsystem roaming.

Tretter says the workgroup reviewed the standards and made some recommendations to the Standards Workgroup.

It is agreed that after the review by the Standards Workgroup, the proposed revisions will be sent to the Operations and Technical Committee for consideration and then to the Steering Committee.

Discussion that the goal is to create through the standards more clarity on the process to follow when there is a perceived or actual impact on a system and that the standards define the process to work through any issues. The idea is to resolve issues at a local level where possible and layout a process for resolution when this is not possible. Suggestion to draft a new standard under the conflict resolution section of standards. Stromberg will draft a standard and present it to the Subsystem Roaming Workgroup for review and then to the Steering Committee. Stromberg will be a part of the Standards Workgroup when the Standards 2.9.0 and 2.11.0 are addressed and will give the guidance to consider merging the two and to not address conflict resolution in these standards.

Glaccum makes a motion to adjourn to meeting.

Tretter seconds the motion.

Motion carries.

Meeting adjourns at 1:30 p.m.

To: SECB Steering Committee
From: Jim Stromberg, ARMER Program Manager
Date: August 29, 2016
Subject: Subsystem Roaming Workgroup

At the August 10, 2016 SECB Steering Committee meeting I was asked to bring standards 2.9.0 and 2.11.0 to the standards workgroup to review for possible merger and to draft a new standard to address conflict resolution relative to roaming.

I am preparing standards 2.9.0 and 2.11.0 for review by the Standards workgroup and they will be reviewing those standards on a future call.

I have prepared a new standard to address conflict resolution. It is attached as standard 7.04.01, System Loading Conflict Resolution. This new standard was developed from the outcomes of the Subsystem Roaming Workgroup.

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

Document Section 7	Compliance and Conflict Resolution	Status: Committee Date: 00/00/00
State Standard Number	7.04.01	
Standard Title	System Loading Conflict Resolution	
Date Established	00/00/00	SRB Approval: 00/00/00
Replaces Document Dated	00/00/00	
Date Revised	00/00/00	

1. Purpose or Objective

By design, the statewide ARMER network allows interoperability between all ARMER users, regardless of geography or discipline. Also by design and in order to not overburden the network, ARMER provides for the ability to limit talkgroup and radio access to ARMER repeater sites. Balancing these interests creates the potential for conflict and this standard establishes a procedures for resolving those conflicts.

2. Technical Background

▪ Capabilities

n/a

▪ Constraints

n/a

3. Operational Context

The statewide ARMER network allows interoperability between all ARMER users and also provides for the ability to limit talkgroup and radio access to ARMER repeaters. Other ARMER standards and a Best Practices Guide provide guidance as how to program ARMER infrastructure and user radios to balance these competing interests. ARMER System Administrators are empowered by those standards to make programming changes to optimize ARMER and minimize conflict.

4. Recommended Protocol/ Standard

Concerns related to System Loading should first be handled in an informal fashion between System Administrators owning the involved sites. Should this process fail, the matter may be escalated to a formal grievance, then to the Emergency Communication Networks staff, and finally to the Operations and Technical Committee (OTC) of the Statewide Emergency Communications Board (SECB).

5. Recommended Procedure

A System Administrator with a concern about system loading should follow the subsequent steps for resolution:

1. The System Administrator with the concern should contact the System Administrator(s) of the suspected offending entity to discuss and informally resolve the concern. The offending entity means site's RF channel owner(s) and/or licensees.
2. If, after reasonable informal efforts to resolve the concern the issue is not resolved, the System Administrator with the concern may formally contact with the System Administrator. The concern should be presented by mail or email to the System Administrator(s) and should include a recommendation for its resolution as well as supporting documents (e.g. standards and usage reports). The System Administrator's supervisor and the Regional Advisory Committee Chair should be copied on the correspondence.
3. If step two does not resolve the issue, the System Administrator with the concern may engage the Emergency Communication Networks (ECN). The ECN will assign a Regional Interoperability Coordinator or staff to coordinate an in person meeting between the System Administrators. The ECN may engage representatives from the region, MnDOT, or other System Administrators to assist in bringing the mater to resolution.
4. If step three does not resolve the issue, the System Administrator with the concern may bring their grievance to the OTC. The OTC may decide the issue but its decision is subject to the approval of the SECB. A decision by the SECB is binding.

6. Management

System Administrators should self-police this matter up to step three above. Unresolved issues at step three and beyond are managed by the ECN's ARMER Program Manager.

To: SECB Steering Committee
From: Jim Stromberg, ARMER Program Manager
Date: August 29, 2016
Subject: National Weather Service Participation

Under the direction of the Operations and Technical Committee, a workgroup has met to consider the National Weather Service's (NWS) participation on ARMER and to update procedures related to their participation.

In February 2016 I asked the Steering Committee for guidance as whether to pursue Interoperability Participation or Sponsorship for the NWS. At that time the Steering Committee guided that the NWS be considered a regional asset and that we explore regional sponsorship. Since that time we have identified a hurdle to regional sponsorship.

During the February meeting it was not understood or discussed that, per state standard 1.10.2, sponsors are required to hold an FCC license on the ARMER system. ECB Regions do not hold FCC licenses and, therefore, are ineligible to sponsor. Our options were to pursue a waiver for the FCC license requirement, seek out a local entity with an FCC license, or find alternative solution. The workgroup has identified an alternative.

We proposal is that NWS ARMER participation be simply established by the NWS ARMER standard. To accomplish this we have included the following language in our draft standard:

This standard establishes authority for NWS offices serving Minnesota to participate on ARMER. NWS offices shall be considered Interoperability Participants. As an Interoperability Participant, the NWS office shall follow ARMER standards just as any other ARMER participant.

To date, the NWS has been operating on ARMER without any sort of formal participation plan but only under the implied authority of an SECB standard detailing operational matters. The above paragraph will simply tie up a loose end. Other newly-added language to the draft standard will prescribe participation-related matters such as training and radio programming responsibilities.

The workgroup asks that the Steering Committee approve this method of resolving participation for the NWS.

The workgroup is also cleaning up how the NWS operates on ARMER. We have one hurdle remaining that is in regard to how the NWS will hail PSAPs. We welcome the Steering Committee's input on this issue or any other part of the draft standard but are only asking that the Steering Committee endorse our method for clarifying NWS participation.

Once we have guidance from the Steering Committee regarding participation and we decide the remaining operational matter, the workgroup will present this standard to the OTC.

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

Document Section 3	Interoperability Guidelines	Status: Date:
State Standard Number	3.35.0	
Standard Title	National Weather Service ARMER Radio Operations	
Date Established		SRB Approval:
Replaces Document Dated	01/24/2013	
Date Revised		

1. Purpose or Objective

This standard establishes permission for National Weather Service (NWS) offices serving Minnesota to access ARMER, defines talkgroups, and establishes procedures for interoperability between the National Weather Service and public safety entities.

2. Technical Background

▪ Capabilities

All NWS offices serving Minnesota except the Aberdeen, South Dakota office are located within the ARMER coverage area.

Table A in the Appendix identifies the NWS offices serving Minnesota, the counties they serve, and the Emergency Communications/Services Board (ECB/ESB) region to which the county belongs.

▪ Constraints

The National Weather Service is an atypical ARMER user. Five of the six NWS offices serving Minnesota's eighty-seven counties are within the ARMER coverage area; one is not. Of the five NWS offices capable of using ARMER, four are physically located outside of the state of Minnesota. The NWS is not a public safety responder; NWS offices operate from fixed sites and are never transient. Yet, the information exchanged between the NWS and public safety during severe weather incidents is critical to public safety.

NWS office coverage boundaries do not align with state boundaries or ECB/ESB regions.

3. Operational Context

This standard establishes authority for NWS offices serving Minnesota to participate on ARMER. NWS offices shall be considered Interoperability Participants. As an Interoperability

Participant, the NWS office shall follow ARMER standards just as any other ARMER participant.

The NWS offices may utilize ARMER radios obtained by purchase, donation, or loan. ECB/ESB regions served by a NWS office shall be responsible for maintaining, repairing, and programming NWS radios. The regions shall also be responsible for training of NWS staff on the proper use of ARMER. The regions shall share the cost and burden in a way they find agreeable or, in the absence of an agreement, proportionally split based by the number of counties in each region served by the NWS office (e.g. costs should be split 30/70 if the NWS officer serves 3 counties in one region and 7 counties in another region).

NWS offices must be able to quickly hail the public safety entities and have a dedicated talkpath for conveying weather alerts to public safety. NWS offices should not be hampered by multiple processes or with tracking down public safety to convey their message.

Each NWS office serving Minnesota (except Aberdeen) is assigned a dedicated ARMER talkgroup for direct weather-related communication between the NWS office and public safety. The assigned NWS office's talkgroup *should* be programmed into the NWS office's radio(s) and into fixed-station, public safety radios such as Public Safety Answer Points (PSAP), Dispatch Centers, Emergency Operating Centers (EOC), and mobile command posts served by that NWS office.

With the consent of the NWS office, its talkgroup *may* be programmed into NWS office's radio(s) and into fixed-station, public safety radios such as Public Safety Answer Points (PSAP), Dispatch Centers, Emergency Operating Centers (EOC), and mobile command posts *not* served by that NWS office. Unless temporarily necessary because of a weather event, no mobile or portable radio should be *selected* to a NWS office talkgroup other than that of the office serving their county. Also, unless temporarily necessary because of a weather event, NWS office radios should not be selected to the NWS office talkgroup of another NWS office.

Generally, NWS office talkgroups should not to be programmed into mobile or portable public safety field unit radios used by first responders or weather spotters in the field. With the permission of the applicable NWS office, NWS office talkgroups may be installed in mobile a portable radios of command staff for management and coordination purposes.

Regional NWS talkgroups should not be patched to other resources.

See Table B in the Appendix for a summary of

NWS office radio IDs should be assigned from the State of Minnesota Miscellaneous Agencies ID pool. Regional NWS talkgroups shall be assigned from a State of Minnesota miscellaneous range for the appropriate zone controller. They should be programmed with a statewide site access profile and given a Level 5 priority.

Regional NWS office radios *should* also have the following talkgroups programmed into their radios:

- MSPCALL

- STACs 1-12
- 8C Conventional Interoperability Zone (8CALL and 8TACs)

Regional NWS office radios *may* have the following talkgroups programmed into their radios:

- Regional Interoperability Zones for the regions served by the NWS office (CALL and interoperability talkgroups).
- SEMTAC
- Other talkgroups as mutually agreed (e.g. METEM).

See Table C in the Appendix for a channel configuration recommendation for all NWS office radios.

4. Recommended Procedure

NWS offices serving Minnesota have identified ARMER as the preferred tool for notifying public safety of a weather event and for communicating with public safety during the event.

OPTION 1

A NWS office wishing to alert public safety of a weather event will hail the Minnesota State Patrol Dispatch (RTMC or SRCC) on MSPCALL or by telephone (the NAWAS telephone may be used as a last resort). The NWS office will identify the affected counties and the regional NWS talkgroup to be utilized for two-way information exchanges during the weather event. The RTMC will then hail the affected counties on the applicable regional CALL or by other means and will direct the counties to the correct NWS talkgroup.

Authorized users wishing to call a NWS office may do so by hailing them on their NWS talkgroup. NWS is expected to monitor their NWS office's talkgroup at all times.

OPTION 2

A NWS office wishing to alert public safety of a weather event will hail the affected counties and the Minnesota State Patrol Dispatch (RTMC or SRCC) on the appropriate regional NWS talkgroup. Upon response(s), the NWS office will utilize the talkgroup for two-way information exchanges during the weather event.

If an affected county does not answer, the RTMC will follow up for the NWS office by contacting any counties that do not answer. If the RTMC does not answer on the regional NWS talkgroup, the NWS office may attempt to hail them on MSPCALL or by telephone.

This procedure requires public safety (typically the PSAP) to have installed and to monitor their regional NWS office's talkgroup.

Authorized users wishing to call a NWS office may do so by hailing them on their NWS talkgroup. NWS is expected to monitor their NWS talkgroup at all times.

In the event additional talkgroup(s) are necessary for communications between NWS offices and public safety, STACs are the preferred choice.

Big Stone and Traverse counties have a unique circumstance in that the NWS office serving those counties is located in Aberdeen, South Dakota, eighty miles west of the Minnesota border and outside of the ARMER coverage area. In an agreement between the Aberdeen NWS office and the counties of Traverse and Big Stone, Traverse County utilizes a South Dakota public safety radio channel to communicate with the Aberdeen NWS office and Traverse County serves as a liaison between the Aberdeen NWS office and Big Stone County.

Except in an emergency, ARMER shall not be used to facilitate communications between any NWS office and any entity outside of Minnesota.

5. Management

The NWS and local entities are responsible for self-policing their adherence to this standard. Regional Interoperability Coordinators and the Statewide Interoperability Coordinator are to be contacted to assist with refining this standard or for conflict resolution.

Appendix

Table A

National Weather Service Office	Emergency Communications/Services Region	County
Aberdeen South Dakota	Central	Big Stone & Traverse
Chanhassen Minnesota	Central	Benton, Douglas, Kandiyohi, Meeker, Mille Lacs, Morrison, Pope, Sherburne, Stearns, Stevens, Swift, Todd, Wilkin, & Wright
Chanhassen Minnesota	Metro	Anoka, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, & Washington
Chanhassen Minnesota	Northeast	Kanabec
Chanhassen Minnesota	South Central	Blue Earth, Brown, Faribault, Le Sueur, Martin, McLeod, Nicollet, Sibley, Waseca, & Watonwan
Chanhassen Minnesota	Southeast	Freeborn, Goodhue, Rice, & Steele
Chanhassen Minnesota	Southwest	Chippewa, Lac Qui Parle, Redwood, Renville, & Yellow Medicine
Duluth Minnesota	Northeast	Aitkin, Carlton, Cass, Cook, Crow Wing, Itasca, Koochiching, Lake, Pine, & Saint Louis
Grand Forks North Dakota	Northwest	Becker, Beltrami, Clay, Clearwater, Hubbard, Kittson, Lake of the Woods, Mahnomen, Marshall, Norman, Pennington, Polk, Red Lake, & Roseau
Grand Forks North Dakota	Central	Grant, Otter Tail, Wadena, Wilkin
Lacrosse Wisconsin	Southeast	Dodge, Fillmore, Houston, Mower, Olmsted, Wabasha, & Winona
Sioux Falls South Dakota	Southwest	Cottonwood, Jackson, Lincoln, Lyon, Murray, Nobles, Pipestone, & Rock

Table B

Talkgroup Requirements	For Whom?	
Required	NWS offices, PSAP's, and EOC's	
Highly Recommended	Mobile Command Posts, Command Staff	
Recommended		
Optional		
Not Allowed	Public safety responder & "weather spotter" mobiles and portables	
Cross Patch Standard	Yes/No	To Talk Group
Soft Patch	No	
Hard Patch	No	
Managed via "Status Board" Application		No

Table C

Channel	Zone A	Zone B	Zone C	8C Conventional
1	NWS Office (Home)	NWS Office (Backup/Neighbor)	NWS Office (Backup/Neighbor)	8CALL90
2	MSPCALL	MSPCALL	MSPCALL	8TAC91
3	Home Choice	Neighbor's Choice	Neighbor's Choice	8TAC92
4	Home Choice	Neighbor's Choice	Neighbor's Choice	8TAC93
5	STAC-1	STAC-1	STAC-1	8TAC94
6	STAC-2	STAC-2	STAC-2	8CALL90D
7	STAC-3	STAC-3	STAC-3	8TAC91D
8	STAC-4	STAC-4	STAC-4	8TAC92D
9	STAC-5	STAC-5	STAC-5	8TAC93D
10	STAC-6	STAC-6	STAC-6	8TAC94D
11	STAC-7	STAC-7	STAC-7	8SOA1
12	STAC-8	STAC-8	STAC-8	8SOA2
13	STAC-9	STAC-9	STAC-9	8SOA3
14	STAC-10	STAC-10	STAC-10	8SOA4
15	STAC-11	STAC-11	STAC-11	NWS Office (Home)
16	STAC-12	STAC-12	STAC-12	MSPCALL