# METROPOLITAN EMERGENCY SERVICES BOARD

# RADIO TECHNICAL OPERATIONS COMMITTEE AGENDA

Board Room, Metro Counties Government Center December 16, 2015 1:00 - 3:00 p.m.

MEMBERS:

Ulie Seal, Chair MN Fire Chiefs Association

Ron Jansen, Vice Chair Dakota County

Jake Thompson Anoka County

Tim Walsh Carver County

Rod Olson City of Minneapolis

Jon Eckel Chisago County

John Gundersen Hennepin County

Bob Shogren Isanti County

Jeff Bjorklund Metropolitan Airports Commission

Chad LeVasseur Metropolitan Council

Clif Giese Metro Region EMS

Scott Williams Ramsey County

Adam Pirri Scott County

Chuck Steier U of M Police, at large member

Nate Timm Washington County

Open MN Chiefs of Police Association

- 1. Call to Order
- 2. Approval of November 18, 2015 Minutes
- 3. Agenda Items
  - a. Health Partners Medical Transport Participation Plan Steve Pott
  - b. Children's Hospital Participation Plan Pam Schultz
  - c. Change to Metro Standard 1.10.1 Requesting Participation Tretter
  - d. Change to Metro Appendix 2 Definitions & Acronyms Tretter
- 4. Moves, Additions & Changes to the System
  - a. Existing/Other Systems
  - b. Update on Removal of Voting from Interoperability System
- 5. Committee Reports
  - a. System Administrator Training Standard Workgroup Thompson
  - b. Metro Mobility System Usage Update—Chad LeVasseur
  - c. System Manager's Group/Metro Owner's Group Update Jansen
  - d. Reports from SECB Committees—Troy Tretter
- 6. Other Business
  - a. Regional Talkgroup Permissions Updates
  - b. Next Meeting January 27
- 7. Adjourn

Ulie Seal. Chair

# Metropolitan Emergency Services Board Radio Technical Operations Committee Meeting Notes November 18, 2015

**Members Present:** John Gundersen, Ron Jansen, Jake Thompson, Bob Shogren. Ulie Seal, Chris Kummer, Nate Timm, Peter Sauter, Susan Bowler, Jon Eckel, Clif Giese, Chuck Steier, Rod Olson

**Guests Present:** Jill Rohret, Troy Tretter; Metropolitan Emergency Services Board, Steve Potts, Dwayne Glenn; HealthPartners, Patty Dowling; DSC-Motorola, Rick Juth; ECN/RIC, Dana Rude; Metro Mobility

**Call to Order:** Ulie Seal called the meeting to order at 1:00 P.M.

Minutes of the October 28, 2015 Meeting and the agenda of the November 18, 2015 meeting. Troy asked that several changes be made to October 28, 2015 minutes before approval. Addition of Ulie Seal, Tim Walsh, John Sells, Tony Martin and Jeff Bjorklund as present. Change 3.C. on the current agenda: ARMER Workgroup presentation to Ron Jansen. Steve Pott from PSC Alliance stated he did not recall

saying in response to a question asked about who was sponsoring them 'possibly a North or Allina or Mayo type sponsor'.

M/S/C Kummer moved to approve the October 28, 2015 meeting minutes and November 18, 2015 agenda with above changes. Gundersen seconded. The motion carried.

# **Agenda Items**

#### Review of State Standard at 1.8.0 System Change Management-Tretter

OTC has reviewed and requested that the regions review and report back on this standard by December. Ron Jansen said that there was not enough time to review. Jill said that there are two change management standards and this one is for technical not operational changes. It should be taken into consideration that this is the standard that talks about major changes to the ARMER system and there never has been a review of this standard for major changes.

Ulie asked what was driving this process at the OTC to readdress the standard. John Gundersen stated there was a request from Central Minnesota for use of SOA3 for a repeater pair. He also stated that after the June 2014 deadline for removal of dual naming on the STAC's, the change management process has not started again after the last change management process.

Troy added that this request for review is a result of a request by central Minnesota. It was the consensus of the group that more time was needed but that they would attempt to get comments to Troy by Thanksgiving and Troy will send everyone group comments prior to the OTC on December 8.

#### Metro Transit SE Light Rail Channels Impact-No Report from LeVasseur

Troy Tretter & Johns Gundersen told members that Curt Myer did a report on the impact of the Hennepin sub sub-system. He found there was no significant impact if they were to use the system as they are using it now.

#### ARMER Eligibility Workgroup - Jansen

The workgroup is asking the group to review and approve provided definitions. Ron noted that the workgroup put significant time and energy into the findings. Troy added that 1.10.1 standard would be revised to adopt these definitions and then would be presented for approval at the December meeting. It would be on the MESB Executive agenda as an informational item. Once changes are made then it would go to the MESB for approval.

Chair allowed Steve Pott the floor.

Steve Pott commented that he did not know EMS was under scrutiny that it is and that this request would be so controversial. He called attention to the previous month's minutes. It was stated that he had made a comparison that HealthPartners might be similar to a North, Allina or Mayo type sponsor. He does not know what that means and did not to mean to imply that there was any connection with any of those organizations.

He said there seemed to be three things that were questioned specifically related to the technical aspects of the plan. One was system administration. HP would likely team up with a vendor –radio shop that have system admin capabilities. For purpose of the plan if they buy radios from some other place they would contract with PSC for those services till they have a different vendor.

Second was user training; He agreed with the report that Ron and the committee put together and the current standards and information is not specific. It does not exclude HealthPartners from the request. They are a licensed ambulance service and they do meet the public safety definition. They are licensed by EMSRB and the activities they would be performing are similar to those that are being used by others already using the system.

Dwayne Glenn said that Regions, a Level 1 calls upon HealthPartners to participate in the disaster drills with the hospital.

Steve Pott said that he has talked at length with the EMSRB about the status of HealthPartners as a licensed ambulance service. They aren't aware of any other licensed, specialty ambulance service in MN that isn't affiliated with an ambulance service that provides emergency response. They are a unique entity in the state, so they would not set a precedence. He is hoping the TOC acknowledges that the system is already being used for this purpose. They may be eligible under the standards as it is today. He asked if the recommendation of the TOC to change the current standard so that they aren't allowed to participate or is it to prevent the next one to participate? They are trying to meet a timeline and would like to ask if that could be met.

Ulie said that they were working on the standard to clarify eligibility. Steve added that it's his take that that HealthPartners in its current form fits under public safety agency. John Gundersen asked for clarification of the licensing for HealthPartners. Clif Giese stated that HealthPartners Medical Transport is the only EMSRB licensed STS. Chris Kummer stated that yes this is true. Bob Shogren asked if HPMT had interoperability with hospitals and PSAP's for patching or for a 35W bridge collapse scenario if they were called to assist. Steve Pott indicated that yes they do VHF and are licensed for VMED28. He also indicated if they had more than one type of radio it proposes a challenge. Ulie stated that interpretable, but that yes it is true for anyone. Ulie asked if their need for ARMER was for a business need, not emergency response. Stave Pott stated this would be for interoperability in a response for a 35W event, they would be used for inter-hospital transportation, not on scene response.

Bob Shogren stated if we change the standard, it includes HPMT, but allow them on the system it does not seem to make sense. Nate Timm asked if change the language of the report to only allow ESMRB licensed and have a primary service area, maybe it would be changed. Ron Jansen said that they are not talking about changes to the findings, this went through extensive changes already. (Noted there was lots of

discussion and there seemed to be a feeling that this workgroups finding was the standard). Ulie noted that this is not the standard, the agenda is to accept the findings or not.

Steve Pott said the he wanted to have a vote on their participation plan was accepted based upon the report's findings. Jill said the TOC could not vote again on this today because it was not on the agenda. They would have to be put on the next month's agenda.

Ulie asked if the members wanted to adopt the report of the committee and move for changes in the standard.

M/S/C Ron Jansen moved to adopt the ARMER Eligibility Workgroup report. Chris Kummer seconded. The motion carried.

Ulie stated they should vote on whether or not to have HPMT come back on next month's agenda for reconsideration of their participation plan.

M/S/C Shogren moved to reconsider HealthPartners participation. Timm seconded.

Discussion from Steve Pott clarified an addition of 5 radios per year for 5 years for a total of 20. Steve thought he would be on today's agenda, he wondered if there was a mistake on Troy's part. Troy Tretter clarified that based on emails, Steve asked if there was anything else that was needed and as to why they were not on the agenda for November. Troy said that since their request was voted down in October, it was a done issue, nothing further was needed. The workgroups report was for definitions for ARMER eligibility for the standard, not for HPMT specifically.

6-Yeas, 5 Nos. The motion carried. Ulie stated it will be on next meeting's agenda before any standard changes are presented. Ulie asked Jill If the number of radios were to change, would they need to come to the TOC for approval? Jill stated they would have to go to the OTC for that approval.

## **Grants / 2015 SHSP Grant - Tretter**

M/S/C Motion made by Jansen to apply for grant. Timm seconded. The motion carried.

#### **Metro Funding Priority Change - Tretter**

*M/S/C* Motion made by Nate Timm to recommend to the MESB to change our funding priority for our grants to match the state's language for funding interoperability projects. Giese seconded. The motion carried.

Once the language is changed, it will go to the grants workgroup before going to the board for approval to apply for grant.

#### Metro Standard 3.14.0 Change - Tretter

M/S/C Motion made by Gunderson to approve Metro Standard 3.14.0 change. Giese seconded. Motion was amended by Olson to remove ME-TAC 5 to be used for emergent events. The motion carried.

#### **System Administrator Training Standard workgroup - Tretter**

M/S/C Motion made by Ron Jansen to table discussion until state has completed their standard changes. Nate Timm seconded. The motion carried.

# Timeline removing dual naming from regional interop channels-Jansen

Motion made by Bob Shogren to remove dual naming from regional interop channels. Thompson seconded. Rod Olson suggested waiting until after the 7.15 upgrade. The motion carried.

# **Motorola IP Simulcast Training Proposal-Tretter**

Motion made by Ron Jansen to approve Motorola IP Simulcast training proposal. Jon Eckel seconded. The motion carried.

# Moves, Additions & Changes to the System

Gundersen – Said the STR tower will move into storage the first part of December pending the water tower ARMER site in Woodbury being done, Nate Timm said there was some work that was not fully completed on the water tower by the contactor.

# **Update on Removal of Voting from Interoperability System**

# Metro Mobility update - Rude

Think the Trapeze interface will work. Removing approximately 85 IDs from the system.

# No update on MOG

#### **SECB Committees - Tretter**

Tretter deferred updates in the interest of time.

# Update from Counties regarding SUA2+

Hennepin is the only county that has not sent in their letter to the state, but it working through the process.

# December meeting changed to December 16.

The meeting was adjourned at 3:00



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# **Technical Plan**

# for ARMER

# 800 MHz Trunked Radio System Participation

by

# Regions Hospital dba HealthPartners Medical Transportation

Submitted to:
Metropolitan Emergency Services Board

Revised December 9, 2015



Allied Radio Matrix for Emergency Response



# HealthPartners Medical Transportation (HPMT) Technical Plan

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# HealthPartners Medical Transportation (HPMT) Technical Plan

# **Executive Summary & Overview of HealthPartners Plan**

Below is a high level synopsis of the plan being proposed by HealthPartners Medical Transportation (HPMT) to become a limited participant of the ARMER 800 MHz system. Further narrative is contained later in this document describing the topics which are summarized below. Regions Hospital acquired its medical transportation division in October 2013. HPMT consists of five ambulances as well as four Special Transportation Service (STS) wheelchair vans. HPMT is a non-emergency, Basic Life Support (BLS) transportation service authorized by the Emergency Medical Services Regulatory Board (EMSRB) that provides hospital to hospital transfers, as well as discharges from the HealthPartners hospital network. HPMT currently subscribes to a private UHF Land Mobile Radio (LMR) service, which provides outdoor mobile radio coverage to much of their service area. The ambulances are also equipped with VHF radios to provide some level of interoperability, and also the ability to contact MRCC when necessary.

HPMT does not intend to migrate to use the ARMER Network for its day to day operations. Instead, they will likely upgrade to a digital, trunked UHF system for the purpose of daily operations. As a division of Regions Hospital, the primary trauma center for the east metro, HPMT is an important part of their mass casualty/disaster planning. Having interoperable access to the ARMER system, will allow HPMT to more fully participate in mass casualty drills, and will be much better positioned to provide services during a mass casualty incident.

Dispatching is accomplished using a desk mounted mobile radio installed at their office located at 2501 Minnehaha Ave in Minneapolis. To accomplish interoperability, HPMT would install a second UHF radio, an ARMER fixed radio, and an audio bridge to connect the two radios. They expect to have a talkgroup on the UHF system that is only used when interoperability with an ARMER user is required. This arrangement will also limit their ARMER interoperability to the coverage footprint of the LMR system.

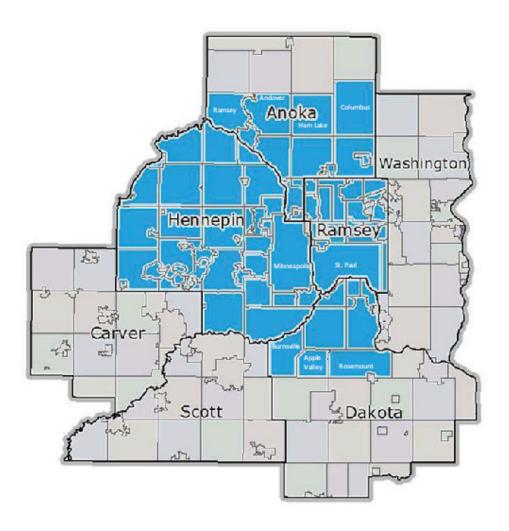
The Minnesota Emergency Medical Services Regulatory Board (EMSRB) has issued HPMT a license to operate as a BLS ambulance service in Hennepin County, Ramsey County, the southern 2/3 of Anoka County and the northern 1/3 of Dakota County – See Figure 1 on the next page. On average, HPMT provides 300 ambulance transports per month, using 5 ambulances. HPMT is also certified by MnDOT to provide Specialized Transportation Service (STS). HPMT performs an average of 200 STS transports per month, using 4 vans.

The ARMER radio used at the HPMT office will be programmed to use the City Center site. There should be no roaming to other sites, unless a failure occurs with City Center. The traffic loading on the ARMER system will be minimal, as it will only be used for interop. A more detailed analysis of HPMT's radio traffic loading, for their day to day operations, is provided later in this document.



#### **HPMT EMS Licensed Counties**

EMS Number: 401 Owner: Regions Hospital Effective : December 8<sup>th</sup>, 2014



#### Licensed Counties/Cities:

Ramsey County, Hennepin County, Anoka County Cities: Anoka, Ramsey, Andover, Ham Lake, Columbus, Blaine, Lino Lakes, Coon Rapids, Dakota County Cities: Lilydale, Mendota, Mendota Heights, West St. Paul, South St. Paul, Sunfish Lake, Inver Grove Heights, Eagan, Burnsville, Apple Valley, Rosemount

<u>Figure 1 – HealthPartners Medical Transportation Licensed Service Area</u>

#### SECTION 1 - BACKGROUND

#### Introduction

This document is prepared as the technical plan for HealthPartners Medical Transportation (HPMT) limited participation on the Minnesota ARMER 800 MHz trunked radio system. The primary audience for this plan is the Metropolitan Emergency Services Board (MESB) Technical Operations Committee (TOC) and the Statewide Emergency Communications Board Operations and Technical Committee (SECB-OTC).

## Project Funding

HealthPartners Medical Transportation (HPMT) has identified internal funding to accomplish interoperability with the ARMER System, as described in this document.

#### SECTION 2 - ELEMENTS OF THE TECHNICAL PLAN

#### **HPMT Location & Resources**

HealthPartners Medical Transportation is located at 2501 Minnehaha Ave, Minneapolis, MN 55404. The communications center is currently equipped with a UHF control station operating on a private LMR system.

# **HPMT Connectivity**

HPMT does not intend to establish a console connection to the ARMER backbone, but rather will access the System using a single control station/consolette located in their dispatch area, patched/bridged to a dedicated talkgroup on their UHF LMR system. This arrangement will only allow interop when their UHF radio is on the dedicated interop talkgroup. The ARMER radio will be adjusted, by the HPMT dispatcher, to the appropriate interop talkgroup for the situation.

#### **HPMT Audio Logging**

HPMT does not have logging capability today. If logging is desired, it will be accomplished with an analog logger getting audio from the control station/consolette.

#### ATIA Data Requirement

No ATIA data taps are contemplated if this plan is approved.

#### System Loading/Call Activity

HPMT intends to continue to use a private LMR system for their day to day operations. Any loading on the ARMER system would be the result of their involvement in a mass

#### HealthPartners Medical Transportation (HPMT) Technical Plan

casualty incident, a drill, or the need to directly contact a hospital or MRCC. Reports gathered from their current LMR provider show that HPMT personnel generate very little radio traffic from their day to day operations. HPMT has assembled the following statistics related to their operations:

Average BLS ambulance transport per month 300. Average transport time duration 60 minutes.

Average STS transports per month 200. Average transport time duration 60 minutes.

Number of transports that end outside of licensed service area 20 per month.

A traffic study on HPMT's existing radio system was performed from November 18 through December 7 – a total of 13 working days. The average airtime used per working day was 632 seconds, with the average transmission being 3.4 seconds. This statistic doesn't have a direct correlation to the interop traffic that HPMT may generate, but it does demonstrate their ability to be concise while performing their day to day business.

#### **Interoperability**

Primary interoperability will be achieved via shared use of the ARMER regional and statewide interoperability talkgroups.

# Fleet Map

The interop radio will be programmed with metro region and statewide interop talkgroups.

#### Schedule

HPMT has funding in place, and hopes to have interop capabilities with the ARMER System by the end of the first quarter of 2016.

## **Training**

HPMT intends to arrange training through the MESB, using their recommended/approved trainer to meet the ARMER policy requirements. End user training will utilize methods of classroom explanation/demonstration with both visual aids and functioning radio equipment. All HPMT personnel are trained to at least the level of EMT.

#### System Maintenance

HPMT will use an ARMER approved service provider for the maintenance and support of the radio. That provider will be selected after a radio is specified and ordered.

#### HealthPartners Medical Transportation (HPMT) Technical Plan

# System Administration

HPMT will use a properly trained and authorized service provider to perform system administration tasks.

#### **SUMMARY**

HealthPartners Medical Transportation looks forward to approval of this plan for limited interoperable participation on the ARMER system. While HPMT believes their day to day use of the ARMER system is permitted by MSS 403.34, 403.38, as well as ARMER Standards. However, as a compromise based on prior concerns raised over HPMT's prior request for full participation, the applicant understands that traffic loading and financial concerns by system owners may not be overcome to allow the use of the ARMER system for day to day operations. Establishing an audio bridge between their LMR radio and an ARMER radio will allow interop, within the service area of the LMR system. This approach will also further options for interoperable communications by a licensed BLS provider serving clients in the metropolitan area.

# 800 MHz Trunked Regional Public Safety Radio System

Document Section:		TOC Recommended:
Sub-Section:		Date:
Procedure Title:	Master Fleetmap Matrix	
Date Established:	Revised 12/9/15	MRB Approval - Signature:
Replaces Document Dated:		
Date Revised:		Date:

Diagram of TalkGro	oups used by H	lealthPartners	Medical Transportation	Parent				Adm			Sit	e Ac	cess	Pern	nissio	ons					Resource Sharing Permissions
TalkGroup / MultiGroup	Numeric ID	Resource Owner	ober 21, 2015  Description	Multigroup that the talkgroup belongs to, or "M" if this is a MultiGroup		Loggig	Ecryptio Eabled	ministrator of Resource	City Center (SN1)	Lino Lakes (SN2)	Dakota (SN3)	Norwood (SN4)	Hastings (SN5)	North Branch (SN6)	HC-East	HC-West	Minneapolis	Ramsey	Statewide	Media Access	P = Permission letter is required to gain authorization for use. D = Defined Agencies. "Letter" L = Like Agencies may share. Fire, Medical, Law, Works etc. A = All Agencies. RX = Are only authorized to receive. TX = Are authorized to RX + Transmit.
Inter-op																					
STAC 1		SECB	Statewide All User Tactical		3			SECB	Х												
STAC 2		SECB	Statewide All User Tactical		3			SECB	Х												
STAC 3		SECB	Statewide All User Tactical		3			SECB	Х												
STAC 4		SECB	Statewide All User Tactical		3			SECB	Х												
STAC 5		SECB	Statewide All User Tactical		3			SECB	Χ												
STAC 6		SECB	Statewide All User Tactical		3			SECB	Х												
STAC 7		SECB	Statewide All User Tactical		3			SECB	Χ												
STAC 8		SECB	Statewide All User Tactical		3			SECB	Χ												
STAC 9		SECB	Statewide All User Tactical		3			SECB	Х												
STAC 10		SECB	Statewide All User Tactical		3			SECB	Х												
STAC 11		SECB	Statewide All User Tactical		3			SECB	Х												
STAC 12		SECB	Statewide All User Tactical		3			SECB	Х												
METAC1		MESB	Region-wide Public Safety Tactical		3			MESB	Х												
METAC2		MESB	Region-wide Public Safety Tactical		3			MESB	Х												
METAC3		MESB	Region-wide Public Safety Tactical		3			MESB	Х												
METAC4		MESB	Region-wide Public Safety Tactical		3			MESB	Х												
METAC5		MESB	Region-wide All User Tactical		3			MESB	Χ												
METAC6		MESB	Region-wide All User Tactical		3			MESB	Х												
METAC7		MESB	Region-wide All User Tactical		3			MESB	Х												
METAC8		MESB	Region-wide All User Tactical		3			MESB	Х												
EMS-EMRCC		SECB	East Metro Medical Resource Control Center		5			SECB	Х												

EMS-WMRCC	SECB	West Metro Medical Resource Control Center	5	SECB	Х					
MRCXP1	SECB	MRCC Cross Patch 1	5	SECB	Х					
MRCXP2	SECB	MRCC Cross Patch 2	5	SECB	Х					
Conventional										
8CALL 90	State	NPSPAC Hailing / Mutual Aid Conventional - Repeater		State						
8TAC 91	State	NPSPAC TAC / Mutual Aid Conventional - Repeater		State						
8TAC 92	State	NPSPAC TAC / Mutual Aid Conventional - Repeater		State						
8TAC 93	State	NPSPAC TAC / Mutual Aid Conventional - Repeater		State						
8TAC 94	State	NPSPAC TAC / Mutual Aid Conventional - Repeater		State						
8CALL90D	State	NPSPAC Hailing / Mutual Aid Conventional - Direct								
8TAC 91D	State	NPSPAC TAC / Mutual Aid Conventional - Direct		State						
8TAC 92D	State	NPSPAC TAC / Mutual Aid Conventional - Direct		State						
8TAC 93D	State	NPSPAC TAC / Mutual Aid Conventional - Direct		State						
8TAC 94D	State	NPSPAC TAC / Mutual Aid Conventional - Direct		State						
8SOA1	State	All Users Scene of Action		State						
8SOA2	State	All Users Scene of Action		State						
8SOA3	State	Public Safety Only Scene of Action		State						
8SOA4	State	Public Safety Only Scene of Action		State						
FSOA1	State	Fire & EMS Only SOA Portables Only		State						
FSOA2	State	Fire & EMS Only SOA Portables Only		State						_



Re: 800 MHz radio participation plan for Children's Minnesota (Children's)

**Date:** 12/16/15

From: Pam Schultz, Corporate Emergency Manager

Subscriber radios - What model of radios you are using, Motorola Model #, etc.

- APX7500 with Motorola MCD 5000 Desk set; one at the Minneapolis Campus and one at the Saint Paul Campus.
- Portables Motorola APX 4000, and XTS-2500; 3 total at the Minneapolis Campus and 3 total at the Saint Paul Campus

Other local elements - Where the radios will be used.

- Radios will be located on multiple locations
  - Children's Minneapolis campus;
     2525 Chicago Avenue South Minneapolis, MN 55404
  - St. Paul campus;345 North Smith Avenue, St. Paul, MN 55102
- ER to EMS radios will be located in the emergency departments
- Portables will be located with the Safety, Security and Emergency Management Dept.

Other local elements - What they will be used for: i.e. ER to EMS vehicles, day to day use.

- MPKIDS for campus to campus communications.
- ER to EMS for Physician to EMS personnel for any in-transit patient consultation/information sharing
- Metro Hospital Compact; hospital to hospital communications.

#### **System administration** –Agency Point of Contact for the radios:

- Bentley Jackson, Security Operations Specialist; <u>Bentley.jackson@childrensmn.org</u> 612-813-6336
- Mitch Josephson, Safety Specialist; <u>mitch.josephson@childrensmn.org</u> 651-220-6712
- Pam Schultz, Corporate Emergency Manager; <u>Pam.Schultz@childrensmn.org</u> 651-220-6044

**System administration** –Radio Programming will be completed by ANCOM Communications

Sid Sanocki, ANCOM Communications; <u>sid.sanocki@ancom.org</u> – 612-363-1136
 1800 East Cliff Road, Burnsville, MN 55337

**Radio ID's** – Children's currently has 6 radio ID's, plans for 15 Radios ID's to last them the next 3-5 years.

**Training plan** – Users of the ARMER radios have already been trained, if there are additional training needs they will contact the MESB for training assistance.

**Preliminary Fleet map** —Children's Hospital currently has EMH-CALL, EMH-1-EMH-4, ME TAC 5-8, 800MHz Conventional Resources, 700MHz Conventional Resources and STAC's 1-12

Chilo	lrens Hospi	ital Templa	te - 11/09/	2015
Pos	ZONE-A	ZONE-7C	ZONE-8C	ZONE-MN
1	MPKIDS	7SOA1	8CALL90	STAC1
2	EMH-CALL	7SOA2	8TAC91	STAC2
3	EMH-1	7SOA3	8TAC92	STAC3
4	EMH-2	7SOA4	8TAC93	STAC4
5	EMH-3	7SOA5	8TAC94	STAC5
6	EMH-4	7SOA6	8CALL90D	STAC6
7	ME TAC5	7SOA7	8TAC91D	STAC7
8	ME TAC6	7SOA8	8TAC92D	STAC8
9	ME TAC7	7SOA9	8TAC93D	STAC9
10	ME TAC8	7SOA10	8TAC94D	STAC10
11	STAC1	7SOA11	8SOA1	STAC11
12	STAC2	7SOA12	8SOA2	STAC12
13	STAC3	BLANK	8SOA3	BLANK
14	STAC4	BLANK	8SOA4	BLANK
15	EMH-CALL	BLANK	BLANK	BLANK
16	MPKIDS	BLANK	BLANK	BLANK

FINAL FINAL FINAL

#### **METRO REGION**

# 800 MHz Trunked Regional Public Safety Radio System Standards, Protocols, Procedures

Document Section: 1—Management of System

Sub-Section: METRO 1.10.1

Procedure Title: Requesting Participation

Date Established: August 2, 2001
Replaces Document Dated: 7/24/071/8/09

1/8/09 12/16/15 Radio TOC Review - Signature

MESB Approval - Signature:

09/07/01

#### 1. Purpose or Objective

Dates Revised:

To establish a procedure for an eligible entity, such as a county, a city, an EMS provider, or a special purpose governmental agency, to apply for participation in the metropolitan region of the ARMER (Allied Radio Matrix for Emergency Response) system.

#### 2. Technical Background:

#### • The following definitions apply to this standard:

- Public Safety Agency: means a functional division of a public agency which provides
  firefighting, police, medical, or other emergency services, or a private entity which
  provides emergency medical or ambulance services.
- Public Service Organization: means a public facility, department, agency, board or commission, owned, operated or managed by or on behalf of the state of Minnesota, or any subdivision thereof, including any county, city, town, township, or independent district in the state.
- <u>EMS Provider</u>: is defined as one licensed by the Minnesota Emergency Service Regulatory Board (EMSRB) to provide services with a designated emergency primary service area (PSA) where they are responsible to response to medical 911 calls for service; or ambulance, also licensed by the EMSRB that provides emergency response.

#### Capabilities

The entity requesting participation must be prepared to migrate to the ARMER system. This will require a technical design document or participation plan approved by the Radio Technical Operations Committee (Radio TOC) and the Metropolitan Emergency Services Board (MESB). In addition it will require the purchase and installation of new equipment compatible with the ARMER system.

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METRO Metro 1 10 1 Requesting Participation jr comments 1.10.1 Requesting Participation

Section 1.10.1

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#### Constraints

The technical designs and participation plans must be consistent with the capacity constraints and operating constraints of the system. Operational plans must be consistent with established regional and statewide operational standards.

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#### Eligibility

Organizations."

Eligibility for full ARMER participation is limited to public safety agencies and public service organization as defined in Section 2 of this standard. An agency or organization that falls outside the definitions of public safety agencies or public service organization would be directed towards Metro Standard 5.5.0 "Non-governmental Use for Emergency Coordination" and

and State Standard 1.10.0 "Requesting Participation by Non-Public Safety/Non-Public Service Formatted: List Paragraph, Indent: Left: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

#### 3. Operational Context:

Generally there are two three ways to participate in the metropolitan region of the ARMER system: full participation, and limited participation, and interoperability participation, through interoperability. Limited participation through patches via a gateway device from a full participant. Interoperability partication is owning ARMER integrated subscriber equipment for the purpose of communicating on ARMER for interoperability in an emgergency event with a full participant. is possible by those entities operating on VHF, UHF or 800 MHz analog systems.

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#### 4. Recommended Protocol/ Standard:

Requests for participation shall be submitted in writing by the governing board of the requesting entity to the MESB. The requesting agency shall submit a design document to the MESB, providing complete details on its plan for participation in the metropolitan area ARMER system. The plan shall be subject to a review process, including but not limited to review by the Radio TOC, by a qualified consulting professional engineer, by the Minnesota Department of Transportation, Department of Electronic Communication and by the MESB.

#### 5. Recommended Procedure:

The request shall indicate any actions taken by the local governing board, including but not limited to detail on the extent to which the requesting entity has developed designs and plans for participation. The written request shall indicate the name and contact information for the person designated to lead the project.

The Executive Director of the Metropolitan Emergency Services Board MESB's Radio Services Coordinator shall forward copies of the request to the Chair of the Radio TOC.

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If a technical design plan is already in place, the entity shall submit the plan to the Radio TOC after which the Radio TOC shall review the plan for compliance and compatibility with the MESB's plan.

The requesting entity should, as part of its planning process, retain the services of a qualified consulting engineer. Ideally the individual retained should be familiar with the ARMER system. Costs associated with the development of a technical design shall be borne by the requesting agency. When the design plan is complete it shall be submitted to the Radio TOC, which shall review the plan for compliance and compatibility with the MESB's plan. The Radio TOC shall report its recommendations to the MESB.

The MESB shall act on the request within a reasonable time period. Review of the plan by all pertinent committees may occur, however the MESB will not hear or approve the plan until all necessary agreements (cooperative, subscriber) are in place. The MESB may accept the request as submitted, accept the request with conditions or deny the request. If the request is initially denied, the MESB shall provide details on changes or additions to the design plan that will bring the plan into compliance with the Board's plan.

Following making design changes that bring the local entity's plan into compliance with the Board's plan, the requesting entity may resubmit its request. The MESB may not deny the request if the design plan is compatible with the MESB's region-wide plan.

#### 6. Management

The Executive Director and staff of the <u>Metropolitan Emergency Services BoardMESB</u> are responsible for management of this procedure.

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#### **METRO REGION**

# 800 MHz Trunked Regional Public Safety Radio System Standards, Protocols, Procedures

Document Section:
Sub-Section:
Procedure Title:
Date Established:
Replaces Document
Date:

Sub-Section:

METRO Appendix 2
DEFINITIONS & ACRONYMS

12/17/00
Replaces Document
Dated:

Radio TOC Recommendation:
Date: 5/24/01

MESB Approval - Signature:

Date:

#### 1. Purpose or Objective

To clarify terms used throughout the standards, protocols and procedures manual. All definitions will be found in this section and will also be footnoted on the first page in which they appear within the section in which they are used.

2/25/0912/16/15

#### 2. Management

Date Revised:

Should there be additions, deletions, or changes to these procedures the Metropolitan Emergency Services Board staff are responsible for revising this section.

## 3. DEFINITIONS (in alphabetical order)

"Common", "Pool" or	Common/ pooled talk-groups (TG) are those that are set-aside
"TACtical" <del>Talk</del> Groups Talkgroup	for communicating across multiple agencies. Agency radio users in appropriate service areas who need to talk to one another for day to day business or for mutual aid will all put the appropriate common or pool talk group in their radios to be available in time of need. Example: Fire Departments will all have the common Statewide Fire Mutual Aid TG in their radios. "Pool" is distinguished from "common" in that pool implies more than one, such as RTAC 1- 4 is a <i>pool</i> of <i>common</i> regional tactical TGs for law enforcement.
Backbone System	A statewide public safety radio communication system that

A statewide public safety radio communication system that consists of a shared infrastructure, the elements of which are identified in the STATE PUBLIC SAFTEY RADIO COMMUNICATIONS PLAN.

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Metro Appendix 2- Definitions Acronyms jr comments Appendix 2- Definitions & Acronyms

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# Control Station (Consolette)

A fixed radio station that may or may not interact with radios, remotes or desktops.

#### **Critical Operations**

-Agency Critical Operations Those governmental, quasi-governmental and nongovernmental operations by authorized users which are reliant upon a functioning two-way radio communications system which unavailability, degradation, delay or failure, partial or complete, would significantly impact or impair the successful

- Does not meet the definition of Mission Critical criteria above.
- Significantly impacts or impairs the Department / Agencies ability to operate in an effective and efficient manner to provide continuous, accurate and reliable services to its clients.
- Significant internal disruption to the agency.
- Public convenience.

operation of the Agency.

• Significant disruption to ongoing operational budget.

-Mission Critical Operations Those governmental, quasi-governmental and non-governmental operations carried out by Authorized Users which are reliant upon a functioning two-way radio communications system which unavailability, degradation, delay or failure, partial or complete, would significantly impact and/or impair the successful delivery of a vital service or mission. Operations would include, but are not limited to the categories below:

#### **Public Safety**

Those functions of government that exist to protect the physical well\_-being of the public as a whole from physical danger - continuous delivery of essential public services.

#### **Public Health**

Those functions of the government that exist to protect longevity of life and quality of life for the public as a whole - continuous delivery of essential public health services.

3

#### Law & Justice

Those functions of government that exist to prevent violations of the laws and rules of society by individuals and groups.

#### **Transportation**

Those functions of the government that exist to provide safe, effective and efficient multi-modal movement of the public and commodities including public roads, highways, waterways, railways, airways and public transportation systems.

#### **Environmental Protection**

Those functions of the government that exist to protect the environment from changes that are detrimental to the existence and continuance of that environment.

#### **Human Services**

Those functions of the government that exist to provide for individuals that are physically, emotionally, financially, academically, intellectually disadvantaged when compared to established social norms. Loss of these services would significantly impair individual's ability to function or operate in society.

When such operational impairments have the effect of:

- Posing significant risk to health and safety, loss of a vital service provided by an agency.
- Causing negative perceptions that have high Public Relations (P/R) impact or Media and Press impact, that would cause significant embarrassment to the agency.
- Directly affecting its command, control, dispatch and information systems and their effective and efficient functionality.
- Inflicting secondary effects upon a service's critical resources (financial, supply-chain, and response capability).
- Impeding the delivery or availability of an otherwise functioning vital system or service.

4

-Non-Critical Operations All other governmental, quasi-governmental and non-

governmental operations, which are reliant upon a functioning two-way, radio communications that do not meet the above

mission critical or department critical definitions.

**EMS Provider** 

(for the purpose of full **ARMER eligibility**)

An EMS Provider which is licensed by the Minnesota Emergency Medical Services Regulatory Board (EMSRB) to provide service with a designated emergency primary service

area (PSA) where they are responsible to respond to medical 911 calls for service; or an air ambulance, also licensed by the

EMSRB that provides 911 emergency response.

**EMSRB** 

The Minnesota Emergency Medical Services Regulatory Board

(EMSRB) is the state agency responsible for licensing

ambulance services, certifying emergency medical personnel, and approving emergency medical services training programs.

Encryption

Digital encoding and decoding of audio (scrambling). If

listening on a radio without encryption capabilities, no audio

will be heard. Logging

Audio recording of a radio communication

**Mobile Radio** Generally installed in a vehicle, intended to be used while in

motion.

Patch Permanent (hard) Patch:

> A patch between two or more audio resources on the system, which is fixed and cannot be controlled or edited by the

dispatcher.

Manual (soft) Patch:

A patch between two or more audio resources on the system, which is setup and controlled by the dispatcher. The dispatcher

owning the patch can add & delete resources as needed.

Portable Radio A radio that is completely freestanding and may be hand-

carried or worn by the radio user.

Public Safety Agency All Law Enforcement/Sheriff, Fire, Emergency Medical and

related service areas. These include badged and/or sworn

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Metro Appendix 2- Definitions Acronyms jr COMMents Appendix 2 Definitions & Acronyms

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ancillary personnel such as Park Rangers, Court Security
Officers, Community Corrections, and those who support public
safety operations under special circumstances.

A functional division of a public agency which provides firefighting, police, medical, or other emergency services, or a private entity which provides emergency medical or ambulance services.

Public Service Public Service in this context refers to general government

personnel such as Public Works, Transportation, and other

similar public service operations.

Any public facility, department, agency, board or commission, owned, operated or managed by or on behalf of the state of Minnesota, or any subdivision thereof, including any county, city town, township or independent district in the state.

**Regional System** In the context of these standards this term is intended to

represent the metropolitan portion of the ARMER system.

**Simulcast Cluster** A group of radio frequency (RF) sites that function as a single

site in transmit and receive.

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**Site** A group of individual radio tower stations in a simulcast cluster.

**SOAs** Scene of Action Channels

<u>8</u>ASOA <u>& 7SOA</u> – available for All users <u>(ex: 8SOA1 & 7SOA1)</u>

FSOA – available for Fire users only <u>(ex: FSOA1 & FSOA2)</u>

 PSOA – available for Public Safety users only, names changed to 8SOA3 & 8SOA4

System Management/ Administrative Positions System Manager - individual in charge of the radio system of a participating agency

 <u>System Administrators</u> – individual who is responsible for the day to day radio system operations of a participating agency

 <u>Sub-System Administrators</u> - individual who is responsible for the day to day radio sub-system operations of a participating agency

**Variance** An allowed divergence from full adherence of an adopted

standard, protocol or procedure

**Waiver** A complete release from an adopted standard, protocol or

procedure

#### 4. ACRONYMS (in alphabetical order)

ALS Advanced Life Support

ARMER Allied Radio Matrix for Emergency Response

ATAC Regional All (user) Tactical talkgroup

AVL Automatic Vehicle Locator

**APCO** Associated Public Safety Communications Officials

**BLS** Basic Life Support

CCGW Conventional Channel Gateway

Metro Appendix 2- Definitions Acronyms jr COMMents Appendix 2 Definitions & Acronyms Section: Appendix 2

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СЕВ	Central Electronics Bank
CPS	Customer Programming Software
CTCSS	Continuous Tone Coded Squelch System
DIU	Digital Interface Unit
DTMF	Dual Tone Multiple frequency
ЕМН	Emergency Medical Hospital
EMS	Emergency Medical Services
<u>ETACs</u>	EMS Tactical talkgroups
EMRS	Emergency Medical Radio Service
FCC	Federal Communications Commission
FTACs	Fire Tactical talkgroups
<u>ICALL</u>	International 800 MHz Calling Channel, now called 8CALL90
<del>ITAC</del>	International 800 MHz Tactical Channels, now called 8TAC91
<u> </u>	International 800 MHz Tactical Channels, now called 8TAC91- 94
LESIU-TACs	•
<u> </u>	24 Law Enforcement Encrypted Special Investigative Unit Tactical
LESIU-TACs	Law Enforcement Encrypted Special Investigative Unit Tactical talkgroups (not allowed on consoles) Ex: SIU1E  Law Enforcement-only Encrypted Tactical talkgroups (allowed
LESIU-TACs LETACs	Law Enforcement Encrypted Special Investigative Unit Tactical talkgroups (not allowed on consoles) Ex: SIU1E  Law Enforcement_only Encrypted Tactical talkgroups (allowed on consoles)
LESIU-TACs  LETACs  LTACs	Law Enforcement Encrypted Special Investigative Unit Tactical talkgroups (not allowed on consoles) Ex: SIU1E  Law Enforcement_only Encrypted Tactical talkgroups (allowed on consoles)  Law Enforcement only Tactical talkgroups (statewide)

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Metro Appendix 2- Definitions Acronyms jr COMMents Appendix 2- Definitions & Acronyms

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**MESB Metropolitan Emergency Services Board** 

**METCOM** Metropolitan region console to console talkgroup (not allowed

in subscriber units)

**METPH 1-4** Metropolitan region public health talkgroups

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MN Department of Health

MESB Metropolitan Emergency Services Board

METCOM Metropolitan region console to console talkgroup (not allowed

in subscriber units)

METPH 1-4METTAC-A Metropolitan region public health talkgroups Metropolitan

Tactical - All. A series of VHF conventional to 800 Tactical talk

groups/ channels that can be used by all users.

METTAC-P Metropolitan Tactical Public Safety. A series of VHF

conventional to 800 Tactical talk groups/ channels that can be

used only by public safety radio users.

ME TAC Metro-wide interoperability talkgroups. Ex: ME TAC1 through

ME TAC4 (public safety only) & ME TAC5 through ME TAC8 (all

users)

MHz Megahertz

MIMS Major Incident Management System

MINSEF Minnesota State Emergency Frequency, now called VLAW31

MNFOG Minnesota Communications Field Operations Guide

MRCC Medical Resource Control Center

MHz Megahertz

NAEMSD National Assn. of State EMS Directors

NPSPAC National Public Safety Planning Advisory Committee

**PSAP** Public Safety Answering Point

PTAC Regional Public Safety Tactical talkgroup

PTT Push to talk, i.e., talk button

Metro Appendix 2- Definitions Acronyms jr COMMENTS Appendix 2 Definitions & Acronyms

ents Appendix 2 Definitions & Acronyms
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**RF** Radio Frequency

**RSS** Radio Service Software

**SEMTAC** Statewide Emergency Management Tactical talkgroup

**SOA** Scene of Action - conventional simplex channels that are

isolated from the **central system** ARMER system

STACs Statewide (All Users) Tactical talkgroups

**TOC** Technical Operations Committee

**UHF** <u>Ultra-High</u> Frequency

VHF Very High Frequency

Commented [JR1]: Should VMED28, VFIRE23 and VLAW31 be added? Also MnCOMM (or whatever the name is) and METEM? ME RVR? Should a general definition for each of the following be included: ME, SR (in terms of region), SE, NE, SW, NW, CM?