

METROPOLITAN EMERGENCY SERVICES BOARD

RADIO TECHNICAL OPERATIONS COMMITTEE AGENDA

Board Room, Metro Counties Government Center

January 27, 2016

1:00 – 3:00 p.m.

MEMBERS:

Ulrie 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

VACANT
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 December 16, 2015 Minutes
3. Agenda Items
 - a. Appointment of Iver Johnson, Metro Region EMS – Ron Robinson
 - b. Washington County Use of 2014 SECB Grant Funds – Nate Timm
 - c. Regional Encrypted Talkgroups for change management - Gundersen
 - d. 2015 SHSP Grant Submission - Tretter
 - e. Metro Standard 1.5.2 – Revision and Changes - Tretter
 - f. Metro Standard 3.10.0 – Interop Channels & Talkgroups for US Govt. Radios - Tretter
 - g. Metro Standard 3.22.0 - Use of Mobile Portable Gateways to Connect to Fixed Network Interoperability Resources - Tretter
 - h. Metro Standard 3.23.0 - Conv. Users Connecting to Regional System - Tretter
 - i. Metro 3.24.0 - RF Control Stations - Tretter
 - j. Metro 3.27.0 – MRCC Talkgroup - Tretter
 - k. Metro 3.34.0 – Cache Radio Standard - Tretter
 - l. Metro 5.2.0 Disaster Relief Organization Access – Tretter
 - m. Satusboard Recommendations - Tretter
4. Moves, Additions & Changes to the System
 - a. Sperry Tower Removal & Replacement - Jansen
 - b. Update on Removal of Voting from Interoperability System - Jansen
5. Committee Reports
 - a. System Administrator Training Standard Workgroup - Thompson
 - b. Metro Mobility System Usage Update—Chad LeVasseur/Dana Rude
 - 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. 2016 Meeting Dates
 - c. Next Meeting February 24
7. Adjourn

Ulrie Seal, Chair

**Metropolitan Emergency Services Board
Radio Technical Operations Committee
Meeting Notes
December 16, 2015**

Members Present: John Gundersen, Ron Jansen, Jake Thompson, Bob Shogren. Ulie Seal, Chris Kummer, Peter Sauter, Jon Eckel, Clif Giese, Rod Olson, Jeff Bjorklund, Adam Pirri, Dave Pikal, Shane Sheets.

Guests Present: Jill Rohret, Troy Tretter; *Metropolitan Emergency Services Board*, Steve Pott, Jeff Nelson; *PSC Alliance*, Rick Juth; *ECN/RIC*, Travis Holloway; *TSA*, Steve Goblirsch; *TSA*, Victor Wanchena; *DOC*, Pam Schultz; *Children's Hospital*, Dana Rude; *Metro Mobility*.

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

Minutes of the November 18, 2015 Meeting and the agenda of the December 16, 2015 meeting.
M/S/C Ron Jansen asked that the following changes be made to the November minutes: Page 1/Agenda Items /Paragraph 2 – change SOA3 to 8SOA3

Page 4/ Last Paragraph "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. Change it to 'is'.

With these changes Jansen moved to approve the November 18, 2015 meeting minutes. Clif Giese seconded. The motion carried.

Agenda Items

Chair Seal announced an additional agenda item (E) would be added. The Dakota County Modification of their Participation Plan.

HealthPartners Medical Transport Participation Plan- Steve Pott

Amended plan was presented. Modification to the plan is as follows:
ARMER radio at dispatch center and bridge it to the LMR service they subscribe to making it a private talk group.

No radios or portables out in the field.

The air time study came in under estimates. 632 seconds of air time 3.4 seconds long. Health Partners does not feel they need to have a sponsor in this case as a participant on the ARMER system.

Steve asked if there were any questions.

Ron Jansen stated from Metro Standard 5.5.0, Non-Governmental Use of Emergency Coordination that it would require them to have a sponsor.

Steve Pott does not think that Hennepin County, Ramsey County, or Anoka County would sponsor them, and that the state standard does not specify a sponsor is required for limited participation.

John Gundersen noted that the metro region standards are more restrictive than the state standards and state standards are written in such a way to allow regions to make their standards more restrictive if they choose to do so.

John Eckel said that in looking at state standard 3.25.0 'Radio to Radio Cross Band Repeaters' it points to requiring a sponsor.

Steve Pott said that he thinks with the time they put into the plan and how they have lowered their participation request, this is a reasonable compromise.

Ulie Seal asked the board members if all they were missing in their request is a sponsor. The only response heard was 'yes'.

Rod Olson asked Steve what their scenario would be in connecting to ARMER. Steve stated they would communicate with MRCC-East or MRCC-West talk groups by patch. Steve also said they have VMED28 in their VHF radios as well.

Chris Kummer asked Steve Pott what ARMER going to give them that VMED28 won't give you. Steve said if VMED28 works, nothing.

Ulie asked the board to we offer them a variance to the standard?

John Gundersen asked where the patch would be taking place, where is the equipment going to be installed. Steve said the facility is on Hiawatha Ave.

Ulie Seal said Hennepin County and motioned towards John Gundersen.

John Gundersen said to Steve Pott he is trying to help you (Health Partners) out and wanted to know who you are contacted with?

Steve replied HCMC, Regions, and Lakeview Medical.

John Gunderson explained the possibility of them falling under the Hospital Compact.

Ulie asked the members do we offer them a variance, asking around the board.

Rod Olson said no, they have to get an ID (Radio ID), someone has to sponsor them.

Ulie Seal asked John Gundersen if Hennepin will sponsor them. John said they (Heath Partners) would have cost to have Hennepin sponsor them, and that he can't say yes or no he would have to talk to them after the meeting.

M/S/C Ron Jansen proposed a motion that Health Partners would need a metro sponsor before approving the plan. Chris Kummer seconded the motion. Ulie Seal added that the motion was to deny their application presented and go back to find a sponsor. The Motion carried.

Children's Hospital Participation Plan – Pam Schultz

Children's Hospital requested 2 desktop radios and more portable radios. They have 6 radio IDs and are requesting more for future expansion.

These are to be used for metro hospital Compact communications, campus to campus communications and ER to EMS for in-transit patient information sharing.

Concern from Ron Jansen is that the training would have to be kept simple because the ED doctors are not primary radio operators.

Pam said ED radio would have EMS and EMH call talk groups.

John Eckel and Clif Giese brought up concern over the requirement for full training on ARMER if the ED was to have all the talk groups listed in the Fleet Map in the proposal, and it was addressed over them not having a qualified system administrator. John Eckel stated they wanted to go off on their own without a sponsor, more of a detailed plan would be required.

Ulie Seal brought up the discussion with Pam and the board over the campus radios being in two different counties was a challenge of getting them serviced by the resident county. John Gundersen stated they would not program the radios in Ramsey County. Pam said they just want to have one programmer.

There was no action taken on this topic. If Children's has questions regarding what needs to be done to modify their Participation Plan they will contact John Gundersen.

Change to Metro Standard 1.1.0 Requesting Participation – Tretter

Purpose of standard is to define a procedure for an eligible entity. There were some language modifications as well.

M/S/C Motion made by John Gundersen to approve Metro Standard 1.10.1 as amended, with commendation for fine work. Ron Jansen seconded. The motion carried.

Change to Metro Appendix 2 Definitions & Acronyms – Tretter

The Public Safety, Public Service and EMS definitions were changed to match the definition in 1.10.1. Tretter asked if there was any changes, as this could be a very specific document and was not sure what the board wanted in it. John Eckel noted that the definition for Public Safety did not match 1.10.1 and wanted to ensure it was the same. Ron Jansen wanted to amend the document to include the definition for LTACE's. Ulie and Troy suggested revisit the standards definitions in the next three months.

M/S/C Motion made by Jeff Bjorklund to adopt the changes to the definitions and acronyms in Metro Appendix 2. Bob Shogren seconded. The motion carried.

Dakota County modification of ARMER Participation Plan – Tretter

M/S/C Motion made by Clif Giese to approve the modified Dakota County ARMER Participation Plan. Bob Shogren seconded. The motion carried.

Moves, Additions & Changes to the System

Jake Thompsen said they have all their Gold Elites replaced. They are ready for the 7.15 upgrades. He brought up there was no mention of logging for SIUE's in the dispatch calls standards. Since it is a statewide resource it would be a good idea for the OTC to define them. He will pass that need onto Cathy Anderson.

Ron Jansen stated Gold Elites will be removed from Dakota County today.

John Gundersen said the Hennepin County SATCOW is back from Washington County and the tower is not deployable because it needs to have the cable runs replaced. He said he will get a quote to see how much it is and wanted to see if any grant funds could be used to repair the tower.

Update on Removal of Voting from Interoperability System

When it is closer, after the 715 upgrade Jansen will bring back a better definition to the group to approve.

Committee Reports

System Administrator Training Standard Workgroup – Thompson

Jake said the state is working on the standard and will wait for the outcome before making a decision on a possible metro standard, Jake said is the Metro rep on the state workgroup.

Metro Mobility System Usage Update- LeVasseur

The south zone vendor is not determined yet. He said they have implemented repeater disable switch in the radio programming for east and south on Monday.

System Manager's Group/Metro owner's Group Update – Jansen

Next week SMG meeting is cancelled.

2016: the SMG will be held the odd months on the 4th Wednesdays of the month; MOG will meet even number months and third Wednesday of the month.

Statewide Status Board group met and prioritized topics.

Reports from SECB Committees – Tretter

Tretter informed the group that the deadline for the 2015 SHSP grant application is January 15th to ensure it can be voted on for the January TOC meeting before going to grants working group. He said that he would be sending out an email after the meeting with details.

Rick Juth looked for input on attending the Regional Leadership group which meets in St. Cloud. It was the general opinion of the group that the meetings were not a good use of metro's time but that agendas will be checked and attendance will be determined based on relevant topics.

Jill told members that tomorrow the board will be voting on the SUA2+ proposal from Motorola.

Regional Talk group Permissions Updates – None

Next meeting will be January 27, 2016.

Members should be prepared to vote on grant proposals.

Clif Giese was thanked by group for his years of service.

The meeting was adjourned at 3:00



January 7, 2016

Mr. Troy Tretter
Radio Services Coordinator
Metropolitan Emergency Services Board
2099 University Avenue West
St. Paul, Minnesota 55104

METROPOLITAN
EMERGENCY SERVICES BOARD

2099 UNIVERSITY AVENUE WEST
SUITE 201
SAINT PAUL, MINNESOTA
55104-3431

PHONE 651-643-8395
FAX 651-603-0101
WWW.MN-MESB.ORG

Dear Troy,

In behalf of the Metro Region EMS System Technical Operations Executive Committee and the Metro Region EMS System Technical Operations Committee Chair, Kevin Novotny, it is our pleasure to nominate Iver Johnson from HealthEast Medical Transportation and Chair of the EMS Communications and IT Committee to represent the metropolitan regional EMS system at the MESB Radio TOC.

Thank you for your consideration of this letter of nomination and support of Iver Johnson.

Respectfully,

Ronald R. Robinson
Metro region EMS System Coordinator
Metropolitan Emergency Services Board



Office of the Sheriff

Commitment to Excellence



William M. Hutton
Sheriff

Dan Starry
Chief Deputy

1/20/2016

Ulie Seal, Chair Metro TOC
1800 West Old Shakopee Rd
Bloomington, MN 55431

Chair Seal,

Mr. Tretter has informed me that the MESB Executive Board has approved our request to amend the grant funding priorities to 2015 and 2016 grants to allow for interoperable communications projects.

Washington County would like to request grant funding for the previously approved technical plan to add VHF interoperable resources to our Hudson Wisconsin ARMER site.

The funding request is as follows:

- Base radios: 3 Motorola VHF APX consolettes, \$20,805
- Site connectivity: 2 RAD RiCi T1 to Ethernet convertors, \$1028.56
- Antennas: 3 Telewave ANT150D dipole, \$852.18
- Coax, entry port boot, and hardware: \$250

Total project: Approximately \$22,935.74. Because the grant is a 50% match, we respectfully request grant funding of \$11,467.87. Supporting documents are attached.

Thank you for your consideration.

Sincerely,

Nathan Timm
Radio System Manager
Washington County Sheriff's Office



Quote Number: QU0000334925

Effective: 22 SEP 2015

Effective To: 22 OCT 2015

Bill-To:

WASHINGTON COUNTY SHERIFF'S OFFICE
15015 62ND ST N PO BOX 3801
STILLWATER, MN 55082
United States

Attention:

Name: Nate Timm

Phone: 651-764-5185

Sales Contact:

Name: Christopher Meier

Email: chris.meier@motorolasolutions.com

Phone: +1(612)5817308

Contract Number: MINNESOTA DOT

Freight terms: FOB Destination

Payment terms: Net 30 Due

Item	Quantity	Nomenclature	Description	List price	Your price	Extended Price
1	3	L30KSS9PW1AN	APX7500 SINGLE BAND VHF MID PO	\$4,379.00	\$3,284.25	\$9,852.75
1a	3	W382AM	ADD: CONTROL STATION DESK GCAI MIC	\$169.00	\$126.75	\$380.25
1b	3	L999AB	ADD: FULL FP W/05/KEYPAD/CLOCK/VU	\$789.00	\$591.75	\$1,775.25
1c	3	G78AR	ENH: 2 YR SFS LITE	\$158.00	\$158.00	\$474.00
1d	3	G851AG	ADD: AES/DES-XL/DES-OFB ENCRYPTION	\$799.00	\$599.25	\$1,797.75
1e	3	W969BG	ADD: MULTIPLE KEY ENCRYPTION OPERATION	\$330.00	\$247.50	\$742.50
1f	3	G806BE	ADD: ASTRO DIGITAL CAI OPERATION	\$515.00	\$386.25	\$1,158.75
1g	3	CA01598AB	ADD: AC LINE CORD US	-	-	-
1h	3	CA01942AA	ADD: DC CORD	\$55.00	\$41.25	\$123.75
1i	3	G51AT	ENH: SMARTZONE OPERATION APX	\$1,500.00	\$1,125.00	\$3,375.00
1j	3	QA01749AB	SW KEY SUPPLEMENTAL DATA	-	-	-
1k	3	G361AH	ADD: P25 TRUNKING SOFTWARE	\$300.00	\$225.00	\$675.00
2	3	HKN6233A	ASSEMBLY.ACCESSORY.APX CONSOLETT RACK MOUNT TRAY HARDWARE KIT	\$200.00	\$150.00	\$450.00

Total Quote in USD






\$20,805.00

PO Issued to Motorola Solutions Inc. must:

- >Be a valid Purchase Order (PO)/Contract/Notice to Proceed on Company Letterhead. Note: Purchase Requisitions cannot be accepted
- >Have a PO Number/Contract Number & Date
- >Identify "Motorola Solutions Inc." as the Vendor
- >Have Payment Terms or Contract Number
- >Be issued in the Legal Entity's Name
- >Include a Bill-To Address with a Contact Name and Phone Number
- >Include a Ship-To Address with a Contact Name and Phone Number
- >Include an Ultimate Address (only if different than the Ship-To)
- >Be Greater than or Equal to the Value of the Order
- >Be in a Non-Editable Format
- >Identify Tax Exemption Status (where applicable)

>Include a Signature (as Required)

Save Confirm Price Begin Checkout

Product & Availability		Extended Price	Order by UPC	Customize Worksheet			
Delete		TESSCO PART NO.	QTY	DESCRIPTION	UOM	EXPECTED AVAILABILITY (QTY, MM/DD) (/yts/ecom/help/ead.html)	YOUR PRICE* (/yts/ecom/help/pricepolicy.html)
<input type="checkbox"/>		342034 (/products/displayProductInfo.do?sku=342034)	2	Fast Ethernet over T1 Intelligent Converter Mfr: RAD Mfr P/N: RICI-T1 <i>This is a non-cancellable, non-returnable item.</i>	1 EACH	2 NOW	514.28
<input type="checkbox"/>		67527 (/products/displayProductInfo.do?sku=67527)	3	138-174 MHz Unity Gain Dipole Antenna Mfr: Telewave, Inc. Mfr P/N: ANTI150D	1 EACH	3 NOW	284.06
<input type="checkbox"/>		363264 (/products/displayProductInfo.do?sku=363264)	3	20' LMR400 Jumper NM - NF Mfr: Ventev Mfr P/N: LMR400NMNF-20	1 EACH	3 NOW	33.47
<input type="checkbox"/>		344589 (/products/displayProductInfo.do?sku=344589)	3	15' LMR400 Jumper NM - NF Mfr: Ventev Mfr P/N: LMR400NMNF-15 <i>This is a non-cancellable, non-returnable item.</i>	1 EACH	3 12/30 View Alternatives (/products/altItem.do?itemId=714518&ols=3)	27.86
<input type="checkbox"/>		362507 (/products/displayProductInfo.do?sku=362507)	1	Boot Assembly (4\" data-bbox="195 305 225 325"/>	1 EACH	1 NOW	13.77

¹ Prices are shown in the currency of the account.

Worksheet Summary¹

Delivery Options For In-stock Items*

<input type="radio"/> Mon, 12/21/15	205.77	-0.00	=	205.77
<input type="radio"/> Tue, 12/22/15	130.22	-0.00	=	130.22
<input type="radio"/> Wed, 12/23/15	43.33	-0.00	=	43.33
<input checked="" type="radio"/> Mon, 12/28/15	26.27	-26.27	=	0.00
Weight : 38.10 lbs				

Product Subtotal	2078.50
Guaranteed Delivery (/yts/customerservice/delivery_returns/pdg/pdg.html)	26.27
Delivery Savings	-26.27
Order Total	2078.50

*Some items on this order are not currently in stock. Your final delivery charges and date(s) may be different based upon shipping options that you choose after you click the "Continue" button.

This represents a copy of your worksheet on Friday, December 18, 2015. Please note that availability of products in this worksheet are subject to change and pricing is only valid through the current calendar month.

Save Confirm Price Begin Checkout

See more

(/products/productsuggestionsdisplay.js)

 **Live Chat**
Click to Start

LTAC5E

	User Total	PTT Total	Usage
State Agencies - MN	37	1988	1.2%

Federal Agencies	96	26333	15.9%
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Non Metro Agencies	182	19592	11.8%
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Metro Agencies	333	117897	71.1%
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Total			
	165810	100%	

LTAC6E

	User Total	PTT Total	Usage
State Agencies - MN	39	2000	1.2%

Federal Agencies	95	26327	15.9%
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Non Metro Agencies	181	19586	11.8%
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Metro Agencies	333	117897	71.1%
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Total			
	165810	100%	

LTAC7E

	User Total	PTT Total	Usage
State Agencies - MN	12	843	2.0%

Federal Agencies	48	13244	31.6%
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Non Metro Agencies	119	6084	14.5%
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Metro Agencies	108	21789	51.9%
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Total			
	41960	100%	

LTAC8E

	User Total	PTT Total	Usage
State Agencies - MN	22	4382	4.7%

Federal Agencies	40	41055	44.2%
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Non Metro Agencies	113	17244	18.6%
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Metro Agencies	82	30201	32.5%
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Total			
	92882	100%	

2015 SHSP Grant

STATE HOMELAND SECURITY PROGRAM GRANT PROGRAM

APPLICATION INFORMATION SHEET

Grant Program Title: 2015 SHSP Grant – Federal Funds

Applicant (Regional Board Name)

Name: **METROPOLITAN EMERGENCY SERVICES BOARD**

Address: **2099 UNIVERSITY AVE W**

SAINT PAUL, MN 55111

Phone: **651-643-8398**

Applicant Contact (must be an individual of the representative County/Tribal Government)

Name: **TROY P. TRETTER**

Address: **2099 UNIVERSITY AVE W**

SAINT PAUL, MN 55111

Phone: **651-643-8398**

E-mail: **ttretter@mn-mesb.org**

Application Date: **1/26/2016**

Amount Requested: **\$ 25,000**

Preliminary proposal from vendor is needed.

Detailed Narrative Description of Proposed Project(s) Include detailed project timelines.

The Metropolitan Emergency Services Board's funding priorities for the 2015 grants are as follows:

- Motorola IP Simulcast Training (Course ACS715217)
- Metro Region Dispatcher Scenario Training
- TIC Plan Maintenance
- IPAWS Software
- Portable Tower
- Non-ARMER interoperability infrastructure

If awarded the metro allocation of the 2015 SHSP grant, the MESB will use the SHSP grant funds for the top three priorities listed above.

The MESB would use \$22,000 towards training. The MESB would provide a Motorola training class for metro region radio technicians. Ideally this class will be held in third quarter 2016 or fourth quarter 2016, which would meet the grant termination deadline of December 1st 2016; exact dates are subject to Motorola Training availability. The MESB is already hosting this training in July 2016 using other grant funds, but the class is restricted to 12 students. Many metro agencies have more than one technician who needs this training, thus the MESB would use SHSP grant funds to hold a second course. This training meets Minnesota SCIP Training Goal One by providing technical training for the correct operation and maintenance of communications equipment and reinforces the skills of metro region radio technicians. This meets 'Priority 1: Training and Exercises' of the 2015 SHSP investment hierarchy.

The MESB is currently hosting dispatcher scenario training in April and May 2016. Training is limited to 2 per PSAP and agencies have expressed great interest in sending more students. The Metro CRTF (Communications Response Task Force) is comprised of an Incident Dispatcher Team (IDT). Formal training, Incident Dispatcher: All Risk / All Hazard by First Contact 9-1-1 LLC, has conducted the training for the Metro region in 2013. Use of grant funds has been used for this training in the past. These meets 'Priority 1: Training and Exercises' of the 2015 SHSP investment hierarchy.

The MESB would use \$1,750 towards exercises. The Metro CRTF conducts a full-scale exercise annually, a contractor assists with the planning and execution of the exercise. Meals are provided for the exercise as well. The exercise is generally conducted 2nd or 3rd quarter. Grant funds have been used in the past to support CRTF / Metro region exercises. This meets 'Priority 1: Training and Exercises' of the 2015 SHSP investment hierarchy.

The MESB would use \$1,250 for CASM and TICP maintenance. This amount is 5% of the 2015 SHSP \$25,000 requested amount. The Metro area has the largest amount of CASM data, and maintaining the data is beyond the workload capability of the full time MESB staff, a contractor has been maintaining the data under the guidance of the MESB. The MESB publishes quarterly updates to the regional TICP, maintaining this document is above the capability of the full time MESB staff, a contractor has been maintaining the data under the guidance of the MESB. This meets 'Priority 5: Planning' of the 2015 SHSP investment hierarchy.

STATE HOMELAND SECURITY PROGRAM GRANT

APPLICATION INFORMATION SHEET

Continued

Project Budget Elements:

This section of the application should include detail cost items for each county included in the regional application, as follows:

Number	Item	Cost Per Item	Total Cost
	Radio Console		
	Radio Console Replacements		
	Control Stations (backup or for non-Motorola implementation)		
	PSAP to ARMER Backbone Connection		
	Microwave Connection		
	Other connection		
	ARMER Backbone sites in county		
	Added Radio Channels		
	Added Base Radio Sites		
	Added ARMER RF Equipment		
	Added Microwave		
	New/Rebuilt Tower Site		
	Training		\$22,000
	Exercises		\$1,750
	Planning		
	Other (specify) Mgmt. /Admin.		\$1,250
	Total Cost		\$25,000

**Minnesota Department of Public Safety
Division of Emergency Communication Networks**

**NOTICE OF GRANT OPPORTUNITY
FY2016**

2015 Homeland Security Grant Program (SHSP)

**Federal Funds
Interoperable Communications Projects**

As part of the FY2015 Homeland Security Grant Program (SHSP), \$800,000.00 has been awarded to DECN. Fifty thousand dollars will be allocated to DPS-ECN for M&A and planning costs. Twenty-five thousand dollars will be distributed to each region to be used for training and/or exercises. The remaining five hundred and seventy-five thousand dollars will be available to regions on a competitive grants process in order to continue the investment in Strengthening Interoperable Communication Systems. SHSP funds have been allocated to Homeland Security and Emergency Management regions or individual counties and earmarked for Interoperable Communication planning since the FY2007 SHSP grant process for this purpose.

Minnesota Statute §403.36, subdivision 1g provides that the Statewide Emergency Communications Board (SECB), which has been designated as Minnesota's State Interoperable Executive Committee (SIEC) shall "advise the commissioner of the Department of Public Safety on public safety communications interoperability and on the allocation and use of funds made available to Minnesota to support public safety communications interoperability." Information on the SECB procedures to fulfill this requirement is available on the SECB website (<https://dps.mn.gov/divisions/ecn/Pages/default.aspx>) under "Grants."

ELIGIBLE APPLICANTS

Each of the following regional emergency services board/regional emergency communications boards (ESB/ECB) are eligible to make application through e-grants under this grant:

- Northeast MN Emergency Communications Board
- Northwest MN Emergency Communications Board
- Central Emergency Services Board
- South Central MN Regional Emergency Communications Board
- Southwest MN Emergency Communications Board
- Southeast MN Emergency Communications Board
- Metropolitan Emergency Services Board

This is a competitive grant. All interested regions will submit an application to the Division of Emergency Communication Networks by 3:00 p.m., January 29, 2016. All regional requests will be reviewed by the Grants Work Group and grants will be awarded based upon alignment of the region's goals with the SECB's Goals and Initiatives for the next 5 years.

Based upon the Investment Hierarchy that was approved by the Grant Work group for the 2015 SHSP, the priorities for this grant are:

Priority	Purpose
Priority 1	Training and Exercises
Priority 2	ARMER Integration Costs (Infrastructure Enhancements)
Priority 3	Local ARMER Integration Costs (Subscriber Equipment)
Priority 4	Other Non-ARMER Interoperability Infrastructure (must be consistent with the SCIP)
Priority 5	Planning

The Grants Workgroup unanimously decided that in order to prevent individual entities from becoming dependent on State funding, there is a matching fund requirement for equipment that is two times the amount of the state grant. Invoices and proof of payment must demonstrate that the agency paid the equivalent.

Sub grantees may utilize a total of 5% of the total awarded amount towards the Management and Administrative category. This includes the original \$25,000 that will be allocated to the regions for Training and Exercises. If a sub grantee believes that this amount will not cover these costs, they may apply for more funding in the planning category.

A detailed Investment Hierarchy is available in e-grants.

Tribal governments should pass a resolution to move to ARMER, submit an approved full participation plan and join their Regional Emergency Services Board/Regional Emergency Communications Boards (ESB/ECB). They should participate in the Regional Advisory Committee (RAC) meetings and the Regional Users and Owners and Operators meetings.

PROJECT DATES (PERFORMANCE PERIODS)

The funds available for this purpose must be encumbered through a fully executed grant no later than March 31, 2016. The grant performance period will extend through December 01, 2016. The grant period cannot be extended.

In order to ensure all funds are spent and not returned to HSEM the Grants Work Group has decided that if, by July 1, 2016, the applicant(s) that are awarded the funding are unable to provide adequate documentation that the funds will be spent by the projected deadline OR the Grants Work Group representative feels that their assigned region cannot fulfill their obligation of spending the awarded monies, the unallocated monies will revert back to ECN for further re-distribution. Re-distribution of these funds will be decided upon by the Grants Work Group and based upon applications originally on file.

Any funds not anticipated to be expended by December 01, 2016 will revert to HSEM.

MATCH REQUIREMENTS

The matching fund requirement is two times the amount of the state grant. Other state funds CANNOT count toward the matching fund requirement. Matching funds may consist of cash and/or in-kind contributions. You must include a detailed description of each match source in the application budget.

PROJECT GOALS

The funding goal of this grant is to provide funds to assist counties and tribal governments to achieve regional funding priorities. Regions need to continually adjust their funding priorities based upon changes in interoperability needs and training requirements. These funding priorities should follow closely along with the Statewide Emergency Communications Board 5 year plan.

APPLICATION PROCESS

Applications must be submitted as follows:

Paper submissions: Division of Emergency Communication Networks
Department of Public Safety
445 Minnesota Street, Suite 137
St. Paul, MN 55101
Attn: Statewide Interoperability Program Manager

e-mail submissions: david.denton@state.mn.us

APPLICATION DEADLINE

All county or tribal government applications for interoperable communication funding under this grant must be submitted to the Division of Emergency Communication Networks by 3:00 p.m. on January 29, 2016.

APPLICATION PROCESS

ADDITIONAL GRANT CRITERIA

The following additional considerations will be applicable to this grant process:

- Grant funds cannot be used to meet a match requirement under any other state or federal grant program.
- Applications must be consistent with the participation plans approved for counties and other local units of government within each region.
- Due to the variability and speculative nature of costs provided to counties in their participation plans, costs may be assigned to various infrastructure elements required for local integration to the ARMER system.
- All other terms and conditions for SHSP apply (see <http://www.fema.gov/fy-2014-homeland-security-grant-program>).

- Applicants must demonstrate the ability to meet the match requirements as set forth by the Grants Work Group.
- Applicants must demonstrate a clear plan to expend the requested funds within the grant performance period.
- Applicants must have a plan showing that the allocated funding will be spent by December 01, 2016.
- In order to ensure all funds are spent and not returned to HSEM the Grants Work Group has decided that if, by July 1, 2016, the applicant(s) that are awarded the funding are unable to provide adequate documentation that the funds will be spent by the projected deadline OR the Grants Work Group representative feels that their assigned region cannot fulfill their obligation of spending the awarded monies, the unallocated monies will revert back to ECN for further re-distribution.
- Re-distribution of these funds will be decided upon by the Grants Work Group based upon the original applications on file.

APPLICATION CONTENT

The application will consist of an applicant information sheet, a narrative attachment, a comprehensive project budget and description of the projects alignment with SCIP priorities. Any proposal that does not include the following components will not be considered for funding.

1. *Applicant Information Sheet:*

The information required in this section is specified in the attached Application Information Sheet. This information is necessary to administer the application process, to assure that any questions concerning an application are promptly addressed, and to assure prompt notification of applicants concerning the application.

2. *Project Overview:*

This section of the application should provide a detailed description of the proposed project(s) for the county or tribal government based upon details provided in each county or tribal government's approved full participation plan. Note: The short timelines do not allow time to seek additional follow up information from applicants.

3. *Project Budget Elements:*

This section of the application should include detail cost items for each county included in the regional application, as follows:

Number	Item	Cost Per Item	Total Cost
	Radio Console		
	Radio Console Replacements		
	Control Stations (backup or for non-Motorola implementation)		

	PSAP to ARMER Backbone Connection		
	Microwave Connection		
	Other connection		
	ARMER Backbone sites in county		
	Added Radio Channels		
	Added Base Radio Sites		
	Added ARMER RF Equipment		
	Added Microwave		
	New/Rebuilt Tower Site		
	Training		
	Exercises		
	Planning		
	Other (specify)		
	Total Cost		

Additional items may be listed separately, including description and estimated cost, but may not necessarily be used as a basis for the allocation of funds to the region.

4. *Other Relevant Information:*

The applicant should provide a detailed explanation of any other information that might be relevant in the evaluation of the grant proposal.

Applicants may be required to provide additional information including but not limited to equipment pricing proposals, the basis for any cost estimates and application for other grants that may be relevant to the consideration of an application.

REPORTING REQUIREMENTS

Grantees will be required to submit Interoperable Communication-Grant Project Status Reports quarterly and will be subject to verification of grant project status throughout the term of the project in addition to audit and reporting requirements contained in the standard grant agreement.

Grantees will also be required to submit a detailed invoice when submitting a request for payment.

Investment Hierarchy

Grants Workgroup Review Rating Form (Step3)

FY2015 SHSP

Applicant projects should fit within the scope of the priorities listed below. This hierarchy pertains to this grant only. The matching fund requirement for equipment is two times the amount of the state grant. Invoices and proof of payment must demonstrate that the agency paid the equivalent.

Priority 1 Training & Exercises

Training and exercise events that enhance the abilities of emergency responders to achieve seamless interoperable communications. Examples are ARMER Train the Trainer; Refresher ARMER Train the Trainer, System Admin Training; Dispatch training; ICS/Communication Workshops; Radio Programming; ICS 300; Interoperability Conference; CASM training; tabletop exercises for planned events, dispatch exercises.

*NOTE: All training costs must be **pre-approved** by the DECN per HSEM requirements. Forms can be found on the ECN website.*

Priority 2 ARMER Integration Costs (Infrastructure Enhancements):

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

Priority 3 Local ARMER Integration Costs (Subscriber Equipment)

Investments in end-user subscriber equipment that is required for users to utilize the ARMER system. Includes radios, control stations and equipment in PSAPs to deal with site trunking. (Only SHSP Grants can be used to purchase radios)

Priority 4 Other ARMER Interoperability Infrastructure (must be consistent with the SCIP)

Infrastructure investments which generally enhance radio interoperability but do not provide any material enhancement to the performance of the ARMER backbone. Examples include indoor BDAs for public safety sites such as LECs, jails or courthouse and schools only.

Priority 5 Planning

Associated costs for planning events. Examples are Food and Beverages provided at meetings; contractor fees; and employee labor costs for administrating grant applications.

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

Document Section:	1 - Management	Radio TOC Recommendation
Sub-Section:	METRO 1.5.2	Date: 5/24/01
Procedure Title:	Revisions and Changes	
Date Established:	3/19/01	MESB Approval - Signature:
Replaces Document Dated:	11/30/11	
Date Revised:	1/27/16	Date: 06/01/01

1. Purpose or Objective

The purpose of this section is to set forth the process by which changes to METRO region radio operating procedures will be solicited, evaluated, and adopted for implementation.

2. Technical Background:

- **Capabilities** N/A
- **Constraints** N/A

3. Operational Context:

The Metropolitan Emergency Services Board (MESB) is charged with setting standards and determining protocols and procedures for the smoothest possible operations between and among the users of the shared region-wide 800 MHz digital trunked public safety radio system.

METRO region radio system users fall into multiple groups:

- Full participants in the shared ARMER infrastructure within the METRO region.
- ARMER users from other regions transiting into and through the METRO region.
- Conventional users who will have access to the regional system by utilizing interoperability equipment that has been designed into the system.

The ability to communicate among and between these multiple groups is possible due to the interoperational hardware and software installed on the region-wide system. The improper use of this equipment can have minor to grave consequences. These standards, policies and procedures have been set forth by teams consisting of radio users and managers from all groups so as to provide optimum service to the citizens of the metropolitan area, while minimizing potential negative consequences. Therefore, changes must not compromise the integrity of the Regional Public Safety system or any of its participants.

4. Recommended Protocol/ Standard:

All operational and technical changes that require a change to the METRO region ARMER Standards, Protocols, and Procedures, or otherwise impact system users must be evaluated and approved through this change management process.

5. Recommended Procedure:

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Whenever possible, major operational and technical changes will be made on an 18-24 month cycle or longer to allow users to match their subscriber radio maintenance cycle to the major change cycle and to minimize the number of times that major changes need to be incorporated. The MESB will determine when a new change planning process needs to be initiated based on synchronizing with similar Statewide Emergency Communications Board (SECB) processes. Minor changes may be made at any frequency.

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Solicit & Evaluate

- Change proposals may be submitted at any time. Proposals should be submitted through the proposer's subsystem owner or regional subscriber contracting entity. Change proposals should be submitted on a standard form provided on the MESB or SECB website, and shall include a proposed implementation plan.
- Once a change planning process has been initiated, MESB staff will collect suggestions for changes from subsystem owners and regional subscribers and will present the collected suggestions to the next scheduled meeting of the RTOC who shall determine if the proposed changes are major or minor.

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Minor changes have one or more of the following characteristics:

1. Minor changes affect a relatively small number of users or are contained to a small portion of the region.
2. Minor changes generally do not contain mandates for other users.
3. Minor changes do not require significant retraining of other users.
4. Minor changes whose costs are accepted by the user.

Major changes have one or more of the following characteristics:

1. Major changes impact the majority of users in the region.
 2. Major changes impact users in adjoining regions.
 3. Major changes mandate the placement of resources in communications equipment.
 4. Major changes require revisions to operational procedures.
 5. Major changes require updated dispatcher and/or user training.
 6. Major changes require reprogramming of console and subscriber equipment.
- Minor changes may be referred by the RTOC to the Regional Radio Services Coordinator, Emergency Communication Networks (ECN's) metro Regional Interoperability Coordinator, and others as necessary for evaluation and recommendation. The Coordinators shall perform the necessary evaluation and recommend changes to the RTOC. The RTOC may elect to vet the request through additional Committees or other user groups. Upon receipt of a recommendation from the RTOC, the Board may approve or deny the requested change.
 - Major changes shall be held by the RTOC until such time as the RTOC determines that the number and importance of proposed major changes warrants the initiation of a major change process. At such time, the RTOC will direct MESB staff to notify stakeholders that a major change cycle is beginning through a notice published on the MESB website and distributed to all subscriber agencies.

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- The solicitation period should last **at least three months** to allow sufficient time for proponents to submit change proposals through their subsystem owner or regional subscriber contracting entity.
- At the close of the solicitation period, MESB staff will schedule presentations by the major change proposers to the RTOC. Change proposals will be made available for public review on the MESB website at least one week prior to the RTOC meeting.
- The RTOC shall consider the proposed changes and determine which proposals have sufficient need and benefit to warrant further evaluation. If the RTOC determines that a change proposal does not warrant evaluation, and rejects the proposal, the proponent of the change request may appeal the decision as per MESB Standard 7.3.0.
- Change proposals selected for further evaluation shall be assessed to discover and document the impacts of each proposed change, including the impacts of the proposed transition plan. The RTOC may exclude any of the following assessments or may add other assessments, depending upon the nature and complexity of the change proposals. For complex assessments, the MESB may utilize a professional facilitator to expedite the process.
 1. Facilitated focus groups of discipline specific users (such as fire, police, EMS)
 2. Table top scenarios conducted by the METRO Communications Response Task Force including creation of ICS205s to test proposed revisions
 3. Tactical Interoperability Communications Plan (TICP) conformity review
 4. Cost/benefit analysis
 5. MnDOT technical review for backbone impacts
 6. Interoperability Subcommittee review and comment
 7. Training needs assessment
 8. Other stakeholder review groups
- The assessment process must be completed within 90 days of initiation of assessment. Input received after 90 days may still be considered, but consideration is not guaranteed. The request for assessment from the RTOC is not asking for a recommendation on the change proposal, but is meant to review how the proposed change will impact operations, finances, training, etc.
- Once all assessments are received or 90 days has passed, MESB staff and the facilitator will assemble the comments and prepare a summary document for public review and comment.

Plan & Approve

- The completed change proposals should be vetted by all MESB member entities and regional subscriber agencies. The discipline associations (Police Chiefs, Fire Chiefs, Sheriffs, Metro Region EMS' Communications Subcommittee, state agencies, etc.) and other interested stakeholders shall be notified of the pending changes and shall be afforded an opportunity to provide comments. MESB staff along with regional or discipline association representatives to the MESB Committees and working groups will be responsible to facilitate this review and discussion. MESB staff will provide a summary of all comments received.

- If there is a cost to implement the change proposals, MESB staff will forward the recommendations through the Executive Committee who will be responsible for determining how the costs should be allocated.
- Once the cost allocation is approved or if there are no costs to allocate, MESB staff will present the change proposals to the RTOC for final review and recommendation. The MESB staff summary shall include a draft change plan addressing comments received.
- The RTOC shall review the comments, recommend approval or denial of each change proposal, and create an overall change plan for approval by the Board.
- The change plan including transition steps and schedules will be made available for review and comment prior to presentation to the Board.
- The Board shall review the recommendations of the RTOC and may approve the change recommendations, reject the change recommendations, or return the recommendation to committee for further review.

Create & Implement

- This phase will vary in length depending upon the transitional plan adopted by the Board. The change plan may also involve multiple changes on different implementation schedules.
- Activities in this phase may include code plug development, radio programming, procedure writing and implementation, training development and implementation, physical construction, equipment replacement, or other activities as outlined in the change plan. Entities named in the plan will be responsible for completing the changes in the plan as per the approved schedule and reporting their status in writing to the MESB.
- MESB staff will report on the status of the implementation to the Board, including any waivers filed under Metro Standard 1.5.3.

6. Management

The Executive Director and staff of the Metropolitan Emergency Services Board, acting on behalf of the board, will manage this process.

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

Document Section:	3. Interoperability Guidelines	Radio TOC Recommendation
Sub-Section:	METRO 3.10.0	Date: 3/26/08
Procedure Title:	Recommended Interoperability Channels & Talkgroups for U.S. Government Radios	
Date Established:	3/5/08	MESB Approval - Signature:
Replaces Document Dated:	4/8/13	
Date Revised:	1/27/16	Date: 4/16/08

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1. Purpose or Objective

To establish policy for recommended interoperability channels and talk groups for U.S. Government radios.

2. Technical Background:

▪ **Capabilities**

These channels and talk groups can be programmed into user VHF, UHF and 800 MHz ARMER radios, incident command posts and emergency operations centers. These nationwide, statewide and region-wide channels and talk groups can meet a wide range of interoperability needs and can function as the primary communications component in local, regional, statewide and national plans.

▪ **Constraints**

The availability of and the use of these channels and talk groups must be easily understood by radio user personnel who are primarily concerned with their mission and not with the operation of radios under stressful conditions. Because U.S. Government agencies may need to work with any local agency in any part of the state, it is highly recommended that when agencies purchase 800 MHz ARMER system radios, they obtain radios that have displays, are capable of DES-OFB encryption, and allow a minimum of 10 zones.

3. Operational Context:

These channels and talk groups can be used to facilitate communications among agencies and service branches that typically do not communicate with each other on a regular day to day basis and to support effective command and management of major incidents under the NIMS protocols.

4. Recommended Protocol/ Standard:

It is recommended that U.S. Government agencies program selected nationwide, statewide and region-wide interoperability channels into their day to day VHF and UHF radios that can be patched to the ARMER trunked system. It is also recommended that U.S. Government agencies each acquire a small quantity of 800 MHz P25 trunked radios for use on the ARMER trunked system and direct interoperability with state and local users. A list of recommended shared interoperability resources is attached to this Standard. Specific programming information will be provided to the federal agency's technical personnel upon request.

5. Recommended Procedure:

Best Practices Encouraged

All agencies are encouraged to follow practices outlined by the U.S. Department of Homeland Security SAFECOM Program. Key elements of SAFECOM include:

- Regional and statewide interoperability SOPs for incident response should be developed and should be molded to conform to the elements of the National Incident Management System.
- Users should be provided with regular comprehensive training on the interoperability SOPs.
- Interoperability SOPs should be tested through realistic exercises to address potential problems.
- The interoperability systems and SOPs should be used every day for managing routine as well as emergency incidents requiring interoperability. In this optimal solution, users are familiar with the operation of the system and routinely work in concert with one another.
- Trained Communications Unit Leaders should be developed to assist with incident pre-plans and to provide on-scene incident support by managing communications and apply available technical solutions at larger or unexpected interoperability incidents.

6. Management

The MESB's Radio Technical Operations Committee and the Interoperability Subcommittee will periodically review and update the recommended resource listing attached to this document.

VHF CHANNELS

<u>HIGHLY RECOMMENDED</u>	<u>ELIGIBILITY</u>
FEDCOM-MP	ALL FEDERAL DEPARTMENTS
FEDCOM-SP	ALL FEDERAL DEPARTMENTS
VCALL10	ALL FEDERAL DEPARTMENTS
VTAC14R	ALL FEDERAL DEPARTMENTS
LE-2	LAW ENFORCEMENT ONLY
IR-2	ALL FEDERAL DEPARTMENTS
VLAW31	LAW ENFORCEMENT ONLY
VTAC11	ALL FEDERAL DEPARTMENTS
<u>OPTIONAL</u>	<u>ELIGIBILITY</u>
VTAC12	ALL FEDERAL DEPARTMENTS
VTAC13	ALL FEDERAL DEPARTMENTS
VTAC14	ALL FEDERAL DEPARTMENTS
MNCOMM	ALL FEDERAL DEPARTMENTS
VFIRE23	FIRE SUPPRESSION ONLY
VMED28	MEDICAL ONLY
HTAC-3	PUBLIC SAFETY ONLY

UHF CHANNELS

<u>HIGHLY RECOMMENDED</u>	<u>ELIGIBILITY</u>
UTAC41	ALL FEDERAL DEPARTMENTS
LE-12	LAW ENFORCEMENT ONLY
IR-12	ALL FEDERAL DEPARTMENTS
<u>OPTIONAL</u>	<u>ELIGIBILITY</u>
UCALL40	ALL FEDERAL DEPARTMENTS
UCALL40D	ALL FEDERAL DEPARTMENTS
UTAC41D	ALL FEDERAL DEPARTMENTS
UTAC42	ALL FEDERAL DEPARTMENTS
UTAC42D	ALL FEDERAL DEPARTMENTS
UTAC43	ALL FEDERAL DEPARTMENTS
UTAC43D	ALL FEDERAL DEPARTMENTS

700 MHz CONVENTIONAL CHANNELS

<u>HIGHLY RECOMMENDED</u>	<u>ELIGIBILITY</u>
7SOA1	ALL USERS
7SOA2	ALL USERS
7SOA3	ALL USERS
7SOA4	ALL USERS
7SOA5	ALL USERS
7SOA6	ALL USERS
7SOA7	ALL USERS
7SOA8	ALL USERS
7SOA9	ALL USERS
7SOA10	ALL USERS
7SOA11	ALL USERS
7SOA12	ALL USERS

ARMER 800MHz CONVENTIONAL CHANNELS AND TALKGROUPS

<u>CONVENTIONAL</u>	<u>ELIGIBILITY</u>
8CALL90	ALL USERS
8CALL90D	ALL USERS
8TAC91	ALL USERS
8TAC91D	ALL USERS
8TAC92	ALL USERS
8TAC92D	ALL USERS
8TAC93	ALL USERS
8TAC93D	ALL USERS
8TAC94	ALL USERS
8TAC94D	ALL USERS
8SOA1	ALL USERS
8SOA2	ALL USERS
8SOA3	ALL USERS
8SOA4	ALL USERS
FSOA-1	FIRE/EMS ONLY
FSOA-2	FIRE/EMS ONLY
<u>STATEWIDE TALKGROUPS</u>	<u>ELIGIBILITY</u>

Deleted: Due to the Statewide and Regional Change Management processes, some talkgroup names will be changed effective November 22, 2013, but will not necessarily be changed in all radios and consoles at that time. Agencies must reprogram radios and consoles with the new naming by June 26, 2015. Dual-naming will be in place in consoles from November 22, 2013 – June 30, 2015. The names and eligibility effective after November 22, 2013 are in brackets [XXXX].¶

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LTAC1	LAW ENFORCEMENT ONLY
LTAC2	LAW ENFORCEMENT ONLY
LTAC3	LAW ENFORCEMENT ONLY
LTAC4	LAW ENFORCEMENT ONLY
STAC1	ALL USERS
STAC2	ALL USERS
STAC3	ALL USERS
STAC4	ALL USERS
STAC5	ALL USERS
STAC6	ALL USERS
STAC7	ALL USERS
STAC8	ALL USERS
STAC9	ALL USERS
STAC10	ALL USERS
STAC11	ALL USERS
STAC12	ALL USERS
STAC13E	ENCRYPTED ALL USERS
STAC14E	ENCRYPTED ALL USERS
BCATAC7	LAW ENFORCEMENT ONLY
LTAC5E	ENCRYPTED LAW ENFORCEMENT ONLY
LTAC6E	ENCRYPTED LAW ENFORCEMENT ONLY
LTAC7E	ENCRYPTED LAW ENFORCEMENT ONLY
LTAC8E	ENCRYPTED LAW ENFORCEMENT ONLY
SIU1E	ENCRYPT. LAW ENF. TASK FORCE ONLY
SIU2E	ENCRYPT. LAW ENF. TASK FORCE ONLY
SIU3E	ENCRYPT. LAW ENF. TASK FORCE ONLY
SIU4E	ENCRYPT. LAW ENF. TASK FORCE ONLY
SEMTAC	All USERS
MDH-EM1	PUBLIC HEALTH – REQUIRES PERMISSION
MDH-EM2	PUBLIC HEALTH – REQUIRES PERMISSION
<u>METRO REGION TALKGROUPS</u>	<u>ELGIBILITY</u>
ME TAC1	PUBLIC SAFETY ONLY
ME TAC2	PUBLIC SAFETY ONLY
ME TAC3	PUBLIC SAFETY ONLY
ME TAC4	PUBLIC SAFETY ONLY
ME TAC5	ALL USERS
ME TAC6	ALL USERS
ME TAC7	ALL USERS

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Deleted: FTAC2 [...TAC6]	...
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Deleted: FIRE ONLY [ALL USERS]	
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Deleted: FIRE ONLY [ALL USERS]	
Deleted: ETAC1 [...TAC9]	...
Deleted: EMS ONLY [ALL USERS]	
Deleted: ETAC2 [...TAC10]	...
Deleted: EMS ONLY [ALL USERS]	
Deleted: ETAC3 [...TAC11]	...
Deleted: EMS ONLY [ALL USERS]	
Deleted: ETAC4 [...TAC12]	...
Deleted: EMS ONLY [ALL USERS]	
Deleted: [...TAC13E]	...
Deleted: [...NCRYPTED ALL USERS]	...
Deleted: [...TAC14E]	...
Deleted: [...NCRYPTED ALL USERS]	...
Deleted: LETAC1 [...TAC5E]	...
Deleted: LETAC 2 [...TAC6E]	...
Deleted: LETAC3 [...TAC7E]	...
Deleted: LETAC4 [...TAC8E]	...
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Deleted: LESIU2 [...JU2E]	...
Deleted: LESIU3 [...JU3E]	...
Deleted: LESIU4 [...JU4E]	...
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Deleted: PTAC3 [...E TAC3]	...
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Deleted: ATAC1 [...E TAC5]	...
Deleted: ATAC2 [...E TAC6]	...
Deleted: ATAC3 [...E TAC7]	...

ME TAC8	ALL USERS
METPH1	PUBLIC HEALTH ONLY
METPH2	PUBLIC HEALTH ONLY
METPH3	PUBLIC HEALTH ONLY
METPH4	PUBLIC HEALTH ONLY
ME RVR HAIL	PUBLIC SAFETY ONLY
ME RVR OPS	PUBLIC SAFETY ONLY
METEM	ALL USERS
<u>CENTRAL REGION TALKGROUPS</u>	<u>ELIGIBILITY</u>
CM CALL	ALL USERS – REQUIRES PERMISSION
CM 2	ALL USERS – REQUIRES PERMISSION
CM 3	ALL USERS – REQUIRES PERMISSION
CM 4	ALL USERS – REQUIRES PERMISSION
CM 5	ALL USERS – REQUIRES PERMISSION
CM 6	ALL USERS – REQUIRES PERMISSION
CM 7	ALL USERS – REQUIRES PERMISSION
CM 8	ALL USERS – REQUIRES PERMISSION
CM 9	ALL USERS – REQUIRES PERMISSION
CM 10	ALL USERS – REQUIRES PERMISSION
CM 11	ALL USERS – REQUIRES PERMISSION
CM 12	ALL USERS – REQUIRES PERMISSION
<u>NORTHEAST REGION TALKGROUPS</u>	<u>ELGIBILITY</u>
NE CALL	ALL USERS – REQUIRES PERMISSION
NE 2	ALL USERS – REQUIRES PERMISSION
NE 3	ALL USERS – REQUIRES PERMISSION
NE 4	ALL USERS – REQUIRES PERMISSION
NE 5	ALL USERS – REQUIRES PERMISSION
NE 6	ALL USERS – REQUIRES PERMISSION
NE 7	ALL USERS – REQUIRES PERMISSION
NE 8	ALL USERS – REQUIRES PERMISSION
NE 9	ALL USERS – REQUIRES PERMISSION
NE 10	ALL USERS – REQUIRES PERMISSION
NE 11	ALL USERS – REQUIRES PERMISSION
NE 12	ALL USERS – REQUIRES PERMISSION
<u>NORTHWEST REGION TALKGROUPS</u>	<u>ELGIBILITY</u>

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NW CALL	ALL USERS – REQUIRES PERMISSION
NW 2	ALL USERS – REQUIRES PERMISSION
NW 3	ALL USERS – REQUIRES PERMISSION
NW 4	ALL USERS – REQUIRES PERMISSION
NW 5	ALL USERS – REQUIRES PERMISSION
NW 6	ALL USERS – REQUIRES PERMISSION
NW 7	ALL USERS – REQUIRES PERMISSION
NW 8	ALL USERS – REQUIRES PERMISSION
NW 9	ALL USERS – REQUIRES PERMISSION
NW 10	ALL USERS – REQUIRES PERMISSION
NW 11	ALL USERS – REQUIRES PERMISSION
NW 12	ALL USERS – REQUIRES PERMISSION
<u>SOUTH CENTRAL REGION TALKGROUPS</u>	<u>ELIGIBILITY</u>
SR CALL	ALL USERS – REQUIRES PERMISSION
SR 2	ALL USERS – REQUIRES PERMISSION
SR 3	ALL USERS – REQUIRES PERMISSION
SR 4	ALL USERS – REQUIRES PERMISSION
SR 5	ALL USERS – REQUIRES PERMISSION
SR 6	ALL USERS – REQUIRES PERMISSION
SR 7	ALL USERS – REQUIRES PERMISSION
SR 8	ALL USERS – REQUIRES PERMISSION
SR 9	ALL USERS – REQUIRES PERMISSION
SR 10	ALL USERS – REQUIRES PERMISSION
SR 11	ALL USERS – REQUIRES PERMISSION
SR 12	ALL USERS – REQUIRES PERMISSION
<u>SOUTHEAST REGION TALKGROUPS</u>	<u>ELIGIBILITY</u>
SE CALL	ALL USERS – REQUIRES PERMISSION
SE 2	ALL USERS – REQUIRES PERMISSION
SE 3	ALL USERS – REQUIRES PERMISSION
SE 4	ALL USERS – REQUIRES PERMISSION
SE 5	ALL USERS – REQUIRES PERMISSION
SE 6	ALL USERS – REQUIRES PERMISSION
SE 7	ALL USERS – REQUIRES PERMISSION
SE 8	ALL USERS – REQUIRES PERMISSION
SE 9	ALL USERS – REQUIRES PERMISSION
SE 10	ALL USERS – REQUIRES PERMISSION
SE 11	ALL USERS – REQUIRES PERMISSION
SE 12	ALL USERS – REQUIRES PERMISSION
SE 13	ALL USERS – REQUIRES PERMISSION
SE 14	ALL USERS – REQUIRES PERMISSION

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SE 15	ALL USERS – REQUIRES PERMISSION
<u>SOUTHWEST REGION TALKGROUPS</u>	<u>ELIGIBILITY</u>
SW CALL 1	ALL USERS – REQUIRES PERMISSION
SW TAC2	ALL USERS – REQUIRES PERMISSION
SW TAC3	ALL USERS – REQUIRES PERMISSION
SW TAC4	ALL USERS – REQUIRES PERMISSION
SW TAC5	ALL USERS – REQUIRES PERMISSION
SW TAC6	ALL USERS – REQUIRES PERMISSION
SW TAC7	ALL USERS – REQUIRES PERMISSION
SW TAC8	ALL USERS – REQUIRES PERMISSION
SW TAC9	ALL USERS – REQUIRES PERMISSION
SW TAC10	ALL USERS – REQUIRES PERMISSION
SW TAC11	ALL USERS – REQUIRES PERMISSION
SW TAC12	ALL USERS – REQUIRES PERMISSION
SW TAC13	ALL USERS – REQUIRES PERMISSION

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METRO REGION

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

Document Section:	3. Interoperability Guidelines	Radio TOC Recommendation:
Sub-Section:	METRO 3.22.0	Date: 3/26/08
Procedure Title:	Use of Mobile/Portable Gateways to Connect to Fixed Network Interoperability Resources	
Date Established:	3/5/08	MESB Approval - Signature:
Replaces Document		
Dated:	3/5/08	
Date Revised:	1/27/16	Date: 4/16/08

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1. Purpose or Objective:

Establish a policy and procedure for the use of mobile/portable audio gateway devices when interconnecting to ARMER conventional or trunked shared resources.

2. Operational Background:

▪ Capabilities

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

GATEWAY NAME	VENDOR	FUNCTIONALITY
ACU-1000	Raytheon JPS Communications	Audio Gateway
ICRI	Communications Applied Technology	Audio Gateway
RIOS Portable	SyTech Corporation	Audio Gateway
SmartMSG	Codespear	VoIP/Network
TCB	Link Communications	Audio Gateway
VIPER	Telex Communications	Audio Gateway
Transpeater III	Transcrypt International	Audio Gateway
Tiger	Microvoice Corporation	Audio Gateway
Motobridge	Motorola	VoIP/Network
Wave for LMR	Twisted Pair	VoIP/Network
IPICS	Cisco	VoIP/Network

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▪ Constraints

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

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

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

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

3. Operational Context:

Patching disparate radio systems is essential to facilitate interoperability between users that do not have compatible radio equipment. The preferred method of patching is currently the use of a fixed gateway (dispatch console) which is hardwired to the radio infrastructure needing to be patched. Such patches are commonly established between ARMER trunked talk groups and the metro region ARMER conventional interoperability system (VMED28, VLAW31, etc.) This method of patching is effective when all end users are within the coverage range of the radio infrastructures involved in the patch.

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

4. Recommended Protocol / Standard:

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

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5. Recommended Procedure:

An agency desiring to implement a mobile/portable audio gateway patch for a pre-planned event should prepare an Incident Communications Plan using an ICS-205 form indicating the resources to be patched. If the agency does not have a certified COML or COMT, it should

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request assistance from a certified COML from the subsystem owner it will be connecting to or from the MESB. The COML will be responsible to review the proposed patch to determine that it will not cause interference. The COML will also be responsible to notify the appropriate dispatch center responsible to update the status board application to indicate the resources are reserved for use.

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

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

- Mobile/portable gateway patches should only be setup by a trained gateway operator that is familiar with the equipment and the resources to be patched.
- Radio resources should only be contained in a single patch in a single mobile/ portable gateway. "Daisy chaining" resources across multiple gateways, e.g. a talk group to a conventional channel in one gateway and the same conventional channel patched to a different talk group in a second gateway should not be attempted due to poor performance.
- Radio ports should be configured for COR detect rather than VOX whenever possible to reduce the problem with loss of the first few syllables.
- Prior to establishing the patch the gateway operator should make an announcement on the applicable resources that a patch is being setup.
- Upon connecting the patch the gateway operator should test the patch end to end to verify acceptable performance.
- If performance is poor, the gateway operator will make any necessary adjustments to audio levels, delay timers, tone control, etc.
- The gateway operator will make an announcement that the patch is setup and ready for use.

- The gateway operator will monitor the performance of the patch while it is in use.
- Once the patch is no longer needed the gateway operator will announce that the patch is being removed and will disconnect the patch.

6. Management:

The metro region TIC Plan will contain a list of certified COMLs ~~and COMTs~~ which may be consulted regarding the use of mobile/ portable gateways. The System Managers Group will have the responsibility to investigate and resolve problems associated with the use of mobile/ portable audio gateways.

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

Document Section:	3-Interoperability Guidelines	Radio TOC Recommendation
Sub-Section:	METRO 3.23.0	Date:
Procedure Title:	Connecting to the 800 MHz System	
Date Established:	3/16/01	MESB Approval - Signature:
Replaces Document		
Dated:	4/4/08	
Date Revised:	1/27/16	

1. Purpose or Objective

Procedure for connecting to the metro region 800 MHz radio system.

2. Operational Background:

▪ **Capabilities**

Users of conventional radios may communicate with radio users on the regional 800 MHz trunked radio system.

▪ **Constraints**

Conventional radio system users may only communicate on those common conventional radio channels that they are permitted to transmit on and available on an 800MHz console via a soft patch.

3. Operational Context:

The communications pathways may be used for day to day coordination, for urgent or emergency mutual aid situations, for task forces, tactical teams, and for other purposes. No new equipment is required; existing conventional radios can be used.

4. Recommended Protocol/ Standard:

Permission from the MESB is **not** required to communicate by means of the existing conventional channels, such as VLAW31, VMED28, VFIRE23 or MNCOMM. Conventional radio system users throughout the state of Minnesota (and many government conventional radio system users in Wisconsin) already have these frequencies in their radio systems. The specific frequency, or frequencies, in that list that are authorized for use in the radios depends upon the service of the owner agency for the radios.

5. Recommended Procedure:

Dispatch centers may request that conventional radio users switch to VLAW31, VMED28, VFIRE23 or MNCOMM. If the designated channel has not been installed in the mobile or portable radio being used, the radio user must inform the dispatch center operator of that fact.

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Deleted: <#>Base radio stations may not be added on the METTAC channels in geographic areas beyond the metro counties as the frequencies used for those channels are used elsewhere in greater Minnesota. ¶

¶ Installation of new mobile and portable radios is not required as existing radio equipment can be used. However, use of the system can be enhanced by taking several steps:¶

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Dispatch centers may attempt to select another interoperability resource that the radio user has available.

6. Management

Overall management of the regional public safety radio system is the responsibility of the Metropolitan Emergency Services Board, with operational management the responsibility of the Minnesota Department of Transportation.

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Deleted: The specific frequency, or frequencies, for the existing channels MINSEF (MINSF VLaw31), National EMS (EMS VMed28), Statewide Fire Mutual Aid (SwFIRE VFire23) or MIMS are authorized for use in radios by the managing agency for the specific channel:¶

- ¶ National EMS (EMS VMed28),¶
- Statewide Radio Board¶
- MINSEF (MINSF VLaw31) ¶
- .Statewide Radio Board¶
- Statewide Fire Mutual Aid (SwFIRE VFire23)¶
- Statewide Radio Board¶
- MIMS-VHF¶
- .Statewide Radio Board¶

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

Document Section:	3 - Interoperability Guidelines	Radio TOC Approval –
Sub-Section:	METRO 3.24.0	
Procedure Title:	RF Control Stations	Date: 5/24/01
Date Established:	1/30/01	
Replaces Document Dated:	9/24/08	MESB Approval - Signature:
Date Revised:	1/27/16	Date: 06/01/01

1. Purpose or Objective:

Establish procedures for the use RF control stations for various purposes. Establish procedures for use of the limited-800MHz participating agency PSAP 911 hailing talkgroups.

2. Operational Background:

▪ **Capabilities**

A RF control station is a radio transmitter and receiver that is set up with the same transmission and reception capabilities as a mobile radio or a portable radio. A RF control station, however, is used at a fixed location and is not moved.

The Metropolitan Emergency Services Board (MESB) is providing two radio control stations to each of the limited-800 MHz participating PSAP centers in the metropolitan area. A PSAP 911 hailing talkgroup is also created for each of these limited-participating agencies for agencies to be able to contact the PSAPs as needed for interoperability.

▪ **Constraints**

The talk group that is operated using radio communications control console electronics can function on one trunked radio system talk group only.

Care in design must be exercised when multiple RF control stations are used at the same physical location to limit the amount of intermodulation interference generated.

Use of RF control stations to patch regional 800 MHz talk groups to VHF, UHF, or other 800 MHz radio systems, may have a region-wide impact. This type of patch can be easily accomplished, but may cause harmful interference under certain circumstances.

The PSAP 911 hailing talkgroups are not for normal business operations, they are intended for interoperability between agencies. The number of PSAPs creates a significant number of talkgroups, which can make the radio channel lineup planning more complex.

3. Operational Context:

There are a number of uses for RF control stations including:

- An agency that does not have a dispatch center, such as a fire department that is remotely dispatched or a public works department may use a RF control station to communicate

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with the network. Normally that would be a RF control station that is surface mounted and has a means for controlling one of multiple talk groups.

- RF control stations may be used to gain access to the regional 800 MHz trunked radio system from a dispatch center that is on a radio system other than the new regional system.
- RF control stations may be used for day-to-day purposes, for urgent or emergency situations, for task teams and for other purposes.
- An individual hailing talkgroup has been created for every limited-800 MHz participating PSAP in the metropolitan area, the IDs for these talkgroups have been pre-planned to facilitate agencies in their radio programming planning.
- The MESB is providing two radio control stations to each of the limited-800 MHz participating PSAP centers in the metropolitan area. One of the two stations is intended to be on the PSAP 911 hailing channel for that agency, the other is for the agency to be able to initiate communications with other agencies as needed.

4. Recommended Protocol/ Standard:

- Use of RF control stations is recommended to gain access to the regional 800 MHz trunked radio system network by radio user agencies that are not on the regional system. Agencies desiring to initiate manual or permanent patches from trunked RF control stations to other radio resources must be pre-approved by the owner of the resource in accordance with *Metro Standard 1.10.1 Requesting Participation*.
- Use of RF control stations for backup dispatching may be permitted, and it is an optional use determined by each agency. Some agencies may elect to use portable radios in portable radio battery chargers for this backup capability.
- Use of RF control stations by an agency without a dispatch center may be permitted and is an optional choice for radio user agencies that are served by the regional 800 MHz trunked radio system.
- Use of RF control stations by agencies that have a dispatch center on the regional 800 MHz trunked radio system at locations away from the dispatch center may be permitted, and is an optional selection available to each agency.
- Use of RF control stations rather than microwave for dispatch center access to the regional 800 MHz radio system by subscriber agencies may be permitted if there is a design that will limit the intermodulation products in an acceptable manner.
- A small number of RF control stations may be permitted at a single location provided that care in design is exercised to limit intermodulation products (see ARMER Standard 1.7.0 for specific design requirements). Multiple RF control stations can be used for day-to-day communications, for urgent or emergency situations, for communications with task teams and for other purposes.
- An individual PSAP 911 hailing talkgroup will be created for each limited-800MHz participating agency PSAP in the metropolitan area.

- These talkgroups can be patched by the PSAP agencies to conventional infrastructure as needed to meet the communications needs of an event involving multiple agencies.

Talkgroup Sharing / Eligibility:

- The PSAP 911 hailing talkgroups are optional and available for any public safety agency for programming into their radios.
- Non-public safety agencies are at the discretion of the individual PSAP for which that talkgroup is the 911 hailing channel, as defined in ARMER Standard 2.7.0 “Shared Talkgroups”.

5. Recommended Procedure:

- Any agency that wishes to use more than one RF control station at one location shall only be permitted to use that configuration if the design is compliant with ARMER Standard 1.7.0. The process for obtaining permission will be to submit an application for multiple RF control stations to the System Managers Group (SMG). The application will describe the location and use of each control station and make it clear that the multiple RF control station configuration design meets the criteria in ARMER Standard 1.7.0.
- No permission will be required for an Authorized User that wishes to purchase and use a single RF control station on the regional 800 MHz trunked radio system. However, the RF Control Stations must meet the standards for radio equipment operating on the regional 800 MHz trunked radio system as defined in ARMER Standard 1.7.0.
- Non-participating or unauthorized radio users will need to obtain permission from the MESB before installing a RF control station.
- Talk groups that can be accessed using RF control stations shall be governed by the permission granting process for shared talk groups in ARMER Standard 2.7.0.

- The regional 800 MHz radio system includes an extensive VHF interoperability system for VLAW31, VMED28, MNCOMM have several voting receivers throughout the region, and a series of transmitters that are manually steered by a system dispatch console position operator. A regional 800 MHz trunked radio system RF control station may **not** be patched to any of these VHF radio channels at any dispatch center.

- MIMS and Statewide EMS/HEAR have several voting receivers, but only one transmitter site. Use of this site will result in high signal level radio coverage over an area greater than the nine county service area of the regional 800 MHz trunked radio system. In some cases, use of a patch between a regional 800 MHz RF control station and a local agency’s transmitter on one of these channels, may be desirable to minimize the radio coverage area. If an agency desires approval to perform this type of patch, that agency must submit a plan describing the intended use to the Radio Technical Operations Committee, and receive approval.

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- In some situations, there may be operational reasons to permanently/hard patch a local conventional radio channel to a regional 800 MHz system RF control station. Normally this type of patch should only be used if other suitable means for interagency communicating are insufficient for the need. If an agency desires approval to perform this type of patch that agency must submit a plan describing the intended use to the Systems Managers Group (SMG) and receive approval.
- The transmit and receive audio on RF control stations may be logged by the owner of the RF control station.
- Control stations/PSAP 911 hailing talkgroups can be used as a transition stage for an agency in the process of converting its communications operations to 800MHz trunking.
- The PSAP 911 hailing talkgroups can be used as dispatch “Point to Point” communications with the permission of the owning agency.

6. Management:

All dispatch center operators shall be trained on the use of RF Control Stations and there shall be continuing training to maintain a good level of understanding of the procedures by all dispatch center operators.

The owners of RF control stations on the regional 800 MHz radio system will be permitted to obtain mobile radio licenses for those stations.

The PSAP 911 hailing talkgroups will be created and administered by the MnDOT 800MHz System Administrator.

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

Document/ Section:	3 - Interoperability	Radio TOC Recommendation
Sub-Section:	METRO 3.27.0	Date: 1/26/05
Procedure Title:	Use of the MRCC Talk Groups	
	- WMRCC, EMRCC	
Date Established:	12/16/02	MESB Approval - Signature:
Replaces Document		
Dated:	4/22/10	
Date Revised:	1/27/16	Date: 2/4/05

1. Purpose and Objective:

To establish operational policy for use of the Medical Resource Control Center (MRCC) related talk groups. These EMS talk groups are a regional EMS system resource to facilitate communications with the West Metro MRCC located at Hennepin County Medical Center and the East Metro MRCC located at Regions Hospital for the purpose of patient care and EMS resource coordination.

2. Technical Background

• **Capabilities**

To enable EMS personnel operating in the metro region to contact West and East Metro MRCCs. The MRCC is an EMS communications resource for the purpose of EMS incident coordination, relay of patient care information, obtaining physician medical control or system medical direction, cross patch of radio and/or telephone communications, assignment of **ME TAC's, STAC's** and other shared EMS resources or any other operational needs as required and allowed by system policy.

• **Constraints**

3. Operational Context:

EMS personnel operating in the metro region may use West and East Metro MRCCs as an EMS communications resource for the purpose of EMS incident coordination, relay of patient care information, obtaining physician medical control or system medical direction, cross patch of radio and/or telephone communications, assignment of **ME TAC's, STAC's** and other shared EMS resources or any other operational needs as required and allowed by system policy.

• **WMRCC & EMRCC Talk Groups**

The MRCC talk groups are the primary 800 MHz communications channel between EMS personnel in the field and the MRCCs. Requests for and communications with the MRCCs shall be initiated on this talk group. Personnel calling the MRCCs should clearly identify their service, unit number, and request. MRCC operators will direct communications to other talk groups if necessary and as appropriate.

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- **SMRCC Talk Group**

SMRCC is a statewide hailing talkgroup for EMS agencies in Greater Minnesota to contact the MRCCs. Refer to State Standard 3.36.0 for information on the use of the statewide resource SRMCC.

- **XP1 and XP2**

MRCXP1 and MRCXP1 are statewide resources available for patching. Refer to State Standard 3.36.0 for information on the use of these resources.

4. Recommended Protocol/ Standard:

Talk Group requirements:

- ☒ Highly Recommended for All EMS
- ☐ Recommended for _____
- ☐ Optional for _____
- ☐ May not be used by: _____

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These talkgroups shall be in the MRCC consoles.

East and West MRCCs jointly controls/manage day to day operations

East and West MRCC control the site during an event or emergency

All EMS agencies should utilize these talkgroups.

5. Recommended Procedure:

N/A

6. Management:

Both the West and East Metro Medical Resource Control Center's will be responsible for monitoring and controlling communication traffic on WMRCC and EMRCC EMS talk groups. The MRCC operators will ensure that policies related to the provision of a regional 24/7/365 EMS communications access point are followed; this includes but is not limited to monitoring and responding appropriately to radio traffic and performing radio patches as required and authorized.

West and East MRCCs work in collaboration and are in constant contact. The MRCCs back each other up in various failure scenarios and work together to create a seamless communication environment for the EMS field personnel that use these talkgroups.

Operational responsibility and performance monitoring shall be a function of the MRCC Supervisor or Manager.

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

Document/ Section:	3. Interoperability Guidelines	Radio TOC Recommendation
Sub-Section:	METRO 3.34.0	Date: 4/22/09
Procedure Title:	Metropolitan Region Cache Radio Standard Programming	
Date Established:	3/4/09	MESB Approval - Signature:
Replaces Document		
Dated:	4/24/13	
Date Revised:	1/27/16	Date: 6/3/09

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1. Purpose and Objective:

To establish policy & procedures for the programming and use of metro region ARMER system cache radios to promote consistency of use and to minimize usage conflicts when an interoperability talk group is needed for an event.

The cache radios are to be a metro-wide resource to facilitate communications between agencies that typically do not communicate with each other on a regular basis or may have a shortage of radios for a large scale or mutual aid incident. These radios are typically reserved for use for intercommunication when coordination of activities between personnel of different agencies is needed for an incident or event.

2. Technical Background:

- **Capabilities -**
Shared interoperability talkgroups exist for the purpose of providing communications within and among ARMER system radio users. These talkgroups can be programmed into user radios including cache radios. .
- **Constraints -**
ARMER system radios have a finite number of programmable talkgroups. In many ARMER radios these talkgroups are organized into zones. Some ARMER radios have fewer zones than others. Recommendations for the standardization of zones of interoperable talkgroups in cache radios are difficult when different types of radios are part of the radio cache.

3. Operational Context:

It is important when radios are deployed to make sure that users are not changing the assigned zone. It is not permissible to have one branch of public safety / public service use a zone not assigned.

For cache radios having fewer than three zones it is recommended that as many as possible of the talkgroups in the zones listed below be programmed into the radios.

All SOAs can be used in the State of Minnesota only.

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The following section shows several tables of talkgroups. The first set of tables shows zones that are highly recommended under this standard until November 22, 2013. The second set shows two zones that are required in all radios and one that is highly recommended after November 22, 2013.¶

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The ATACs and PTACs [will be ME TAC 1-8 after November 22, 2013] listed are Metro Region only.¶

Deleted: Due to State and Regional Change Management processes, most of the talkgroup names below have been changed. The changes will take effect November 22, 2013, but will not necessarily be changed in all radios and consoles at that time. Agencies must reprogram radios and consoles with the new naming by June 26, 2015. Dual-naming will be in place in consoles from November 22, 2013 – June 30, 2015.¶

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Until November 22, 2013¶
Position

4. Recommended Protocol/ Standard:

State

Talkgroup requirements:

<u>Requirements</u>	<u>For Whom?</u>
Mandatory	None
Highly Recommended	800MHz cache radios–Branch Specific Incident Command Zones
Optional	National Zone
Not Allowed	N/A

Cross Patch Standard:

Refer to individual talkgroup standards for patching availability.

*Denotes required zone

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The Statewide Radio Board has implanted State Standard 3.16.6 which requires two interoperability zones to be programmed into all radios. Some radios have limited capacity and will not be capable of having these zones programmed. If so, a variance must be filed with the Statewide Radio Board.¶

Statewide Interop*			Conventional Interop*		
Zone Display Name	Channel Selector	Channel Display Name	Zone Display Name	Channel Selector	Channel Display Name
MN	1	STAC1	8C	1	8CALL90
MN	2	STAC2	8C	2	8TAC91
MN	3	STAC3	8C	3	8TAC92
MN	4	STAC4	8C	4	8TAC93
MN	5	STAC5	8C	5	8TAC94
MN	6	STAC6	8C	6	8CALL90D
MN	7	STAC7	8C	7	8TAC91D
MN	8	STAC8	8C	8	8TAC92D
MN	9	STAC9	8C	9	8TAC93D
MN	10	STAC10	8C	10	8TAC94D
MN	11	STAC11	8C	11	8SOA1
MN	12	STAC12	8C	12	8SOA2
MN	13	STAC13E**	8C	13	8SOA3
MN	14	STAC14E**	8C	14	8SOA4
MN	15		8C	15	FSOA1***
MN	16		8C	16	FSOA2***

**STAC 13E and STAC 14E are required in those radios equipped with Data Encryption Standard (DES).

***FSOA1 and FSOA2 are restricted to Fire and Emergency Medical Service (EMS) radios only.

All cache radios in the metropolitan region are *highly recommended* to have the following zone programmed:

Metro Regional Interop		
Zone Display Name	Channel Selector	Channel Display Name
ME	1	ME TAC1
ME	2	ME TAC2
ME	3	ME TAC3
ME	4	ME TAC4
ME	5	ME TAC5
ME	6	ME TAC6
ME	7	ME TAC7
ME	8	ME TAC8
ME	9	
ME	10	
ME	11	
ME	12	
ME	13	
ME	14	
ME	15	
ME	16	

5. Recommended Procedure:

Cache radios capable of three or more zones should be programmed consistent with the talkgroup requirements specified in Section 4. Radios with fewer than three zones should be programmed with as many as possible of the talkgroups listed in Section 4.

Cache radios should be issued with the appropriate service branch zone enabled.

Cache radios should be reported in the TIC Plan.

Fleetmap documentation **must** be included with the radio cache for deployment purposes.

6. Management:

System managers and sub-system managers are responsible for the proper programming and reporting of cache radios as specified above.

Communications Leaders (COMLs) or their designee(s) are responsible for the enabling of the appropriate service branch zone when cache radios are disbursed at a critical incident.

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

Document Section:	5—System Access by NGOs	Radio TOC Approval:
Sub-Section:	METRO 5.2.0	Date: 04/23/03
Procedure Title:	Disaster Relief Organization Access	
Date Established:	2/26/03	MESB Approval - Signature:
Replaces Document		
Dated:	1/20/09	
Date Revised:	1/26/2016	Date: 05/02/03

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1. Purpose or Objective

To establish a policy that provides for non-government organizations (NGOs) providing disaster relief services to be included as “Authorized Users” of the regional 800MHz trunked digital public safety radio system for communications services.

2. Policy Background:

NGOs providing disaster relief services are defined as “Eligible Users” of the regional 800MHz trunked digital public safety radio system as provided for in section 90.20(a)(2)(vii) of the FCC Rules and Regulations. The Board is empowered under Minn. Stats. §473.894 Subd. 15 to enter into system use agreements with such eligible NGOs for inclusion in the system.

3. Operational Context:

An umbrella organization entitled “Minnesota Voluntary Organizations Active in Disaster” (MnVOAD) has approximately 30 member organizations which provide a broad mission in times of emergency and disaster. Services ~~provided~~ by MnVOAD member organizations include:

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Advocacy for Victims	Financial Assistance
Bulk Distribution of Goods	Financial Planning
Case Management	Funeral Services
Child Care	Health Care
Clean-Up & Rebuilding	International Relief
Community Outreach	Mass Care
Counseling	Massage Therapy
Damage Assessment	Mental Health Services
Debris Removal	Mitigation Planning
Disaster Education	Mobile & Fixed Feeding
Disaster Planning	Organizational Mentoring
Donations Management	Pastoral Care/Chaplaincy
Elder Care	Pet & Animal Care
Emergency Assistance	Radio Communications
Emergency Repairs	Relocation Services

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Resource Coordination
Sanitation Services
Special Needs
Technical Assistance
Training
Translation Services
Transportation Services

Volunteer Coordination
Volunteer Services
Warehouse Facilities
Welfare Inquires (Int'l)
Welfare Inquires (US)

Two member organizations (the American Red Cross and the Salvation Army) provide initial response disaster services to both large scale and smaller scale emergencies occurring in the community. These organizations often work directly with public safety agencies. Other MnVOAD members are not normally mobilized until a substantial disaster has occurred. Since MnVOAD radios may be deployed elsewhere in the country for disaster response they should be equipped with 700 MHz and 800 MHz nationwide interoperability channels.

4. Recommended Protocol/ Standard:

MnVOAD and its member disaster relief organizations will be authorized to use the system for the following types of communications: Government Agency to MnVOAD members; MnVOAD members to Government Agency; MnVOAD members to other MnVOAD members; and internal MnVOAD member communications. All communications using the system shall be limited to the protection of life and property, emergency situations, disaster relief planning, response, mitigation, recovery and related supporting operations including planned drills. Internal day to day, administrative and other non-disaster relief related communications are not permitted.

Assignment of priorities and use of the system by MnVOAD members for internal MnVOAD communications will be considered "Public Service" and "Non-Critical Operations" as defined in Appendix 2 of the Board's Standards.

The following four priority 7 talk groups will be established for internal MnVOAD operations: DRO-1, DRO-2, DRO-3 and DRO-4. These talk groups will not be capable of encryption. DRO 1 will be assigned as primary use by the American Red Cross Disaster Services and DRO 2 by the Salvation Army Disaster Services. DRO-3 and DRO-4 will be assigned as needed by MnVOAD. Operation on other public safety, public service and interoperability talk groups by MnVOAD members will be at the direction of the Responsible Government Official coordinating the incident. It is recommended that MnVOAD radios be equipped with the following capabilities:

DRO-1	8 SOA1
DRO-2	8 SOA2
DRO-3	8CALL90
DRO-4	8TAC91
ME TAC5	8TAC92
ME TAC6	8TAC93
ME TAC7	8TAC94
ME TAC8	

STAC1	8CALL90 D
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STAC2	8TAC91 D
STAC3	8TAC92 D
STAC4	8TAC93 D
	8TAC94 D

5. Recommended Procedure:

MnVOAD shall enter into a User Agreement with the Board. MnVOAD shall be responsible to coordinate all use of the system by MnVOAD members. Individual MnVOAD members shall sign a Memorandum of Understanding, on a form approved by the Board, with MnVOAD agreeing to comply with the Board's Standards, MnVOAD's User Agreement with the Board, and Board approved Standard Operating Procedures for disaster relief organization use of the system prior to use of the system. The User Agreement shall specify the maximum number of radios that may be owned by MnVOAD and its members and activated on the system. The User Agreement shall also specify enforcement provisions including consequences of misuse.

The acquisition cost of radio equipment for use of the system is the responsibility of MnVOAD and its member organizations. There will be no access fee charged by the Board for access to the system, however, users may be responsible for the actual costs associated with programming the radios to operate on the system and Board assessed User Fees. The Board shall designate an entity or entities to perform the programming.

The Board or any Authorized User, at their discretion, may loan, lease or otherwise temporarily provide radios to MnVOAD or any other eligible disaster relief organization for the authorized purposes provided for within this Standard.

The talk groups programmed in MnVOAD radios shall be limited to those specified within this Standard, the User Agreement and those additional public safety talk groups that have been authorized by the respective agencies owning those talk groups.

6. Management

The staff of the Metropolitan Emergency Services Board shall manage the User Agreement process and maintain a list of DROs that have been approved to use the system. Billing users for the cost of programming shall be the responsibility of the programming entity.

The Minnesota Department of Public Safety, Division of Homeland Security and Emergency Management is the lead agency for planning and coordination of MnVOAD communications operations. MnVOAD radios shall be considered part of the State of Minnesota subscriber fleet for purposes of FCC licensing. Radio IDs will be allocated by MnDOT

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Subject: Sperry Tower Removal and Replacement

Greetings,

As some of you may know the Sperry Water Tank located at 1420 Towerview Road in Eagan will be dismantled and a new, taller replacement communications tower will be constructed in its place. This project is planned to commence in early 2016 and is estimated to be completed in the late third quarter or early fourth quarter of 2016. When the new tower is standing and the County's equipment is operational on it, performance is predicted to be better than what now exists on the water tank.

During this construction project the radio and paging equipment will need to be taken off-line for short periods of time. These outages will be coordinated with dispatch personnel to insure no major incidents radio traffic is affected.

The project will also require a temporary antenna configuration which will reduce the radio and paging coverage foot print provided by this site while demolition and new construction is underway. The City has elected to erect two temporary towers to support the relocation of antenna configurations of the current tenants during the project. These temporary towers will be approximately 100 feet in height. I have attached two computer generated coverage maps for the tower site for the 800 MHz coverage foot print. The first depicts the current coverage foot print, and the second is the expected coverage with the lower, 100 foot, antenna configuration.

We will continue to provide regular status updates throughout the time frame of this project. Your ongoing patience and support is appreciated during this project timeline.

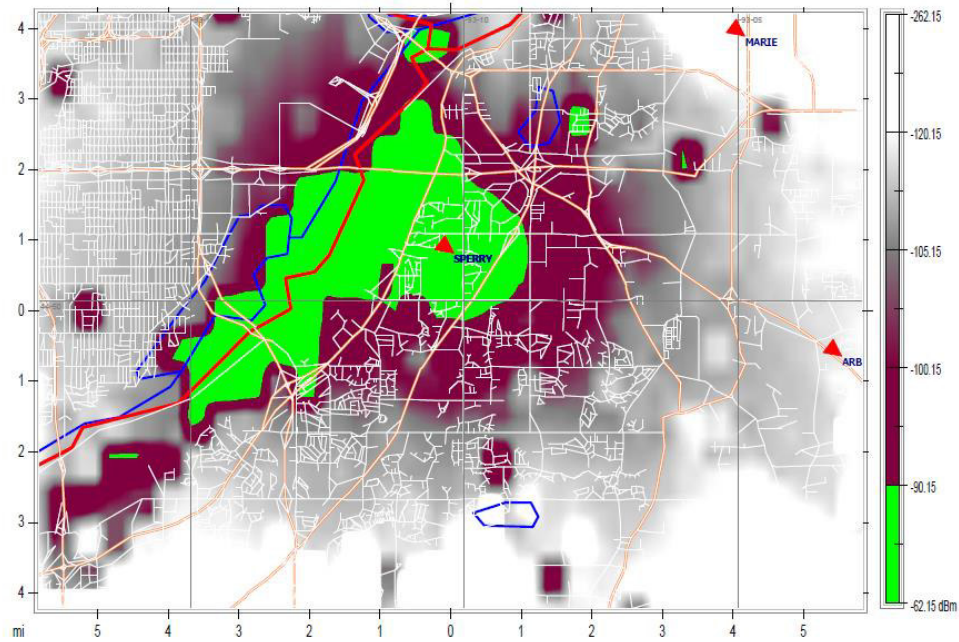
If you have any questions or concerns on this project please feel free to contact Radio Services (651) 322-8632.

DAKOTA SUBNET MN

PORTABLE INDOORS

MEDIUM BUILDING

PSC Alliance Inc. (612) 216-1502



With Sperry at Top of Tank - Downlink

Map Scale: 1:101916 1" = 1.61 mi V/H Size: 8.40 x 11.64 mi

Portable On-Belt - 1 Mtr AGL

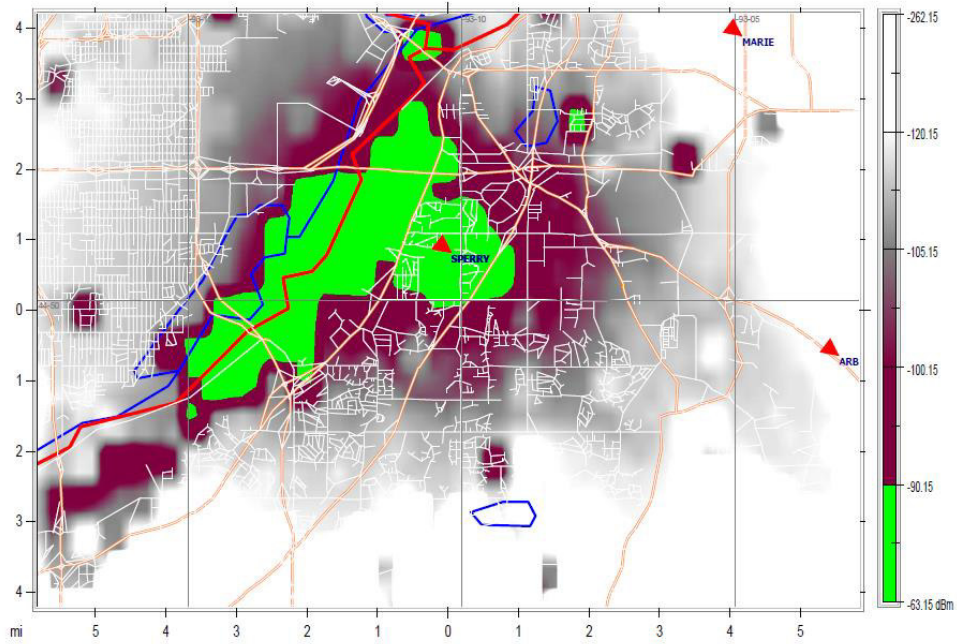


DAKOTA SUBNET MN

PORTABLE INDOORS

MEDIUM BUILDING

PSC Alliance Inc. (612) 216-1502



With Sperry at 100' - Downlink

Map Scale: 1:101916 1" = 1.61 mi V/H Size: 8.40 x 11.64 mi

Portable On-Belt - 1 Mtr AGL

Troy Tretter

From: Stromberg, James (DPS) <James.Stromberg@state.mn.us>
Sent: Thursday, January 21, 2016 10:33 AM
To: Troy Tretter
Subject: MnFOG Update

Troy:

I am seeking volunteers to serve on a workgroup to update the MnFOG. I envision this being a 6 month commitment with monthly calls, at least one in-person meeting, and some between-meetings homework. At present there are three interested persons (including me); I would like to grow the group by one or two more. Please let me know if you are interested or if you have someone in mind. Thanks!

Jim Stromberg
ARMER Program Manager / Statewide Interoperability Coordinator
State of Minnesota, Department of Public Safety, Division of Emergency Communication Networks
445 Minnesota Street, Suite 137, Saint Paul, Minnesota 55101
651-201-7557
651-296-2665 (fax)
James.Stromberg@state.mn.us
<http://ecn.dps.mn.gov>

Metropolitan Emergency Services Board Radio Technical Operations Committee

2016 Meeting Dates

Wednesday, January 27, 2016

Wednesday, February 24, 2016

Wednesday, March 23, 2016

Wednesday, April 27, 2016

Wednesday, May 25, 2016

Wednesday, June 22, 2016

Wednesday, July 27, 2016

Wednesday, August 24, 2016

Wednesday, September 28, 2016

Wednesday, October 26, 2016

Wednesday, November 16, 2016*

Wednesday, December 21, 2016*

All meetings will be at 1:00 p.m. at the Metropolitan Counties Government Center,
2099 University Avenue, St. Paul

*Meetings will be scheduled on the 3rd Wednesday for these months due to
the Thanksgiving and Christmas holidays.