



METROPOLITAN EMERGENCY SERVICES BOARD RADIO TECHNICAL OPERATIONS COMMITTEE AGENDA

June 23, 2021, 1:00 p.m.

This meeting will be conducted online (no in-person location). To join online, please go to <https://metropolitanemergencyservicesboard.my.webex.com/metropolitanemergencyservicesboard.my/j.php?MTID=mad315b964b3f1313883772a36cfd6ca3>. To join the audio portion only, please call 408-418-9388, use code 182 925 0600. If prompted for a password, use Radio (72346 from touchpad).

1. **Call to Order** – Committee Vice-Chair, Ron Jansen
2. **Approval of Agenda** – Jansen
3. **Approval of Minutes of May 26, 2021 Meeting** – Jansen
4. **Action Items**
 - A. Allina EMS Permission for METAC 11 and 12 E – Vikki Vadnais
 - B. Radio Items for Regional Strategic Plan – Fredrick/Workgroup
5. **Moves, Additions & Changes to the System**
6. **Committee Reports**
 - A. Metro Mobility System Usage Update – Chad LeVasseur/Clay Stenbeck
 - B. System Managers Group Update – Jansen
 - C. MnDOT ARMER System Update – John Anderson/Tim Lee/Dave Klema
 - D. SECB Committees
 - i. Steering – Jill Rohret/Fredrick
 - ii. LMR – Nate Timm/Mike Mihelich
 - iii. WBBA – Rod Olson/Thompson
 - iv. IOC & Workgroups
 - a. IOC - Thompson/Timm
 - b. STR Workgroup - Curt Meyer/Mark VandenBerghe
 - c. COMU Workgroup - Timm/Dan Anderson
 - v. IPAWS – Scott Haas
 - vi. Finance/Grants Workgroup – Fredrick
7. **Other Business**
 - A. METAC Permission update – Fredrick
 - B. MCC7500e Naming Conventions – Meyer
 - C. METCOM Users – Open Discussion
 - D. Change Management/Encryption Discussion update – Fredrick
8. **Adjourn**

Reminder: Next meeting scheduled for July 28, 2021

Metropolitan Emergency Services Board

Radio Technical Operations Committee May 26, 2021 Draft Meeting Minutes Meeting Held via WebEx

Members Attendance

Derek Baas, Sherburne County

Jeff Bjorklund, MSP Airport

Cory DeMuth, Anoka County

Ron Jansen, Dakota County

Chad LeVasseur, Metro Transit

Curt Meyer, Hennepin County

Mike Mihelich, Ramsey County - **absent**

Rod Olson, City of Minneapolis

Peter Sauter, Carver County

Nick Schatz, Scott County

Bob Shogren, Isanti County

Chuck Steier, U of M PD

Jake Thompson, Chisago County

Nate Timm, Washington County

Victoria Vadnais, Allina EMS

Mark VandenBerghe, MN State Fire Chiefs - **absent**

Guests: John Anderson, *MnDOT*; Fred Cummings, *Carver County*; Scott Haa,; *Scott County (alternate)*; Janelle Harris, *Edina ECC*; Frank Jarman, *Motorola*; Andrew LaVenture, *Edina Fire*; Clay Stenbeck, *Metro Transit*; Dave Theis, *On Target Training*; Aaron White, *Edina Fire*

MESB Staff: Tracey Fredrick, Jill Rohret, Martha Ziese

1. Call to Order

Jake Thompson, Radio TOC Chair called the meeting to order at 1:00 p.m.

2. Approval of Agenda

Jeff Bjorklund moved to approve the agenda for the May 26, 2021 meeting. Peter Sauter seconded. Motion carried.

Approval of Agenda

Name	Entity	Yes	No
Baas	Sherburne	X	
Bjorklund	Airport	X	
DeMuth	Anoka	X	
Jansen	Dakota	X	
LeVasseur	Metro Transit	X	
Meyer	Hennepin	X	
Olson	Minneapolis	X	
Sauter	Carver	X	
Schatz	Scott	X	
Shogren	Isanti		
Steier	U of M	X	
Thompson	Chisago	X	
Timm	Washington	X	
Vadnais	Allina EMS	X	

Total Votes: 13 Yes 0 No Motion passes

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3. Approval of Minutes

Nick Schatz moved to approve the minutes from the April 28, 2021 meeting.

Curt Meyer seconded. Motion carried.

Approval of Minutes

Name	Entity	Yes	No
Baas	Sherburne	X	
Bjorklund	Airport	X	
DeMuth	Anoka	X	
Jansen	Dakota	X	
LeVasseur	Metro Transit	X	
Meyer	Hennepin	X	
Olson	Minneapolis	X	
Sauter	Carver	X	
Schatz	Scott	X	
Shogren	Isanti		
Steier	U of M	X	
Thompson	Chisago	X	
Timm	Washington	X	
Vadnais	Allina EMS	X	

Total Votes: 13 Yes 0 No Motion passes

Action Items

4A. COMU Recognitions/Renewal

i. Craig Brekke COML Renewal

Jeff Bjorklund moved to approve the COMU renewal for Craig Brekke. Curt Meyer seconded. Motion carried.

Approval of 4A.

Name	Entity	Yes	No
Baas	Sherburne	X	
Bjorklund	Airport	X	
DeMuth	Anoka	X	
Jansen	Dakota	X	
LeVasseur	Metro Transit	X	
Meyer	Hennepin	X	
Olson	Minneapolis	X	
Sauter	Carver	X	
Schatz	Scott	X	
Shogren	Isanti		
Steier	U of M	X	
Thompson	Chisago	X	
Timm	Washington	X	
Vadnais	Allina EMS	X	

Total Votes: 13 Yes 0 No Motion passes

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B. Hennepin EMS Addition of MCC7500e

Dave Theis said currently, the U of M has an ARMER approved firewall. The U of M has two MCC 7500e consoles that are used for football games and remote deployment. The capability exists at the U of M to host an additional eight MCC 7500e consoles that can be connected from the internet through a secure VPN connection set up through the U of M's IT network. Last year, there was a push by some counties to get MCC7500e consoles online per a CARES Act deadline. The U of M has agreed to host a number of entities; Hennepin EMS being one. Equipment was purchased from Motorola. Two laptops had the software installed and approval is sought by the Radio TOC to have these laptops continue to function.

Thompson asked if there were any other agencies that will access that network, that could interfere with the collaboration project with Scott County.

Theis said that Hennepin EMS could move back to the collaboration site at any time. There is not an issue to be on the U of M network.

Theis said the Airport is currently accessing the U of M's network with their 7500e's. The Airport recently purchased a firewall and will eventually move back to their own network. Anoka County is also currently connected to the U of M network as well.

Rod Olson asked who supplies the Radio ID number assigned to each laptop. Theis said the IDs came from the pool as assigned by MnDOT to each agency.

Ron Jansen asked if there needed to be a plan change or discussion for entities that do have these in play.

Theis said he would require LMR approval to introduce a firewall into the ARMER system.

Jake Thompson asked if there should be an update to participation plans, even if temporary, to maintain the integrity of the system.

Motion made by Ron Jansen to approve the Hennepin EMS Addition of a MCC7500e and to also add this item as a discussion item on the next agenda. Vikki Vadnais seconded. Motion carried.

Approval of 4B.

Name	Entity	Yes	No
Baas	Sherburne	X	
Bjorklund	Airport	X	
DeMuth	Anoka	X	
Jansen	Dakota	X	
LeVasseur	Metro Transit	X	
Meyer	Hennepin	X	
Olson	Minneapolis	X	
Sauter	Carver	X	
Schatz	Scott	X	
Shogren	Isanti	X	
Steier	U of M	X	
Thompson	Chisago	X	
Timm	Washington	X	
Vadnais	Allina EMS	X	

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Total Votes: 14 Yes 0 No Motion passes

C. New Metro Standard for Event and Exercise Planning

Fredrick said the new metro standard was developed to establish procedures and protocols for non-emergent events. Much of the content is similar to the state standard of the same name, but there is some metro specific information included in this new standard. The Radio TOC work group and the 9-1-1 TOC have reviewed this new standard and has recommended approval of this standard.

Motion made by Nick Schatz to approve the new Metro Standard for Event and Exercise Planning. Curt Meyer seconded. Motion carried.

Approval of 4C.

Baas	Sherburne	X	
Bjorklund	Airport	X	
DeMuth	Anoka	X	
Jansen	Dakota	X	
LeVasseur	Metro Transit	X	
Meyer	Hennepin	X	
Olson	Minneapolis	X	
Sauter	Carver	X	
Schatz	Scott	X	
Shogren	Isanti	X	
Steier	U of M	X	
Thompson	Chisago	X	
Timm	Washington	X	
Vadnais	Allina EMS	X	

Total Votes: 14 Yes 0 No Motion passes

4D. Radio Items for Regional Strategic Plan

Fredrick said these items are a result of the discussions for the Regional Strategic Plan. The work group went over the items that were discussed earlier in the spring. The work group came up with six items specific to Radio.

Fredrick said, in no specific order, items included:

AES Encryption, ARMER Cybersecurity, options for TDMA, keeping the ARMER system current, IV&D addition to the Regional ARMER network, and exploration of the Regional/Statewide KMF.

Nick Schatz asked if they were in priority order.

Fredrick said they were just written down as they came up in discussion.

Schatz asked if IV&D and KMF should take priority over AES Encryption for a natural progression.

Meyer said that this is all funding-dependent.

Ron Jansen asked if these priorities are going to be renumbered. Keeping the ARMER system current is important to the safety of the network and should be priority one over

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everything else.

Schatz asked if there is a plan if encryption is compromised, and would a KMF assist in that if compromised.

Jansen said this was addressed in the workgroup, but after the plan is set, there will be additional work to complete all of the steps and items included in the plan.

Motion made by Nick Schatz to form a work group to answer priority questions. Rod Olson seconded. Motion carried.

Fredrick said she will get that in front of the MESB in July.

Jansen, Olson, and Thompson volunteered to sit on that work group.

Approval 4D.

Baas	Sherburne	X	
Bjorklund	Airport	X	
DeMuth	Anoka	X	
Jansen	Dakota	X	
LeVasseur	Metro Transit	X	
Meyer	Hennepin	X	
Olson	Minneapolis	X	
Sauter	Carver	X	
Schatz	Scott	X	
Shogren	Isanti	X	
Steier	U of M	X	
Thompson	Chisago	X	
Timm	Washington	X	
Vadnais	Allina EMS	X	

Total Votes: 14 Yes 0 No Motion passes

5. Moves, Additions & Changes to the System

Nate Timm said Washington County has substantially completed their microwave upgrade.

John Anderson said they have been doing design work in the background for the Ethernet back-call. With the upgrade, software releases created loss of disk space.

Rod Olson said Minneapolis is looking into building a back-up 9-1-1 center.

6. Committee Reports

A. Metro Mobility System Usage Update – no update

B. System Owners Group Update – no update

C. MnDOT ARMER System Update – no update

D. SECB Committees

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i. Steering

Jill Rohret said the SECB Steering Committee met in April and May. Discussion continued on the State-wide Strategic Planning regarding the initiative; what the committee make-up will be and how often it will meet. The SECB Steering Committee will be sending a recommendation for the process to the SECB for tomorrow's agenda.

ii. LMR – no update

iii. WBBA

Rod Olson said the WBBA met on May 18th. There was an overview of the FirstNet coverage. Steve Tate gave his presentation for strategic planning. They are looking for two or three representatives from the SECB Committee and one representative from each SECB member seat. Meetings will be on Monday June 7, 21, 28th.

iv. IOC & Workgroups

a. IOC – no meeting

Jake Thompson said at the meeting on May 18th, there was a COML/COMT renewal approval for Dave Pike. There was a vote on standards, and discussion on strategic planning.

b. STR Workgroup – no meeting

c. COMU Workgroup – no update

Ron Jansen said Dan Anderson is resigning from chairing the work group.

v. IPAWS

Scott Haas said the Wireless Emergency Alert and lessons learned were discussed.

vi. Finance/Grants Workgroup

Fredrick said there was discussion regarding the future funding for ARMER and wireless broadband. A work group has been formed to consider options for long-term funding. The SECB and TCPR grants are coming to an end in June.

7. Other Business

A. METAC Permission

Fredrick stated there were no new requests for METACs in the last month.

Ron Jansen asked if the temporary permissions for the encrypted talk groups or others have been removed

Fredrick that all are aware if there have been temporary permissions granted because of the trial, that they should have had them taken back out at this point. Permanent permission requests would need to come before the Radio TOC.

Vikki Vadnais said Allina EMS still has permissions for the METAC 12E on one of the consoles, and asked if there still thoughts that there will be more civil unrest where those permissions will be needed.

Fredrick said there is potential to more civil unrest. Vadnais said she will write up a formal request and submit to Fredrick for Allina EMS to keep their permissions.

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Scot Haas asked if the process for change management had started.

Fredrick said it is not moving at the state level but will re-iterate there is a desire for this to move forward.

Jansen said if you look at the state standard, the metro is way off from following that standard.

Haas asked if the state has not moved on this item, could the Radio TOC consider moving it forward at a regional level.

Jansen asked if we are looking to form or a work group or just discussion A simple language change might be all that is needed.

Fredrick said this item will remain on the Radio TOC agenda.

B. Discussion of Future of Encryption

Timm said more encryption and encryption options are needed in the metro. The metro has fallen behind the other regions in programming radios. More encrypted state TACs are needed.

Jansen agreed. There will be a need to get rid of some talk groups to put anything on the consoles. It is a long way off to get fire departments on encrypted radios. AES and DES encryption patching needs to be discussed.

Timm said they too came up against the constraints of light model. Dakota, Hennepin, Minneapolis are close to full capacity. Motorola did something so WACO is not.

Timm said this might be a broader LMR discussion.

Curt Meyer said if it goes to LMR, the LE community should be involved in this discussion.

Thompson suggested this is on the agenda for next month.

Fredrick has this topic and change management on next month's agenda.

C. 2021 Meetings

Rohret said all meetings will be hybrid July on.

8. Adjournment 2:15 PM



EMERGENCY MEDICAL SERVICES

To: Metro TOC, Chair Jake Thompson

CC: Tracey Fredrick

From: Victoria Vadnais, Allina Health Emergency Medical Services

Date: June 14, 2021

Allina Health Emergency Medical Services (AHEMS) is requesting a waiver to Metro Region ARMER Standard 3.14.0 Use of Metro ARMER ME TACS.

AHEMS was given a temporary waiver to include ME TAC12E into our MCC7500 consoles and dispatch portable radios. This was in response to event planning that needed encrypted interoperability between law and medical dispatch. We seek permission to permanently keep ME TAC12E in our MCC7500 consoles and one portable radio for backup situations. Approval of this waiver would ensure AHEMS' ability to have full interoperability with our law enforcement counterparts should the need arise.

Thank you for your consideration.

Victoria Vadnais

Priority #3: Continue to Invest In, Upgrade, and Expand the ARMER System

The ARMER system is the primary emergency responder communication tool throughout the ten-county metro area. A consistent, predictable maintenance and enhancement plan must be established that includes adequate funding. ARMER expansion capabilities should include a focus on cybersecurity, encryption capabilities, and making plans for IV&D (Integrated Voice and Data) and KMF (Key Management Facility) –IV&D adds P25 data to the ARMER system allowing data features such as GPS location, Over the Air Rekeying (OTAR), and Over the Air Programming (OTAP), KMF is a server that manages and deploys encryption keys for subscriber units. The system may need to transition to support P25 Phase 2 Time-Division Multiple Access (TDMA)-based voice and data traffic to increase system capacity as well as Long-Term Evolution (LTE) push-to-talk capabilities if ARMER system loading increases, and additional frequencies are not available for further channel expansion. The metro area should also agree to make considerations to standardize on Advanced Encryption Standard (AES). This would allow system owners and users to plan accordingly to have the equipment necessary in place.

Planning Activities

The use of AES-based encryption should be discussed, and plans developed. Interoperability between LTE push-to-talk equipment on ARMER must be defined and any limitations LTE users may experience must be clearly understood. The transition to ARMER P25 Phase 2 TDMA voice and data traffic will require coordination with the system owners and users to ensure backward compatibility while allowing new equipment onto the system. During the time frame of the strategic plan, researching options for IV&D, KMF, and TDMA would need to take precedence, so that the following strategic planning frame could build on that research.

Organizational Activities

The FCC inquiry and possible rule-making that would prohibit 9-1-1 fee diversion for narrowly defined non-9-1-1 uses may negatively impact the ARMER system funding. Currently, MN statutes allocate 9-1-1 surcharge fees to be used to support the ARMER system. If the use of 9-1-1 fees for the ARMER system is prohibited by federal action, a new ARMER system funding stream will be needed.

Equipment Activities

Procure and implement the system software and hardware upgrades necessary to support AES Encryption, IV&D, KMF, and/or P25 Phase 2TDMA capabilities based on the plan described under the Planning Activities section above.

Training Activities

ARMER system user training will be required as new capabilities and features are introduced. Regular in-service training for all system users should be done on an annual basis but may need to be done more frequently depending on the operational changes associated with any specific upgrade or enhancement.

Exercise Activities

At least one large scale, multi-agency training exercise should be conducted annually that includes the use of Communications Unit Leader (COML) and Metro Region Communications Response Task Force (CRTF) resources.

**Metro Mobility Usage
(Hours:Mins:Secs)
2021**

Month	City Center	Anoka (Lino Lakes)	Dakota	Norwood	Hastings	North Branch	Hennepin West	Overall
January	63:54:47	31:25:26	21:23:55	11:11:37	32:59:25		21:56:38	182:51:48
February	57:56:13	24:20:30	18:36:36	10:21:59	31:51:11		16:53:24	159:59:53
March	53:34:46	27:26:49	26:20:11	9:52:27	35:08:45		16:49:47	169:12:45
April	55:00:15	30:54:14	24:06:32	9:09:14	40:40:15		16:44:56	176:35:26
May	61:13:57	34:33:12	27:57:47	10:11:48	43:15:14		8:07:13	185:19:11
June								
July								
August								
September								
October								
November								
December								

Difference
since Jan. 12 656:57:50 385:58:45 298:06:15 222:53:22 265:34:15 0:26:46 152:56:51 1982:54:04

Target 150:00:00 75:00:00 75:00:00 75:00:00 75:00:00 0:00:00 75:00:00 525:00:00