RADIO TECHNICAL OPERATIONS COMMITTEE
AGENDA
Board Room, Metro Counties Government Center
June 27, 2018
1:00 p.m. – 3:00 p.m.

1. Call to Order

2. Approval of April 2018 Minutes

3. Agenda Items
   a. Metro Standard 3.22.0 Use of Mobile / Portable Gateways to Connect Fixed
      Network Interoperability Resources – Tretter
   b. Metro Standard 3.21.0 Recommended Initial Communications Plan for Large
      Scale and Disaster Level Mutual Aid Incidents – Tretter
   c. Action Radio Participation Plan – Andrew Johnson
   d. COML Renewal, Curt Meyer - Tretter
   e. COML Renewal, John Gundersen - Tretter

4. Moves, Additions & Changes to the System
   a. IP Simulcast Conversion – Washington County
   b. IP Simulcast Conversion – City of Minneapolis

5. Committee Reports
   a. Metro Mobility System Usage Update—Chad LeVasseur/Dana Rude
   b. System Manager’s Group/Metro Owner’s Group Update – Jansen
   c. Reports from SECB Committees
      i. Steering – Rohret/Tretter
      ii. OTC – Gundersen / Timm
      iii. Interoperable Data Committee – Olson / Thompson
      iv. IOC –Thompson/Timm
         1. STR Sub-Committee – Tretter/Gundersen
         2. COMU Sub-Committee - Timm / Anderson
      v. IPAWS – Haas / Williams
      vi. Finance / Grants Workgroup- Tretter

6. Other Business
   a. Next Meeting: July 25

7. Adjourn

Scott Haas, Chair
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Scott Haas, Chair
Members Present:
Jon Eckel, Tim Walsh, Ron Jansen, Jake Thompson, Rod Olson, Scott Haas, Nancie Pass, John Gundersen, Wendy Lynch

Guests Present:
Jill Rohret, Troy Tretter, Martha Ziese

Call to Order:
Scott Haas called the meeting to order at 10:00.

Approval of Minutes
M/S/C Motion made by Thompson to approve minutes from March 28, 2018. Pass seconded.

Agenda corrected to reflect March not February minutes included in packet.

Agenda Items:
Dakota County VHF Paging Simulcast Addition
Ron Jansen said that Dakota County is requesting an amendment to its ARMER participation plan to reflect an upgrade in its VHF paging system. Dakota County will install the system at the following ARMER sites: Arbor Point, Buck, Cannon Falls, Empire, Fairfield, Hastings, Palomino, Sperry, Verizon, and Welch.

The paging system being added by Dakota County is similar to that which the TOC approved for Hennepin County in March 2018. This addition will occur within the Zone 1 master site at MnDOT Water's Edge.

Dakota County is also requesting use of excess capacity on ARMER microwave links for this paging system. The County would like to use two T1s from MnDOT Water’s Edge to Empire; one T1 from Hastings to Empire; and one T1 from Welch to Cannon Falls to Empire.

Troy Tretter said once approved, the request will go before the May 8 OTC before moving to the May 9 MESB meeting for approval.

M/S/C Motion made by Eckel to approve the request for Dakota County. Gunderson seconded.

Scott Huppert (HCEMS) COML Recertification
Tretter presented that Scott is renewing his COML, he only needs 1 point for 2018, but he has included documentation for 5 points. Scott is an active COML and Incident Tactical Dispatcher. He is also an active member of the CRTF. This packet after signed, will go to the COMU Sub-Committee of the IOC in June and the IOC in July.

M/S/C Motion made by Jansen to approve Scott Huppert COML Recertification. Pass seconded.
Metro Standard 3.17.4 Event & Exercise Communications

Tretter said changes to this standard were suggested by the CRTF Steering Committee. This document was deemed necessary to update after the MS150 in 2017 and Super Bowl as items that are best practice are not covered in standard.

Primarily: In Section 4: use a COML to prepare an ICS205, to send the completed ICS205 to the Radio Services Coordinator for distribution; to include patched resources on the ICS205; use status board; and to use event planners and radio system managers in the process. Section 6, the CRTF will provide a summary report of review of ICS205’s to the TOC. Tretter said this has been done by the CRTF, and the Interoperability sub-committee does not exist.

Motion made by Gunderson to approve the suggested changes to Metro Standard 3.17.4. Jansen seconded.

Tretter asked if there should be a discussion if the 205 should be created after one or more channels are being used. Should it be changed to one?

Olson asked if it should state one or two state resources. It is a good local notification system.

Tretter said that if it is more than one statewide resources than the 205 would be distributed to SWIC. Currently only one regional resource is being used.

Pass said that giving an agency too much information, it could be missed.

Jon Eckel suggested the wording be changed to “if a 205 is required for an event and a patch is to be used, that patch is to be reflected on the 205”. Gunderson agreed.

M/S/C Motion was withdrawn and restated to reflect above change.

Metro Standard 3.22.0 Use of Mobile / Portable Gateways to Connect Fixed Network Interoperability Resources

Tretter presented this standard has needed updating for a while and was also reviewed by the CRTF steering workgroup. Changes are removal of the vendor list of gateways, as it is out of date and not felt it was necessary. Under section 6, it removes the TIC plan as keeping the list of the COML’s and COMT’s. Tretter said he keeps an updated list and the TIC plan is updated less frequently, plus it directs people where to go, the MESB, rather than the TIC plan which is a non-public document. The final change removes the SMG, which is a non-SECB body and puts the responsibility of resolving issues with the Metro TOC.

M/S/C Motion made by Gunderson to approve proposed changes to Metro Standard 3.22.0. Thompson seconded.

The group agreed there is a need for a definition of mobile in the definition document. Jansen asked if the discussion should be tabled to research language?

Motion was withdrawn.

M/S/C Motion by Jansen to table discussion to allow for a proper definition of mobile to be researched and to add that definition to the standard and the appendix. Gunderson seconded.

Move, Additions & Changes to the System
Gunderson said that the Hennepin County VHF simulcast would be completed at the end of the month.

Jansen said that Aviat was selected as their microwave provider for their microwave upgrade project.

Committee Reports
Metro Mobility System Usage Update
Tretter said there has been a slight increase in usage. 78 hours February-March.

System Manager’s Group/Metro Owner’s Group Update
No update from System Manager’s Group

Reports from SECB Committees
Steering
Tretter said the Steering Committee met on April 11. The federal entity report was discussed, there were some changes that were suggested, so it will come back at the next meeting. Tretter said there was a review of the strategic plan following feedback from the strategic planning meeting held in March.

OTC
Gunderson said the OTC met on April 10. Action items included approving some standards, updates consisting for the most part were updating language and name changes. A standard on media access item was tabled; perhaps sun-setted. There was a request to research the use of ARMER by the media. The Scott County talkgroup request was also approved.

Interoperable Data Committee
Olson said there was a conference call April 17. There was a FirstNet policy discussion on whether to create a policy sub-committee. There was a discussion on the Governor’s taskforce on broadband. There was a discussion on some grant opportunities, they are going to focus on the SLIGP 2.0 grant. Network testing was discussed.

IOC – No report, there was no meeting.

STR Sub-Committee
Tretter said the STR Sub-Committee met on April 3. There was a discussion on the remaining maintenance funds. Some of the STR standards will be merged into one.

COMU Sub-Committee
Tretter said the COMU Sub-Committee met April 17 by phone. The COMT packet was approved. There was a discussion about merging expiration dates for COMU personnel that have multiple certifications. An Incident Tactical Dispatcher standard was implemented at a state level. Next meeting Tretter will introduce the curriculum developed at the regional level for consideration.

IPAWS
Scott Haas said that meeting will take place in St. Cloud at the Interoperability meeting.

Finance/Grants Workgroup
Tretter said that there has been discussion to allow grant funding priorities to be modified to include the Genesis training. It was approved at the March Executive MESB meeting. That grant expires June 1, but the training cannot happen until after June. Tretter requested a quote from Motorola to hold training prior to the expiration date of June 1st.
Tretter said the grant is $25,000.00 grant. $8,000.00 will be expended at the St. Cloud Interoperability conference. SECB funds or HSEP funds can be used. The SHSP funds expire in December. A Networking Essentials and Motorola Communications 4 1/2 class for up to twelve people is approximately $26,000.00. There is an MCC 7000 Dispatch Console Workshop for $21,000.00, and an IB&D Simulcast Workshop in Schaumburg for $17,000.00.

Some of the grant money might be turned back in that could also be used.

Jill Rohret said that Genesis Training is still possible with another pot of money from the SHSP grant.

Tretter will send out notification of training to the TOC membership. System Owners will have priority.

**Regional Talkgroup Permission Requests**
Tretter has received a request from the Great Lakes Indian Fish and Wildlife Commission on April 12, this was not in the packet, but the request was available as a handout. The request is for access to METAC’s 1-10.

*M/S/C Motion by Jansen to approve Great Lakes Indian Fish and Wildlife Commission request for access to METACS 1-10. Pass seconded.*

**Other business**
Haas said there is volunteer opportunity to serve on the RECCWG exercise and planning group at the FEMA region five level. Anyone who is interested in serving should contact SWIC Jim Stromberg.

*The meeting adjourned at 11:20.*
1. Purpose or Objective:
Establish a policy and procedure for the use of mobile/portable audio gateway devices when interconnecting to ARMER conventional or trunked shared resources.

2. Operational Background:
   - **Capabilities**
     - There are several devices available for purchase that can interconnect to mobile and/or portable radios in any location. When these devices receive a transmission on one radio, they key the transmitter on the other radio and feed the audio from the receiving radio to the transmitting radio. The communications can go in both directions but only one at a time. The two devices may be two VHF radios, one VHF and one 800 MHz radio, or any other two devices. This policy standard is for mobile devices. Mobile is defined as devices not permanently placed at a fixed location. Devices that are at a fixed location are controlled by MESB policy XXX. - Console patches are not considered as a mobile/portable gateway.

   Various audio gateway devices have proliferated within the public safety community. These devices are marketed under different names but basically provide the ability to "patch" one radio system to another radio system. A partial listing of the common devices is contained in the following table.

<table>
<thead>
<tr>
<th>GATEWAY NAME</th>
<th>VENDOR</th>
<th>FUNCTIONALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACU-1000</td>
<td>Raytheon JPS Communications</td>
<td>Audio Gateway</td>
</tr>
<tr>
<td>ICRI</td>
<td>Communications Applied Technology</td>
<td>Audio Gateway</td>
</tr>
<tr>
<td>ROS-Portable</td>
<td>SyTech Corporation</td>
<td>Audio Gateway</td>
</tr>
<tr>
<td>SmartMSG</td>
<td>Codessar</td>
<td>VoIP/Network</td>
</tr>
</tbody>
</table>

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**Constraints**

Unless used properly with knowledge of the networks being patched, these devices can be harmful to the normal operations of those networks. Their use can be particularly harmful to a simulcast digital trunked radio system such as the metro area ARMER system.

Mobile/portable gateways must be optimized in order to provide intelligible audio through the patch. Non-optimized gateway connections often cause message truncation (loss of words at the beginning or end of a transmission), audio holes in the middle of messages, audio level problems (too loud or too quite), audio distortion, excessive end of message hang times resulting in “bonks” or call rejects, and other problems.

If multiple connections are established to the same resources on different gateways (one of which may be a console patch) an audio loop will occur locking up all channels/talkgroups in the patch causing constant noise which cannot be talked over by a user.

Connecting multiple patches in a “daisy chain” fashion causes excessive key-up delays, message truncation and most commonly intelligibility problems due to multiple audio processing conversions of digital to analog / receiver to transmitter, etc.

**3. Operational Context:**

Patching disparate radio systems is essential to facilitate interoperability between users that do not have compatible radio equipment. The preferred method of patching is currently the use of a fixed gateway (dispatch console) which is hardwired to the radio infrastructure needing to be patched. Such patches are commonly established between ARMER trunked talk groups and the metro region ARMER conventional interoperability system (VMED28, VLA31, etc.) This method of patching is effective when all end users are within the coverage range of the radio infrastructures involved in the patch.

In some cases, an incident requires the interconnection of channels with no associated infrastructure interfaced with the fixed gateway system, or out of the coverage range of these channels. In these cases the use of mobile/portable gateways is necessary.

**4. Recommended Protocol / Standard:**
Because of the high potential for harmful interference and disruption of communications, no mobile/portable audio gateway device may be connected, attached or used on the metro region ARMER system unless the patch is setup by a trained gateway operator and such use has the approval of a certified ICS Communications Unit Leader (COML) or Communications Unit Technician (COMT) under an approved ICS-205 Incident Communications Plan.

5. Recommended Procedure:
An agency desiring to implement a mobile/portable audio gateway patch to a regional resource for a pre-planned event should prepare an Incident Communications Plan using an ICS-205 form indicating the resources to be patched. If the agency does not have a certified COML or COMT, it should request assistance from a certified COML from the subsystem owner it will be connecting to or from the MESB. The COML will be responsible to review the proposed patch to determine that it will not cause interference. The COML will also be responsible to notify the appropriate dispatch center responsible to update the status board application to indicate the resources are reserved for use.

An agency desiring to implement a mobile/portable audio gateway patch for an emergent incident should notify the dispatch center controlling the incident to inform them of the resources requested to be patched. The dispatch center will update the status board applications to indicate the patched resources are in use and patched. If the agency does not have a certified COML or COMT, it should request assistance from another certified COML and complete an ICS-205 as soon as possible for dissemination to the Incident Commander and the dispatch center controlling the incident. COML assistance may be provided remotely. If a certified COML is unavailable the appropriate ARMER Subsystem Administrator should be consulted prior to initiating the portable/mobile gateway patch.

The following guidelines should be followed when utilizing mobile/portable gateways:

- Mobile/portable gateway patches should only be setup by a trained gateway operator that is familiar with the equipment and the resources to be patched.

- Radio resources should only be contained in a single patch in a single mobile/portable gateway. "Daisy chaining" resources across multiple gateways, e.g. a talk group to a conventional channel in one gateway and the same conventional channel patched to a different talk group in a second gateway should not be attempted due to poor performance.

- Radio ports should be configured for COR detect rather than VOX whenever possible to reduce the problem with loss of the first few syllables.

- Prior to establishing the patch the gateway operator should make an announcement on the applicable resources that a patch is being setup.
Upon connecting the patch the gateway operator should test the patch end to end to verify acceptable performance.

If performance is poor, the gateway operator will make any necessary adjustments to audio levels, delay timers, tone control, etc.

The gateway operator will make an announcement that the patch is setup and ready for use.

The gateway operator will monitor the performance of the patch while it is in use.

Once the patch is no longer needed the gateway operator will announce that the patch is being removed and will disconnect the patch.

6. Management:

The [metro region TIC Plan will contain](https://example.com) MESB Radio Coordinator will maintain a list of certified COMLs and COMTs which may be consulted regarding the use of mobile/ portable gateways. The System Managers Group [Radio Technical Operation Committee (RTOC)] will have the responsibility to investigate and resolve problems associated with the use of mobile/ portable audio gateways.

Commented [t1]: Or do we want this with the Metro Radio TOC?
1. **Purpose or Objective:**
To recommend an initial “default” incident communications plan utilizing the statewide 800 MHz ARMER interoperability talkgroups to facilitate effective command, control, situational awareness, coordination and staging for the initial response to a large scale and/or disaster level incident.

2. **Technical Background:**
   - **Capabilities**
     The Statewide Radio Emergency Communications Board (SECB) 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-TAC 1-12. Law enforcement has an additional four statewide tactical talkgroups.
   - **Constraints**
     Experience has shown that not all agencies have used many different processes in the past. Not all responding agencies to a large-scale incident may have regional interoperability talkgroups. This standard strives for consistency among all metro agencies.

3. **Operational Context:**
These recommendations are based on core principles of NIMS including establishment of an Incident Communications Plan to support the Incident Command System (ICS) as it is established for a large-scale mutual aid incident. Lessons learned from the Twin Cities Urban Areas Security Initiative (UASI) Tactical Interoperable Communications (TIC) Plan validation exercise evaluated by the Department of Homeland Security and after action reports I-35W bridge collapse also provide a basis for this standard.

4. **Recommended Protocol:**

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<table>
<thead>
<tr>
<th>Document Section:</th>
<th>3. Interoperability Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Section:</td>
<td>METRO 3.21.0</td>
</tr>
<tr>
<td>Procedure Title:</td>
<td>Recommended Initial Communications Plan for Large Scale and Disaster Level Mutual Aid Incidents</td>
</tr>
<tr>
<td>Date Established:</td>
<td>5/28/08</td>
</tr>
<tr>
<td>Replaces Document Dated:</td>
<td>5/28/08</td>
</tr>
<tr>
<td>Date Revised:</td>
<td>4/24/13</td>
</tr>
</tbody>
</table>

Radio TOC Recommendation
Date: 5/28/08
MESB Approval – Date: 6/11/08
State Standard 3.16.0 (effective November 22, 2013) requires STAC 1-12 plus STAC 13E and 14E to be programmed in all PSAP consoles. Any PSAPs which do not have space in its consoles for these resources must file a variance with the State Interoperability Coordinator.

5. **Recommended Procedure:**

When an emergent large scale or disaster level incident requires an immediate and massive mutual aid response, the following initial Incident Communications Plan should be implemented by the dispatch center with primary control of the incident:

A. The Incident Commander (IC) should be identified. A Command Net should be immediately established utilizing the first available STAC talkgroup. The Command Net should be used for communications between the IC, the controlling dispatch center, other dispatch centers providing resources and the Emergency Operations Center if established.

B. A Staging Net should be established utilizing the next available STAC talkgroup. The Staging Net STAC should be patched to conventional interoperability resources as necessary depending on the response, e.g., VLAW31. During initial response this talkgroup would be used to notify responders of situation updates. The use of this talkgroup will transition to a Staging Net talkgroup.

C. A Staging Officer should be assigned by discipline (Police, Fire, EMS) and a physical location for the incident staging area(s) designated.

D. In the absence of an ICS structure and Staging Officer, during the initial phase of the response, the controlling dispatch center may designate a staging area as a collection point for responding mutual aid agencies from all branches. Once the ICS structure and Staging Officer are in place, units will be moved to the designated discipline staging by that specific Staging Officer.

E. Operations Section Tactical Nets should be established for each major service branch on statewide TACs using the first available STAC after the Command and Staging Nets are established. Units will be assigned to the designated Tactical Net upon receiving their assignment at staging.

F. The attached ICS-205 should be used as a sample ICS-205 for the initial recommended Incident Communications Plan until the incident Communications Unit Leader (COML) prepares the ICS-205 for the next operational period.

Upon initial response the dispatch center with primary control of the incident is responsible for the following:

- Assigning the proper STACs for the Command Net and the Staging Net
- Assigning the proper STACs for Operations Section Tactical Nets; Law enforcement may use their service branch-specific talkgroups
- Establishing the necessary patches to conventional channels as required
- Updating the status of the incident to effected PSAPs using the METCOM talkgroup
- Announcing the mutual aid staging collection point if there is no ICS structure to designate
- Announcing the location of the incident staging area(s) to incoming units
- Announcing the need for personnel and resources
• Updating the Status Board application to designate which interoperability resources have been assigned for use
• Advising when responding units can be cancelled
• Utilize regional talkgroups when feasible

This communications plan deals with the gap between the initial dispatch of the incident and the establishment of an ICS Communications Unit to prepare the Incident Communications Plan for the next operational period.

6. Management:
Dispatch center managers and supervisors for agencies on the region-wide 800 MHz radio Metro ARMER system shall insure that this procedure for usage and assignment of the STAC talkgroups be adhered to, as well as the setting up of soft patches for which they are responsible.
### INCIDENT COMMUNICATIONS PLAN

**LARGE SCALE AND DISASTER LEVEL INCIDENT**

**INITIAL COMM PLAN TEMPLATE**

<table>
<thead>
<tr>
<th>Radio Type/Cache</th>
<th>Channel and/or Talkgroup Name</th>
<th>Function - LE, Fire, EMS, Pub Wks, Transit, etc.</th>
<th>Frequency/ Tone/Talkgroup ID</th>
<th>Operational Assignment</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REGIONAL 800 MHZ DIGITAL</strong></td>
<td>STAC1 (or first available STAC)</td>
<td>INCIDENT COMMAND</td>
<td>COMMAND NET</td>
<td>AREA COMMAND, INCIDENT COMMAND, COMMAND STAFF, GENERAL STAFF (SECTION CHIEFS), INCIDENT DISPATCH CENTER, EOC, ETC.</td>
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<tr>
<td><strong>REGIONAL 800 MHZ DIGITAL</strong></td>
<td>STAC2 (or next available STAC)</td>
<td>ALL RESPONDING UNITS W/ ASSESSMENTS</td>
<td>TACTICAL NET OPERATIONS SECTION - ALL BRANCHES STAGING</td>
<td>ALL INCOMING UNITS - CHECK IN AND INITIAL ASSIGNMENT - PATCHED AS NECESSARY TO VHF CONVENTIONAL RESOURCES</td>
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<tr>
<td><strong>REGIONAL 800 MHZ DIGITAL</strong></td>
<td>LTAC1 (or first available LTAC)</td>
<td>LAW ENFORCEMENT</td>
<td>TACTICAL NET OPERATIONS SECTION - LAW ENFORCEMENT BRANCH</td>
<td>INITIAL ASSIGNMENT FOR LAW ENFORCEMENT TACTICAL OPERATIONS - EXPAND AS NECESSARY</td>
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<tr>
<td><strong>REGIONAL 800 MHZ DIGITAL</strong></td>
<td>STAC3 (or next available STAC)</td>
<td>EMS</td>
<td>TACTICAL NET OPERATIONS SECTION - EMS BRANCH</td>
<td>INITIAL ASSIGNMENT FOR EMS TACTICAL OPERATIONS - EXPAND AS NECESSARY</td>
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<tr>
<td><strong>REGIONAL 800 MHZ DIGITAL</strong></td>
<td>STAC4 (or next available STAC)</td>
<td>FIRE</td>
<td>TACTICAL NET OPERATIONS SECTION - FIRE BRANCH</td>
<td>INITIAL ASSIGNMENT FOR FIRE TACTICAL OPERATIONS - EXPAND AS NECESSARY</td>
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</table>

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<table>
<thead>
<tr>
<th>Line</th>
<th>Function (NET)</th>
<th>Talkgroup/Channel/Phone</th>
<th>Assignment</th>
<th>RX Freq (N or W)</th>
<th>RX Tone/NAC</th>
<th>TX Freq (N or W)</th>
<th>TX Tone/NAC</th>
<th>Mode</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>1</td>
<td>COMMAND</td>
<td>STAC2 (or first available STAC)</td>
<td>INCIDENT COMMAND</td>
<td>ARMER</td>
<td></td>
<td>ARMER</td>
<td></td>
<td>D</td>
<td>AREA COMMAND INCIDENT COMMAND COMMAND STAFF GENERAL STAFF ACTION CAPITAL INCIDENT COMMAND CENTER EOC INC.</td>
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<tr>
<td>2</td>
<td>SUPPORT</td>
<td>STAC3 (or next available STAC)</td>
<td>STAGING</td>
<td>ARMER</td>
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<td>D</td>
<td>AREA INCIDENT COMMAND DUTY - USE IN EMERGENCY ASSIGNMENT - ADJUST AS NEEDED TO THE CONVERSATIONAL REQUIREMENTS</td>
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<td>TACTICAL</td>
<td>STAC4 (or next available STAC)</td>
<td>LAW</td>
<td>ARMER</td>
<td></td>
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<td>INITIAL ASSIGNMENT FOR LOCAL TACTICAL OPERATIONS EXPAND AS NEEDED</td>
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<tr>
<td>4</td>
<td>TACTICAL</td>
<td>STAC5 (or next available STAC)</td>
<td>EMS</td>
<td>ARMER</td>
<td></td>
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<td>INITIAL ASSIGNMENT FOR LOCAL TACTICAL OPERATIONS EXPAND AS NEEDED</td>
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<td>5</td>
<td>TACTICAL</td>
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<td>D</td>
<td>INITIAL ASSIGNMENT FOR LOCAL TACTICAL OPERATIONS EXPAND AS NEEDED</td>
</tr>
</tbody>
</table>

**SPECIAL INSTRUCTIONS**

COML: 
AGENCY: 
PHONE: 
EMAIL:

The connection calls for frequency lists to show four digits after the decimal point, followed by either an "F" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeaters and base stations must be programmed with the Rx and Tx reversed. (MEST Version 1.0, 11/2015)
April 26, 2018

Operations and Technical Committee,

We are requesting two talkgroups and eight subscriber ID's in the test section range on the ARMER system. This request is to facilitate testing and demos of Harris, Tait, and Kenwood radios to new customers. We are reviewing the ARMER standards as set forth on the website to ensure our compliance. Our 24-hour tech line is 763-463-0924.

I have contacted Jim Stromberg of ECN and he has explained that there is no current participation plan type for a radio shop. We are not a system administrator for anyone at this time, so we would not have their admin key and we will not have a signed contract to be their provider because the agency will not have bought anything from us.

Sincerely,

Joshua Ewing
Operations Manager
COMU Position Recognition Application

Application Type:
☐ Initial Application ☐ Renewal ☐ Change of Status

Position (check only one):
☐ COML ☐ COMT ☐ COMC ☐ AUXCOMM (THSP)
☐ INCM ☐ INTD ☐ RADO ☐ THSP

Name
(Last, First Middle) Meyer, Curtis S.

Certifying Agency
Hennepin County Sheriff

County
Hennepin

ECB/ESB Region

Agency Address
1245 Shenandoah Ln

24/7 Telephone
612-758-8086

Business Telephone
612-596-1922

Email Address
curtis.meyer@hennepin.us

Signature
Date
6/15/2018

Agency Certification (this section must be completed even if PTB Agency Certification form was completed)
The above named individual seeking state recognition for the above identified COMU position is recognized by the above named agency in that COMU position. The person serves the agency as a paid employee or as a volunteer but, in either case, is recognized as an employee for the purposes of Workers Compensation, liability, and all other liability-related protections afforded employees of the agency.

When the above named person serves in the COMU position, whether within the agency’s jurisdiction, or outside, the person serves as an employee/representative of the agency.

Name & Title
John Gunderson - Radio Systems Manager

Agency
Hennepin Sheriff

Signature
Date
6/15/2018

Regional Recognition
The ECB/ESB region has reviewed the request for state recognition and supports state recognition of this person.

Name & Title
Region

Signature
Date

COMU Workgroup & SWIC Recognition
The COMU Subcommittee and the SWIC have reviewed the request for state recognition and supports state recognition of this person.

SWIC
Signature
Date
COMU Experience Record

Name
(Last, First Middle)

Agency

County Region

Detail activities below and attach supporting documents.

<table>
<thead>
<tr>
<th>POINTS</th>
<th>DATE(s)</th>
<th>SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3/27/2018</td>
<td>CRTF Quarterly Training @ MESS</td>
</tr>
</tbody>
</table>

I certify that I participated in the above activities.

Signature

Date: 6/15/2018
COMU Position Recognition Application

Application Type:
☑ Renewal
☐ Change of Status

Position (check only one):
☑ COML
☐ COMT
☐ COMC
☐ INCM
☐ INTD
☐ RADO
☐ AUXCOMM (THSP)
☐ THSP

Name
Last, First Middle) GUNDESON, JOHN DANIEL

Certifying Agency
Hennepin County Sheriffs Office

County
Hennepin

ECB/ESB Region
Metro

Agency Address
1245 Grandview Lane
Plymouth, MN 55447

24/7 Telephone
612-384-0580
Business Telephone
612-596-1921

Email Address
JOHN.GUNDESON@HENNEPIN.COUNTY.MN

Signature
Date 6/14/18

Agency Certification (this section must be completed even if PTB Agency Certification form was completed)
The above named individual seeking state recognition for the above identified COMU position is recognized by the above named agency in that COMU position. The person serves the agency as a paid employee or as a volunteer but, in either case, is recognized as an employee for the purposes of Workers Compensation, liability, and all other liability-related protections afforded employees of the agency.

When the above named person serves in the COMU position, whether within the agency’s jurisdiction, or outside, the person serves as an employee/representative of the agency.

Name & Title
Dwight Deisting Communications Manager

Agency
Hennepin County Sheriffs Office

Signature
Date 6/14/18

Regional Recognition
The ECB/ESB region has reviewed the request for state recognition and supports state recognition of this person.

COMU Workgroup & SWIC Recognition
The COMU Subcommittee and the SWIC have reviewed the request for state recognition and supports state recognition of this person.

SWIC
Signature
Date
**COMU Experience Record**

**Name**
_Last, First Middle_  
Gofferson  John Paul

**Agency**  
Hennepin County Sheriff's Office

**County**  
Hennepin

**Region**  
METRO

*Detail activities below and attach supporting documents.*

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<td>3/27/18</td>
<td>MESB, CRTF Quarterly Training, CRTF Members Testing, Testing</td>
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</tbody>
</table>

I certify that I participated in the above activities.

**Signature**  
[Signature]

**Date**  
6/14/18
Investment Hierarchy

2019 SECB Grant

Applicant projects should fit within the scope of the priorities listed below. This hierarchy pertains to this grant only. All equipment other than the GIS Project is at a 50% match and invoices and proof of payment must demonstrate the agency paid the equivalent. If items are not listed in the examples below, be sure and check with grant administrator to ensure payment.

Priority 1 GIS Project

Investments in developing the required Next Generation 9-1-1 (NG9-1-1) geospatial datasets, which will allow Public Safety Answering Points (PSAPs) to upgrade and deploy significant NG9-1-1 functional elements, including the Location Validation Function (LVF) and Emergency Call Routing Function (ECRF). Ideal grant candidates include those lacking required NG9-1-1 geospatial datasets (specifically road centerlines and address points) and resources needed to prepare those data. **NOTE:** Grant candidates must be willing to maintain the required NG9-1-1 geospatial data that are developed and delivered upon project completion.

- As Minnesota moves forward with the implementation of Next Generation 9-1-1 (NG9-1-1) technologies, specifically the emergency call routing function (ECRF) and location validation function (LVF), accurate and up-to-date GIS information is critical. With a goal of 2020 to implement these technologies, the continued support for the collection, aggregation, and validation of GIS data is a priority for future NG9-1-1 initiatives. After completion, all counties who qualify for grant funds must be able to maintain and update data as needed.

Priority 2 ARMER Training & Interoperable Voice Communication Exercises and Planning Costs

Training and exercise events that enhance the abilities of emergency responders to achieve seamless interoperable communications. Examples are ARMER Train the Trainer; Refresher ARMER Train the Trainer; System Admin Training; Dispatch training; ICS/Communication Workshops; Radio Programming; ICS 300; Interoperability Conference; CASM training; tabletop exercises for planned events, dispatch exercises. **NOTE:** All training must be pre-approved by the DECN per HSEM requirements. Forms can be found on the ECN website.

Planning includes associated costs for planning events. Examples are Food and Beverages provided at meetings; contractor fees; and employee labor costs for administering grant applications.

- The goal of training and exercises is for emergency personnel to come together across disciplines to learn how to best use the ARMER system and other Land Mobile Radio systems/resources in order to enhance operational effectiveness. This is an ongoing initiative and refresher trainings for emergency personnel are encouraged.

Priority 3 ARMER Integration Costs (Infrastructure Enhancements):

2017 SECB Investment Hierarchy version 2.0
Investments into infrastructure projects which result in a material enhancement to the performance of the ARMER backbone by expanding its capacity, coverage area, or wide-area network that is necessary to complete the transition to ARMER. Examples of such are channel additions, tower sites, MCC7500 consoles and outdoor BDAs as needed to fill in coverage gaps. **NOTE:** All outdoor BDAs must be approved through OTC to ensure MNDOT is aware of them and they are set up correctly so as not to cause interference with ARMER backbone.

- The goal of this initiative is to achieve satisfactory ARMER coverage in identified deficient areas.

**Priority 4** Other ARMER Interoperability and operability Infrastructure (must be consistent with the Strategic Plan) specifically approved by the grants workgroup.

Infrastructure investments which generally enhance interoperability and operability but do not provide any material enhancement to the performance of the ARMER backbone. Includes indoor BDAs for public safety sites such as LECs, jails or courthouse and schools. Items will need to be reviewed and approved by the Grants Workgroup. It is recommended that approval is sought before making any purchases.

- The goal of this initiative is to achieve satisfactory ARMER coverage in identified deficient areas.
RECOMMENDATION
The 9-1-1 TOC recommends including the following items as regional funding priorities for FY2018 grants:
- PSAP cybersecurity (firewall project)
- Phase two of CAD-to-CAD interoperability project

The Radio TOC recommends including the following items as regional funding priorities for FY2018 grants:
- Motorola technical training courses
- Exercise for the Metro Communications Response Taskforce (CRTF)
- Financial assistance for attendance at the State Interoperability Conference
- Expanded regional exercise involving the CRTF and partner agencies
- Portable radio replacements: cache radios and patrol radios
- Dakota County bi-directional amplifier (BDA)

Staff recommends including equipment or other one-time costs related to cybersecurity monitoring at PSAPs, if needed.

BACKGROUND
Emergency Communication Networks (ECN) Division and the Statewide Emergency Communications Board (SECB) now require regions to approve regional funding priorities. These priorities are to include projects/items/concepts for which regions can apply for grant funds through the SECB process. In the past, grants were only open to radio projects.

ISSUES & CONCERNS
9-1-1 projects are eligible for grant funding. Due to this, both the 9-1-1 and Radio TOCs developed projects are included as a regional funding priority.

Grants are structured that both 9-1-1 projects and radio projects are applied for in the same grant and are all included in the competitive structure.

Staff plans to apply for all projects during the application process. However, the top priorities are, Motorola technical training, and PSAP cybersecurity.

FINANCIAL IMPACT
None to the MESB other than staff time to apply for and process grants.