



METROPOLITAN EMERGENCY SERVICES BOARD RADIO TECHNICAL OPERATIONS COMMITTEE AGENDA

February 26, 2025, 1:00 p.m.

This meeting will be conducted in-person at the MESB Office, 2099 University Ave W, St Paul ONLY

1. **Call to Order** – Committee Chair, Jake Thompson
2. **Approval of Agenda** – Thompson
3. **Approval of Minutes of January 22, 2025 Meeting** – Thompson
4. **Action Items**
 - A. University of Minnesota ARMER Plan Amendment – Dave Theis
 - B. Metro ARMER Standard 3.14.0 Update – Tracey Fredrick
5. **Moves, Additions & Changes to the System**
6. **Committee Reports**
 - A. System Managers Group/Metro Administrators – Ron Jansen
 - B. MnDOT ARMER System Update – John Anderson/Nick Schatz/Shane Chatleain
 - C. SECB Committees
 - i. Steering – Fredrick/Jill Rohret
 - ii. LMR – Nate Timm/Mike Mihelich
 - iii. WBBA – Rod Olson/Cory DeMuth
 - iv. IOC/COMU-STR Workgroup – Timm/Jansen/Thompson/Dan Anderson
 - v. IPAWS – Scott Haas
 - vi. Finance/Grants Workgroup – Fredrick/Rohret
7. **Other Business**
 - A. METAC Permission update – Fredrick
 - B. School Mapping Information – Rohret
8. **Adjourn**

Reminder: Next meeting scheduled for March 26, 2025. Please note that the March meeting will be held at Dakota County Highway Department, 2800 160th St W, Rosemount.

Metropolitan Emergency Services Board

Radio Technical Operations Committee

January 22, 2025
Draft Meeting Minutes

Members

Airport – Jeff Bjorklund

Anoka County – Cory DeMuth

Carver County – Pete Sauter

Chisago County – Mike Parker

Dakota County – Ron Jansen

Hennepin County – Jake Thompson

Isanti County – **absent**

Metro Region EMS – **absent**

Metro Transit – Chad LeVasseur

Minneapolis – Rod Olson

Minnesota Fire Chiefs – Patrick Maynard

Ramsey County – Mike Mihelich

Scott County – Scott Haas

Sherburne County – **absent**

Washington County – Nate Timm

U of M – Jeff Lessard

Guests: Leticia Cardenas, *Minneapolis*; Elias Charif, *M Health*; Greg Ehrsam, *Motorola*; Ted Hutson, *Motorola*; Frank Jarman, *Motorola*; Andrew LaVenture, *Edina*; Kris Massie, *Hennepin*; Nick Schatz, *MnDOT*; and Dave Theis, *University of Minnesota*.

MESB Staff: Tracey Fredrick; Jacob Kallenbach; and Jill Rohret.

1. Call to Order

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

2. Approval of Agenda

Motion made by Ron Jansen, seconded by Cory DeMuth to approve the January 2025 Radio TOC meeting agenda. Motion carried.

3. Approval of Minutes of October 23, 2024 Meeting

Motion made by Mike Mihelich, seconded by Jeff Bjorklund to approve the October 2024 Radio TOC meeting minutes. Motion carried.

4. Action Items

A. COMU Recognitions and Renewals

i. Tianna May COML Recognition

May currently works at the Ramsey County Emergency Communications Center. She is seeking initial recognition as a COML. She has satisfactorily completed the position task book and has agency support. May has also expressed interest in being part of the CRTF.

Motion made by Nate Timm, seconded by Scott Haas to approve the COML recognition of Tianna May. Motion carried.

ii. Deanna Douglas COML Renewal

Douglas currently works at the Minneapolis 911 Emergency Center. She is receiving renewal points for authoring ICS205s and acting as a COML for several events. Douglas continues to have agency support to continue in the role of COML.

iii. Dan Anderson COML Renewal

Anderson currently works at Hennepin County Emergency Management. He is receiving renewal points for being a presenter at training and participating in communications exercises. Anderson has agency support to continue in the COML role.

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iv. Nate Timm COML/COMT/AUXC Renewal

Timm currently works at the Washington County Sheriff's Office. He is receiving renewal points for being an evaluator during exercises, authoring ICS205s, participating during training, and leading training and creating materials. Timm has agency support to continue in all three roles.

v. Ron Jansen COML/COMT Renewal

Jansen currently works for Dakota County. He is receiving renewal points for authoring ICS205s, participating in and leading training. Jansen has continued support from his agency to be in the COML and COMT roles.

Motion made by DeMuth, seconded by Rod Olson to approve the renewals of Deanna Douglas, Dan Anderson, Nate Timm, and Ron Jansen. Motion carried.

B. Encrypted METAC Addition

Fredrick states that the encrypted ME TAC allows for two additional encrypted regional talkgroups. She states that the group can decide to create two new channels (13E and 14E) or decide if two current channels should be replaced (9E and 10E). These talkgroups will be designated and available to all Metro Public Safety Disciplines to alleviate some of the congestion on the two current regional encrypted talkgroups and will allow the newer-created LSEC talkgroups to remain for Law Enforcement only.

Olson states that he recommends adding two new talkgroups, rather than change any current talkgroups. Also want to ask if these will be DES-OFB or AES. Recommend that these be created as DES-OFB with current keys.

The Radio TOC agree with the recommendation from Olson.

Rohret asked if the standard should also be updated and requested that the standard and addition be brought in front of the Board at the same time.

Motion made by Haas, seconded by Jansen to add two new talkgroups to the encrypted ME TAC. Motion carried.

C. Washington County Backhaul

Timm states that Washington County is seeking approval from the TOC to use MnDOT ethernet backhaul for paging transmitter connections. Washington County plans to transition the GTR stations from the channel bank network to ethernet in 2025. The existing T1 circuits will be abandoned after the transition.

Jansen asks if MnDOT has approved. Timm responds by stating MnDOT has given their approval.

Motion made by Jansen, seconded by Haas to approve the Washington County Backhaul plan amendment. Motion carried.

D. March 2025 Radio TOC Meeting Date

Fredrick states that due to scheduling conflicts the Radio TOC does not have access to its usual meeting space for the March 2025 meeting. The TOC could decide to move the location, move the date, or cancel the meeting.

Haas asked how people responded to the March 25, 2025 date. Fredrick states that she did not hear many responses overall; there were some conflicts with that date.

Jansen states that the Radio TOC could use Room 137 at the Dakota County facility for the

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March meeting.

Motion made by Haas, seconded by DeMuth to move the March 2025 Radio TOC meeting to the Dakota County Highway Department barring any unforeseen challenges. Motion carried.

E. Dakota County Logging Plan Amendment

Jansen states that the Dakota County logging plan amendment plan proposes to interface the Revco logging equipment to the existing Motorola AIS and ultimately retire the DSS logger. Revco equipment will be installed on-premises at the Dakota 911 PSAP facility located in Rosemount.

Motion made by Haas, seconded by Timm to approve the Dakota County logging plan amendment. Motion carried.

5. Moves, Additions, & Changes to the System

This states that the University of Minnesota has a few changes going on that will impact Metro and Statewide users. The number of remote MCC7500 connections is increasing; currently 15 out of 20 approved are being utilized. Additional sites will be added to the new site, which has an additional 20 connections available. A repeater site is being added to the Duluth site, which will be completed in February or March. There are current plans to add a 10-channel site at the main campus for in-building coverage, which will be brought to the TOC at a future meeting.

6. Committee Reports

A. Metro Mobility Usage Update

There is no new update. Jansen asked if the group which had presented making changes to the TOC last year is making progress, as the TOC has not received any new updates on the project. LeVasseur said he has not checked in with that group in a while, but they have been given the information they need.

B. System Managers Group/Metro Administrators

Meeting for this month was canceled.

C. MnDOT ARMER System Update

Motorola system audits will begin in February to prepare for the 2024.1 upgrade which will begin in September 2025. Working on projects to address several MTNs from Motorola. Discussions on SMG meetings for 2025; Water's Edge will be undergoing updates, so will not be available for meetings. Over the summer, SMG meetings will likely be held at Arden Hills. Unsure yet if the ROC will need to be vacated during this time. MnDOT continues discussions with Motorola over the SUA, with likely communications to stakeholders in the next month.

D. SECB Committees

i. Steering

The committee met in November and December. They continued work on the SECB Policy and Procedure manual. The group is continuing to consider planning for the upcoming SCIP and what goals and objectives to include in that. The committee did not meet in January and is scheduled to meet again in February.

ii. LMR

The group met in January. It approved U.S. Customs and Border Protection request for additional radio IDs, changes to standard IOP-11 and Vice Chair nominations were discussed alongside SUA contract pricing, and the creation of a committee for DAS and BDA requirements on a statewide level.

iii. WBBA

There is no new update. Rohret states that the SECB Executive Committee has been

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discussing the future of the WBBA Committee, as it does not currently have a chair and fails to meet quorum frequently. It is possible that the committee may dissolve into a subcommittee under the Interoperability Committee.

iv. IOC/COMU-STR Workgroup

The group took action on Vice Chair nominations and Bloomington IOP-11 and IOP-34 waivers were approved alongside COML recognitions and other standard discussions. Discussion also occurred surrounding SCIP and current vacancies.

v. IPAWS

There is no new update.

vi. Finance/Grants Workgroup

Both groups met in November, December, and January. Financial standards continue to be a popular topic, with revisions to grant management being discussed. DPS has adopted a new grants platform; all new grants will be used through the new platform, IGX. Both groups will meet again in February.

7. Other Business

A. METAC Permission Update

There are no new requests.

B. Motorola Update

Frank Jarman of Motorola stated that Greg Ehram will be the new Motorola contact for a few of the metro counties (Washington, Carver, and Scott Counties) due to a realignment of duties.

8. Adjourn

The meeting was adjourned at 1:38 p.m.

University of Minnesota – Twin Cities

Department of Public Safety



ARMER Participation Plan

Amendment 5, Version 1.0

February 11, 2025

SECTION 1. OVERVIEW

The University of Minnesota – Twin Cities Department of Public Safety Police Department takes calls on-campus as well as off-campus where they augment City of Minneapolis Police and assist Minneapolis Fire where and when needed.

Both our portable and mobile radios are programmed to use the Minneapolis simulcast site (zone-1, site-9) for their primary coverage area. Over time, we've found that locations in many buildings on campus do not have sufficient RF coverage to make and receive radio calls. Portable radios frequently go Out-of-Range when in lower levels of campus buildings, due in parts to distance from the closest simulcast subsite, shadowing of the subsites from the hi-rise buildings, and construction/materials of the buildings. Consequently, when we service calls in many of the buildings, our ARMER radios can be unusable.

SECTION 2. SCOPE OF PLAN AMENDMENT

The purpose of the Plan Amendment is to request the addition of a Local Enhancement Site to be built on the Minneapolis campus to provide better in-building coverage. Rather than add a subsite to one of the simulcast sites that cover the Twin Cities metro area, we have purchased a standalone ASTRO Site Repeater (ASR) that is configured for 10 channels. Frequencies in the 800 MHZ Public Safety band have been identified by APCO and are in the process of formal FCC licensing to the University by the ARMER APCO Coordinator.

SECTION 3. EQUIPMENT AND CONNECTIVITY

The RF site will be a standalone Motorola Astro Site Repeater (ASR). Equipment will be ordered from Motorola and will be similar to the majority of other ASRs located within the state.

The site will be connected to the Zone-1 Master Site in Waters Edge by way of dedicated University fiber and OEC microwave. Juniper routers will be used to carry the network traffic. Refer to Figure-1 for connectivity.

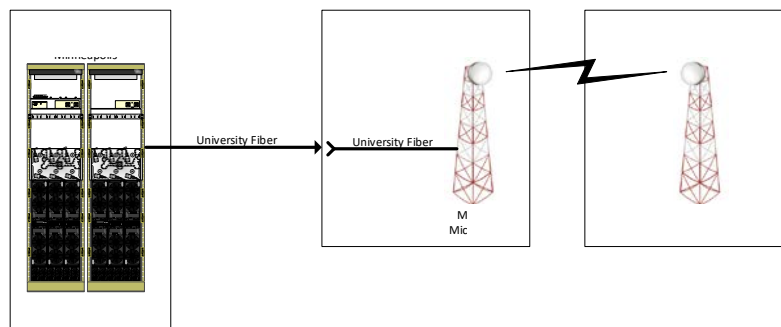


Figure-1. Network Connectivity

SECTION 4. SITE LOCATION & ACCESS

The ASR equipment will be located on the top floor of Malcom Moos Tower, 515 Delaware St SE, on the University of Minnesota-Twin Cities campus. The room will be secured with key-card access to prevent unauthorized people from entering the room. Refer to Figure-2.

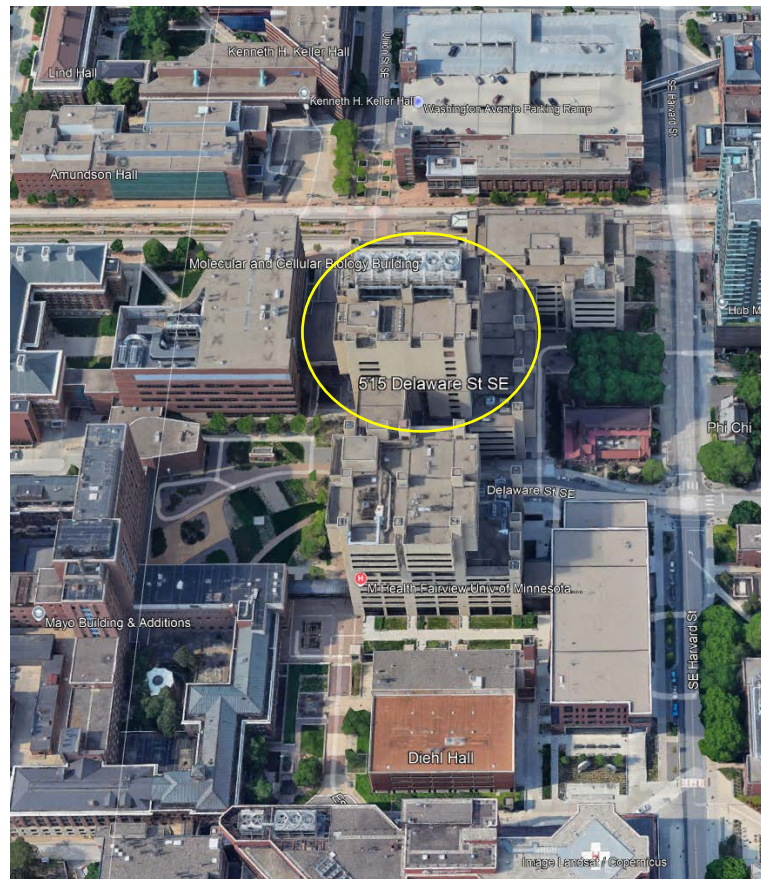


Figure-2. Site Location

SECTION 5. COVERAGE MAPS

The primary purpose of this site addition is to provide fill-in building coverage to augment the coverage from the City of Minneapolis Simulcast site. The design of this local enhancement site is to emphasize fill-in coverage rather than coverage to the horizon. The coverage design specification was an approximate 1-mile radius out from 515 Delaware St SE. To achieve this goal, an omni-directional, 3 dB gain, electrical down-tilt, null-fill antenna will be used for both the transmit and receive antennas. Antennas with low gain such as the one we plan to use are typically used where fill-in is desired vs. a high gain antenna where distance is the goal.



Figure-3. Coverage Area Map

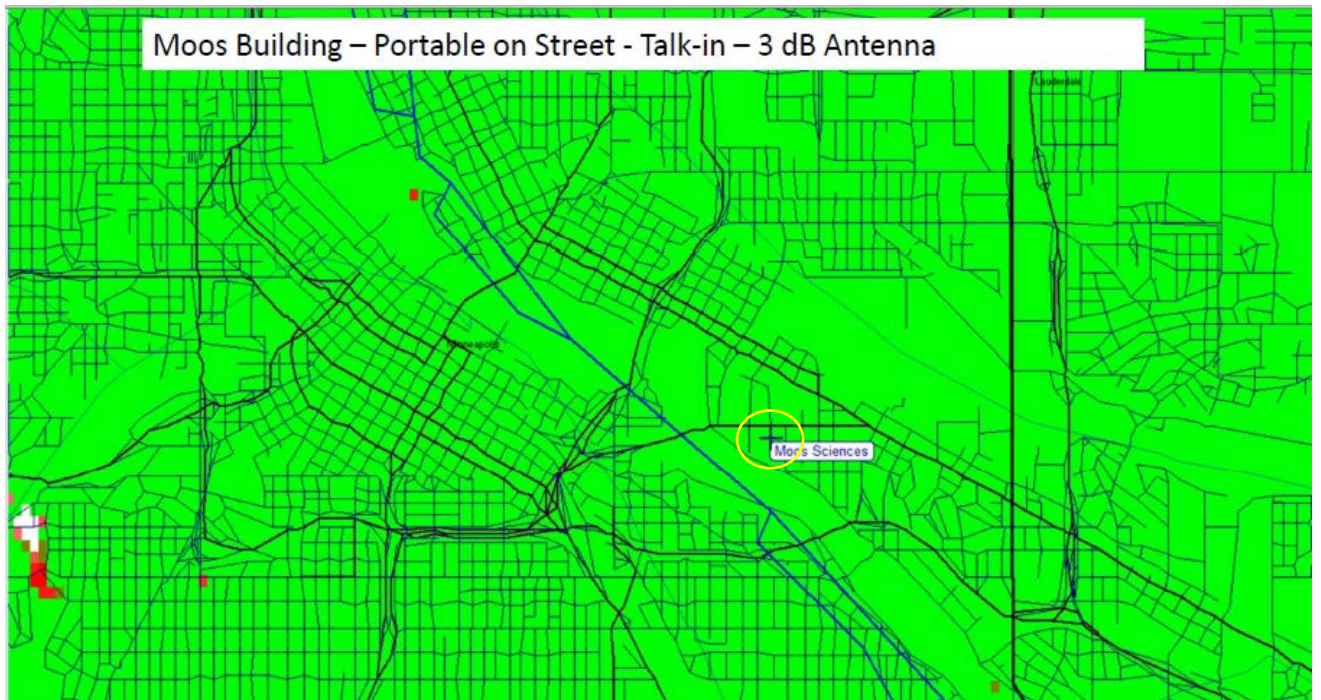


Figure-4. Portable Talk-In. On Street. 1-Mile Radius

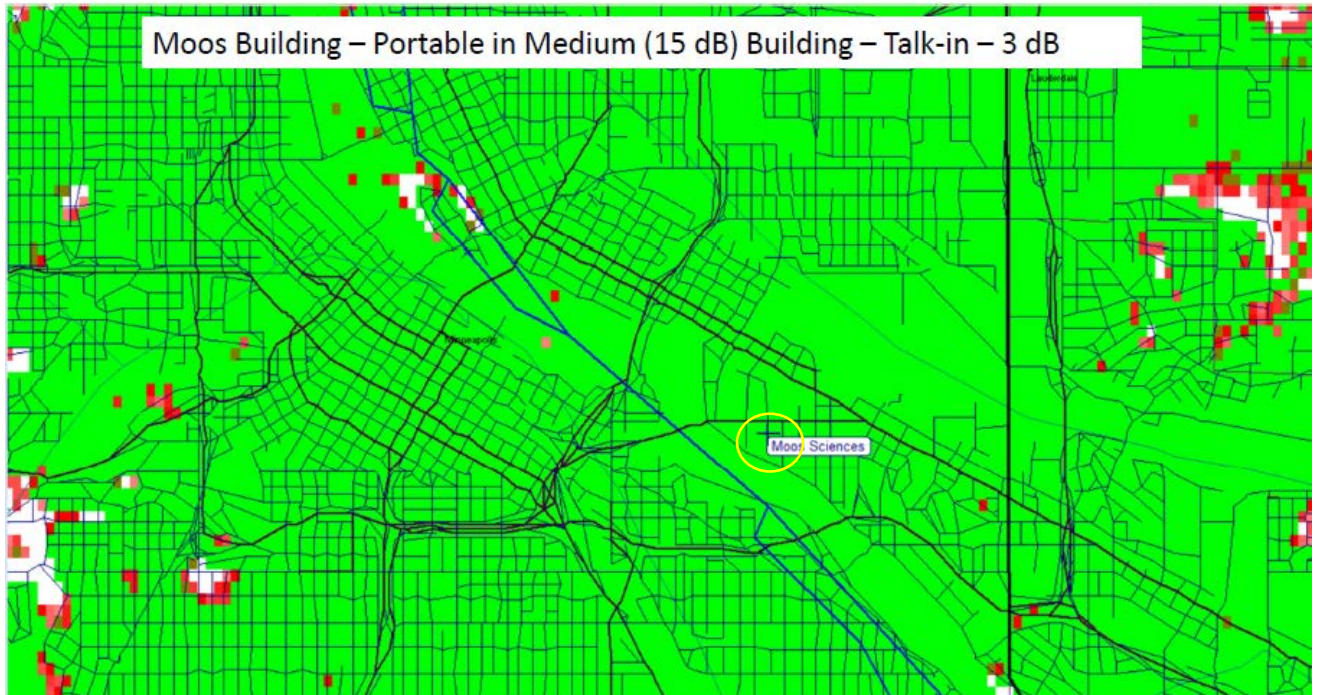


Figure-5. Portable Talk-In. In-Building. 1-Mile Radius

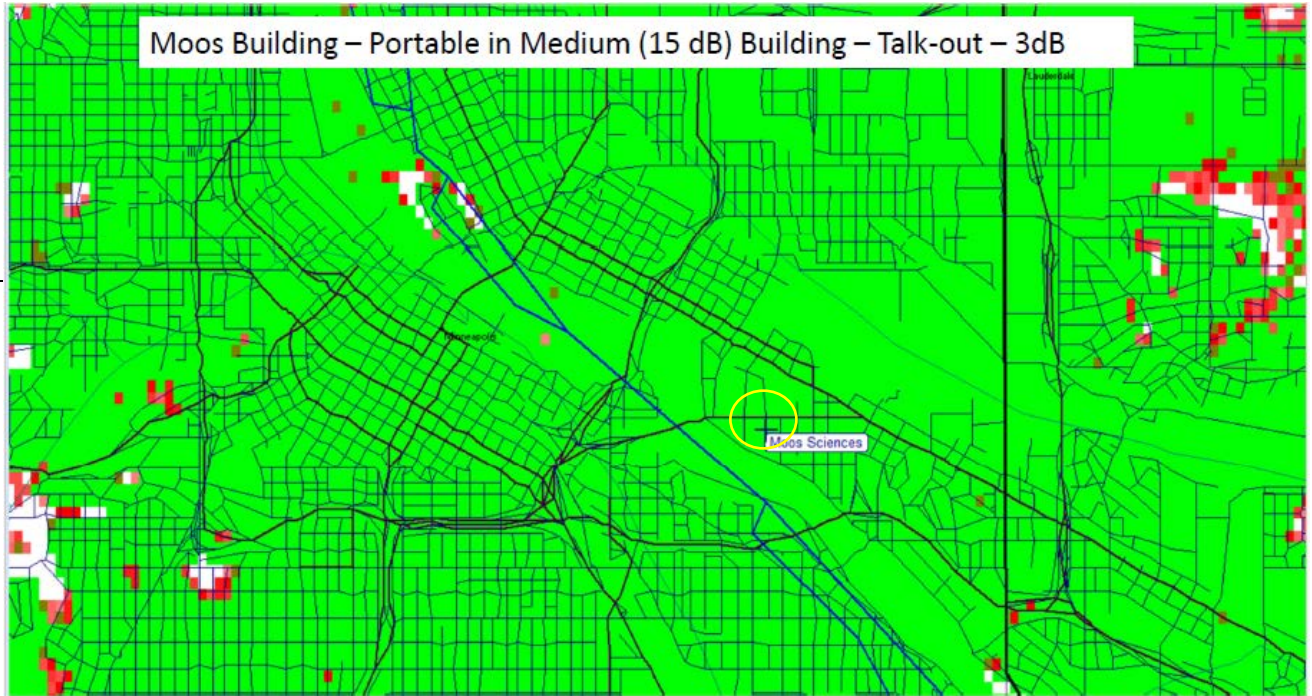


Figure-6. Portable Talk-out. In Building. 1-Mile Radius

SECTION 6. PRIMARY CONTACTS

The primary points of contact for this project and plan are:

Jeff Lessard

Director of Emergency Communications
University of Minnesota
Department of Public Safety
505 Washington Ave SE
Minneapolis, MN
Phone: 612.202.1528

Dave Theis

System Administrator
University of Minnesota
Department of Public Safety
505 Washington Ave SE
Minneapolis, MN
Phone: 320.423.8728

SECTION 7. TALKGROUP SITE ACCESS & SITE BUSY

University of Minnesota Police officers scan Minneapolis PD talkgroups since they get dispatched for calls off-campus. We propose to add the UM Minneapolis site to the TG/MG Site Access Profile currently used by all Minneapolis Police and fire talkgroups. We also propose that any talkgroups that use this site ***be set to “Fast Start”*** to avoid any potential site busy conditions that may occur when talkgroups are set to “All Start” and the site has no voice repeaters to assign.

SECTION 8. ARMER RADIO TRAFFIC USAGE

An ARMER plan typically includes a review of the amount of traffic expected to be added to the radio system from the mobile and portable radios. In this plan, any radios that are currently allowed to use any of the Metro Simulcast Sites can deaffiliate from those sites and will roam to the new UM Minneapolis site. Therefore, there will be no additional traffic loading on the system.

SECTION 9. SITE MAINTENANCE

The University of Minnesota plans to manage operations, alarms, and events for this site. Should the site require any maintenance, we plan to use Ancom Communications as the primary service entity.

1800 Cliff Rd E # 17
Burnsville, MN 55337
(952) 808-0033

Ancom will provide system-level service. A select quantity of Ancom technicians have been trained and certified as Level 2 Radio System Administrators per ARMER standard LMR-28 (System Administrators Definition and Minimum Training Requirements).

SECTION 10. CHANGE MANAGEMENT

The University of Minnesota will follow established procedures to seek approval of all relevant Committees and Boards prior to making any changes to the provisions outlined in this plan request.

Metro Region ARMER Standards

Section 3 – Metro 3.14.0 Use of Metro ARMER ME TACS

Date Established 1-6-01

Date Revised/Reviewed ~~3-1-24~~1/24/25

1. Purpose or Objective

To establish policy and procedures for use of the metro region ARMER ME TAC 1-10 and 11E - 142E talkgroups. These talkgroups are a region-wide resource to facilitate communications between agencies that typically do not communicate with each other on a regular basis. This policy will serve to minimize usage conflicts when an interoperability talkgroup is needed for an event.

2. Technical Background

- Capabilities

It is possible to have access to ME TAC talkgroups in radios used by metro agencies that share use of the ARMER system. These common talkgroups can be used for a wide range of intercommunication when coordination of activities between personnel of different agencies is needed on an event. Patching of the talkgroups can be done to any single non-hard patched conventional resource, other common talkgroups or to private talkgroups as needed to facilitate communications for an event.

- Constraints

Some of these talkgroups may be used as part of a soft patch to common VHF channels that are restricted for use by personnel of specific services, such as the VLAW31 VHF frequency that may only be used by law enforcement and EMS personnel. The emergency communications center/Public Safety Answering Point (PSAP) creating the patch is responsible for checking for proper talkgroup authorizations when creating soft patches.

Because many different agencies may be communicating with one another, for purposes of safety, plain English/common terminology must be used when communicating on these regional resources. **The use of ten codes is not permitted.** This pertains to direct or indirect (when in soft patch) use of these regional resources.

The availability and the use of these talkgroups should be easily understood by radio user personnel who are primarily concerned with their mission.

ME TACs are not to be used for an internal event. Private, other tactical, administrative, or common talkgroups are for internal agency communications. ME TACs should be used only when interoperability with external agencies is needed or is likely.

ME TAC's 1-10 shall not be encrypted.

ME TAC's 11E ~~and -142E-14E~~ are always encrypted.

Metro region-wide ARMER talkgroups may only be in one patch at a time.

3. Operational Context

These talkgroups are metro region resources to facilitate communication between agencies that typically do not communicate with each other on a regular basis.

ME TAC 1-10 are available for use by all regional users.

ME TAC 11E-142E are available to any regional public safety and public service user which has encryption-capable devices.

Agencies not included under the MESB joint powers agreement require written permission from the MESB for use of any ME TAC talkgroups.

4. Recommended Protocol/Standard ME TAC 1-10 Talkgroups

TG Requirements For Whom?

Highly Recommended	Metro public safety and public service mobiles, portables, PSAPs
Recommended	Metro public safety and public service mobiles, portables, PSAPs
Optional	None
Not Allowed	None

Cross Patch Standard	Yes/No	To Talkgroup(s)	Soft Patch
Optional	As needed	Hard Patch	No
			None

In order to meet the communication needs for an event, the ME TAC1-10 talkgroups may be patched to:

- Conventional RF resources, such as VHF, UHF, etc.
- Private agency talkgroups, such as PSAP mains, tactical talkgroups, etc.
- Direct patches between the ME TAC talkgroups, although this would not be preferred as a method of resolving communications needs.

ME TAC11E-142E Talkgroups

TG Requirements For Whom?

Highly Recommended	Metro region public safety and public service users with encryption-capable devices
Recommended	Public safety and public service users with encryption-capable devices and public service mobiles, portables, PSAPs
Optional	None
Not Allowed	Non-Metro users

Cross Patch Standard	Yes/No	To Talkgroup(s)	Soft Patch
Optional	As needed	Hard Patch	No
			None

ME TAC11E and- 142E talkgroups may only be patched to another talkgroup encrypted by ADP, DES, or AES encryption.

The Status Board application will be used to manage the talkgroup resources.

The ME TAC talkgroups shall only be used when there is a significant need for interagency communications and other suitable means for interagency

communications are unavailable, to avoid a reduction in availability of these resources when needed for important events.

None of the ME TAC talkgroups shall be part of any system-configured multi-group.

It is highly recommended that metro region ARMER system public safety dispatch consoles have all of the ME TAC talkgroups available for patching.

If an agency elects to not program a sufficient quantity of these tactical talkgroups, it is the individual agency's responsibility to understand that it will be limiting its ability to communicate with other agencies during an emergency event. The agency will be responsible to resolve its interagency communications methods during an event. [If a metro agency elects not to program all of the ME TAC talkgroups, that agency should submit a variance request to the Regional Radio Services Coordinator.](#)

If non-Metro region agencies desire use of these talkgroups, a waiver proposal should be sent to the Regional Radio Services Coordinator.

5. Recommended Procedure

The pool talkgroups may be either used directly or be patched to other resources to meet the communication needs of an event.

The usage of ME TAC 1-10 talkgroups for **EMERGENCY or IN PROGRESS** interoperability events should be ME TAC 1, 2, 3, 4, . . .10 in that order.

The usage of ME TACs for **PREPLANNED NON-EMERGENCY** interoperability events should be ME TAC 10, 9, 8, 7, . . .1 in that order. **ME TAC 1 will not be reserved for planned events.**

When formulating communications plans, COMLs should check with the agencies involved in interoperability events to see what shared resources are available.

When a resource is needed, the requesting agency will contact the appropriate metro region ARMER emergency communications center/PSAP to have the next preferred available talkgroup granted. The dispatch center will utilize the Status Board application to identify the status of the resource.

At the conclusion of the event, the ARMER dispatch center will remove any patches that were used for the event and update Status Board.

Resources that are patched to these talkgroups, such as VLAW31, VFIRE23, and VMED28 VHF radio frequencies shall continue to adhere to the rules set forth by the groups that govern the use of their respective conventional radio resources.

NOTE: Emergency Communications centers/PSAPs initiating any soft patches must announce the patch after it is set up AND prior to it being taken down.

6. Management

Metro Region emergency communications center/PSAP managers and supervisors for agencies on the ARMER system shall ensure that this procedure for usage and assignment of the ME TAC talkgroups be adhered to, as well as the setting up of soft patches for which they are responsible.

The Minnesota Status Board System Administrator shall be responsible for the Status Board application.

Emergency center telecommunicators shall receive initial and continuing training on the use of this procedure.

The Metropolitan Emergency Services Board will be responsible for the ME TAC E encryption key.

V. Reason for Request

(Attach supporting documentation)

Name of individual completing application:

Address:

Phone:

E-mail address:

This Page for Authorizing Agency Use Only

Metropolitan Emergency Services Board - ARMER_System
**AUTHORIZATION TO USE TALK GROUPS
NOT OWNED BY THE REQUESTING AGENCY**

Request Approved _____ Approved with Conditions _____ Denied _____

Conditions:

Authorized Signature: _____

Name of Authorizing Individual _____

Address _____

Phone _____

E-mail address _____

Metro Mobility Usage (Hours:Mins:Secs) 2025

Please Note: The report from Metro Mobility will be given at the beginning of the quarter beginning

Month	Anoka (Lino					North	Hennepin
	City Center	Lakes)	Dakota	Norwood	Hastings	Branch	West
January	17:24:38	11:09:01	4:58:51	5:09:57	6:40:23		10:00:51
February							
March							
April							
May							
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

Target	150:00:00	75:00:00	75:00:00	75:00:00	75:00:00	0:00:00	75:00:00
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g in 2023

Overall

55:23:41

1982:54:04

525:00:00