METROPOLITAN EMERGENCY SERVICES BOARD

RADIO TECHNICAL OPERATIONS COMMITTEE AGENDA

Board Room, Metro Counties Government Center February 24, 2016 1:00 - 3:00 p.m.

MEMBERS:

Ulie Seal, Chair MN Fire Chiefs Association

Ron Jansen, Vice Chair Dakota County

Jake Thompson Anoka County

Tim Walsh Carver County

Rod Olson City of Minneapolis

Jon Eckel Chisago County

John Gundersen Hennepin County

Bob Shogren Isanti County

Jeff Bjorklund Metropolitan Airports Commission

Chad LeVasseur Metropolitan Council

Iver Johnson 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 January 27, 2016 Minutes
- 3. Agenda Items
 - a. Regional Encrypted Talkgroups for change management Gundersen
- 4. Moves, Additions & Changes to the System
 - a. Anoka County Water Tower Sites Repainting Thompson
 - b. Update on Removal of Voting from Interoperability System Jansen
- 5. Committee Reports
 - a. Metro Mobility System Usage Update—Chad LeVasseur/Dana Rude
 - b. System Manager's Group/Metro Owner's Group Update Jansen
 - c. Reports from SECB Committee Tretter
 - d. 2016 Interoperability Conference Tretter
- 6. Other Business
 - a. Regional Talkgroup Permissions Updates
 - b. Discussion on system capacity management
 - c. Next Meeting March 23rd (time change?)
- 7. Adjourn

Ulie Seal, Chair

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Metropolitan Emergency Services Board Radio Technical Operations Committee Meeting Notes January 27, 2016

Members Present: John Gundersen, Ron Jansen, Jake Thompson, Rick Juth, Dana Rude, Iver Johnson, Adam Pirri, Nate Timm, Peter Sather, Dave Pikal, Jon Eckel, Rod Olson, Chad LeVasseur, Jeff Bjorklund,

Guests Present: Troy Tretter; *Metropolitan Emergency Services Board*, Rick Juth; *ECN*/RIC, Victor Wanchena, Steve Ouradnik; *DOC*, John Anderson, *MnDOT*, King Fung, Curt Meyer; *HCSO*, *Mike Fink; Motorola, Marv Turner; Metro Transit Police*, xxxxx Northland Business

Call to Order: Ron Jansen called the meeting to order at 1:00 P.M. Additional item added to agenda. Hennepin County EMS found as an audit by the state as Line item N.

Agenda of the January 27, 2016 meeting.

M/S/C Motion made by John Gundersen to approve January 2016 agenda. Jake Thompson seconded. The motion carried.

Minutes of the December 16, 2015 Meeting

M/S/C Motion made by Gundersen to approve December 2015 minutes. Thompson seconded. The motion carried.

Welcome to Iver Johnson as Metro Region EMS representative.

Agenda Items

Washington County Use of 2014 SECB Grant Funds - Timm

Nate Timm had discussed his requested use of the 2014 SECB grant funds would be used to fund Washington County's VHF interoperability project with Wisconsin; that the TOC approved the technical plan for in November. He is requesting \$11,467.87 which is 50% of the project. The 50% match funds will be paid by Washington County.

M/S/C Motion made by Gundersen to approve WACO use of grant funds. Shogren seconded. The motion carried.

Jake Thompson asked if there were funds available for the request, Troy Tretter said there is \$50,000 in grant funds. The documentation is to be received from Washington County to the MESB no later than June 1, 2016.

Regional Encrypted Talkgroups for change management - Gundersen

John Gunderen briefed on that there are no regional interoperability encrypted talk groups and that the statewide LTACxE talkgroups when they are used, for task forces comprised of other counties, seem to be mostly Metro use. John said that interagency encrypted talkgroups are not a problem, that there are no shared regional talk groups that are encrypted. John said that Curt Meyer from Hennepin County has researched the reports and has updated reports from what were in the packets.

Curt Meyer from Hennepin County explained the use of the statewide LTACxE channels usage tables to members. John Gundersen added that the state technical and operational change management standards will be combined into one. Discussion from Ron Jansen that if regional encrypted talkgroups were created, what encryption standard would be used, Ron recommended to follow the same standards as the state LTACxE talkgroups.

John Gundersen discussed this going to change management at the state level and discussed the work completed by the change management standard workgroup and they would have a month or so before the change management standard was ready for the next change management cycle. Rod Olson asked if the regional encrypted talk groups would be regional or statewide, if the persons using the channel moved outside of the metro area. Tretter mentioned that if the channels were regional only is would not need to go through change management at the state level. A discussion came up about state change management solicitation needed to be in by January 31st. Ron Olson and Nate Timm asked if more METAC's were needed or just METACxE's. John Gundersen said that Hennepin County would be the lead agency to take this through change management. Questions arose if the Metro of the LTACE's use were metro agencies in the Metro area, or they moved out of the Metro area? Also, if the usage was based on Radio ID's or tower sites? John Gundersen suggested they do more research on the data and table until the next TOC.

M/S/C Motion made by Gundersen to table this discussion until next month after data is received. Timm seconded. The motion carried.

2015 SHSP Grant Submission - Tretter

Troy Tretter briefed on the 2015 SHSP grant application that will go forth to ECN. The MESB would use \$22,000 towards training. Motorola, dispatcher scenario training, IDT training. The MESB would use \$1,750 towards exercises, CRTF training and meals for the exercise. The MESB would use \$1,250 for CASM and TICP maintenance.

Nate Timm asked why there was not a request for a portable tower. Troy Tretter explained there wasn't a proposal brought forth and that there should be a workgroup to have a plan ready to submit when the next grant is available.

M/S/C Motion made by Timm to approve the 2015 SHSP grant submission. Johnson seconded. The motion carried.

Troy noted that the Motorola training dates should be listed as March. This grant is a 50% match for equipment and there have been no requests to utilize funds for equipment.

Metro Standard 1.5.2 - Revision and Changes - Tretter

Troy Tretter discussed the changes on page 2, Language changes to SECB from Statewide Radio Board, DECN to ECN and spelling out the acronym. This also is the metro change management standard. If we want to make changes on this, we can keep the language changes for now, and wait. It's up to the group, it was noted this would possibly need changes after the state revised the change management standard.

M/S/C Motion made by Gundersen to approve Metro Standard 1.5.2 revision. Bjorklund seconded. The motion carried.

Metro Standard 3.10.0 - Interop Channels & Talkgroups for US Govt. Radios - Tretter

Changes on Page 4 to the 8SOA standards, page 5, changes to update the statewide and regional talk group naming, page 6, changes to the NE Talkgroups, removing 'TAC' from the naming. Page 7, changes to the NW channel naming. This may change again based on the update to the MNFOG.

Nate Timm stated that SE TAC 14 & 15 should be encrypted.

M/S/C Motion made by Timm to approve Metro Standard 3.10.0 revision. Thompson seconded. The motion carried.

 ${\bf Metro\ Standard\ 3.22.0-Use\ of\ Mobile\ Portable\ Gateways\ to\ connect\ to\ fixed\ Network\ Interoperability\ Resources-Tretter}$

Tretter briefed on the changes: removed METTAC-P from page 2, paragraph 3. Added COMT under paragraph's 4, 5, and 6. Removed 'and individuals identified to be trained as COML's' as they are no longer listed in the regional TICP. Removed the redundancy of spelling out COML as it was already spelled out earlier in the document.

M/S/C Motion made by Gundersen to approve the changes to Metro Standard 3.22.0. Bjorklund seconded. The motion carried.

Metro Standard 3.23.0 - Conv. Users Connecting to Regional System - Tretter

Tretter briefed on the changes: updated language in paragraph 4 & 5 to the proper VHF naming language as addressed in the MNFOG. Deleted the paragraph about the management of MnDOT as managing the VHF resources as it seems redundant.

M/S/C Motion made Gundersen to approve change to 3.23.0. Thompson seconded. The motion carried. Jon Eckel stated that it was unclear what the permission was needed for.

M/S/C Motion made by Eckel to form a workgroup (Gundersen, Olson, Timm) to define permissions. Olson seconded.

Metro 3.24.0 - RF Control Stations - Tretter

Tretter briefed on the changes: VHF channel naming on page 3, and suggestion to change MnDOT 800 MHz system administrator to the local system administrator.

M/S/C Motion made by Bjorklund to change Metro Standard 3.24.0 with the above change. Gundersen seconded. The motion carried.

Metro 3.27.0 - MRCC Talkgroup - Tretter

Tretter briefed on the changes: to the remove ETAC, PTAC's and change to regional ME TAC's and STAC's, noted that in the state standard 3.36.0 addressed in the top of page 2, the SMRCC and XP1, XP2 talkgroups, are prefixed by EMS-. Noted that there is a misspelling of SRMCC at the end of the first paragraph, should be SMRCC.

M/S/C Motion made by Timm to approve Metro Standard3.27.0 changes. LeVasseur seconded. The motion carried.

Metro 3.34.0 - Cache Radio Standard - Tretter

Tretter briefed on the changes: deleted the language for the dual naming transitional period. Also, removed the language of the 2 zone interoperability, statewide and conventional. Variances with the SECB, I feel that should be added back in with just removing the 'After November 2013' language.

M/S/C Motion made by Gundersen to approve Metro Standard 3.34.0 changes. Thompson seconded. The motion carried.

Metro 5.2.0 Disaster Relief Organization Access - Tretter

Tretter briefed on the changes: updated the language to the proper metro naming and conventional channel naming.

M/S/C Motion made by Gundersen to approve Metro Standard 5.2.0 changes. Timm seconded. The motion carried.

Statusboard Recommendations - Tretter

Tretter asked members to approve statusboard recommendations to sort user accounts alphabetically and developing mobile devices app. Jansen will to take to OTC. Also it was suggested that a search field for talkgroups and users would be useful. Additional requests should be sent to Troy.

HCMC EMS AIS approval-King Fung

King Fung from Hennepin County briefed the change to the Hennepin EMS system for the addition of the AIS.

M/S/C Motion by made by Gundersen to approve HCMC EMS AIS. Thompson seconded. The motion carried.

Moves, Additions & Changes to the System

Sperry Tower Removal & Replacement - Jansen

Ron Jansen discussed they will be replacing the Sperry tower site and they will have temporary poles installed to install the radio equipment on until the work is done. Jansen referenced the information on his letter in the TOC packet.

Update on Removal of Voting from Interoperability system - Jansen

Jansen said it is on hold until after the 7.15 upgrade is complete.

Committee Reports

System Administrator Training Standard Workgroup - Thompson

Jake Thompson said the state has passed the 1.1.1 and had 4 levels of system administrators, and it suffices the need for the Metro that another standard does not need to be created for the Metro.

Metro Mobility Update - Dana Rude

ANCOM was contracted to move Dakota County to Burnsville office off the system... Base stations went in today. All the mobile radios are at the facility. They have not heard from Trapeze or Motorola regarding software changes. Tretter noted the usage for December was skewed because of an outage on their data system and that this month's totals are not accurate to normal usage by Metro Mobility.

System Managers Group/Metro Owners Group - Ron Jansen

SMG meeting this morning. 7.15 upgrade discussion. Motorola has a draft. Ron introduced John Anderson from MnDOT, the head of the SMG and that he would be attending the TOC meetings as a visitor. The next SMG Motorola will present the differences between 7.13 and 7.15. There was discussion on genesis upgrade discussion, only 1, 2 and 4 zones for Gold Elites. Discussion on VPN connection over MotoBridge, ID discussion, SUA2+, Motorola Wave. Ro

Reports from SECB Committees

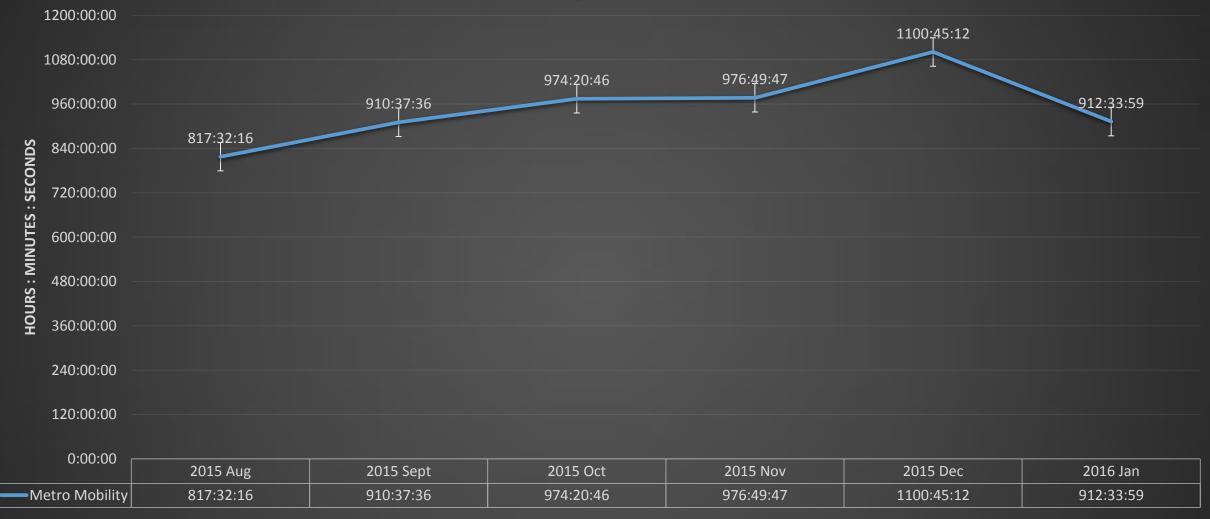
Tretter discussed a letter from Jim Stromberg, the state SWIC looking for additional volunteers to help revise the MNFOG. Nate Timm had already volunteered and Tretter asked for additional volunteers. No one else volunteered, Tretter said he would assist Nate Timm on the workgroup.

The next meeting is February 24, 2016. Meeting was adjourned at 3:04.

Metro Mobility & Transit/LRT Use January 2016 1080:00:00 912:33:59 960:00:00 840:00:00 720:00:00 **HOURS: MINUTES: SECONDS** 600:00:00 480:00:00 310:27:53 360:00:00 240:00:00 137:34:54 135:32:09 131:28:21 118:06:54 79:23:48 120:00:00 0:00:00 0:0∳:00 0:0∳:00 0:0ф.00 0:00:00

	City Center	Lino Lakes	Dakota	Norwood	Hastings	North Branch	Minneapolis	Hennepin East	Hennepin West	Ramsey	Total
—Metro Mobility	310:27:53	131:28:21	137:34:54	118:06:54	135:32:09	0:00:00	0:00:00	0:00:00	79:23:48	0:00:00	912:33:59





Break Out Session Schedule 2016 Interoperability Conference April 25-27, 2016

Breakout Session Tracks (April 26-27, 2016)

Track 1 & 2 Vendor provided training opportunities. All of the sessions in the Vendor Training Opportunities track will be presented by conference exhibitors. Sessions presented by vendor representatives may reflect to some extent vendor opinions relative to topics presented.

Track #3 Elected Officials

Session 3A Public Safety Broadband (Approaches and Status in Selected Neighboring State(s))

This break out session will focus upon the status, approach and results of the FirstNet planning and consultancy process occurring in Wisconsin, one of our neighboring states and how those efforts may interact with MN approach. As part of this session, a discussion of issues and decisions in this process that may influence interstate interoperability. This breakout session will also include a discussion of tribal governments participation in MN process where similar system interoperability issues may come up.

Session 3B Overview of SECB Committees (Role of committee and area of responsibility)

The Statewide Emergency Communication Board (SECB) has an extensive committee structure through which it processes issues before they are finally presented to the SECB for a final determination. In this breakout session a representative of each SECB committee will review the committee membership, committee's purpose and role, it's processes and other responsibilities. The focus of these presentations is to provide practical information upon how matters are presented to the committees and how they are managed.

Note: This breakout session is scheduled in Session B with an overlap into Session C to the extent necessary to cover the various SECB Committees.

Session 3C Extend Session from 3B.

Session 3D Regional Boards (Accomplishments, Initiatives & Issues)

There are seven Regional Radio Boards (RRB) in Minnesota. The implementation of ARMER with local adoptions has brought us together with a common infrastructure, there are still significant differences in how each region addresses local issues. Similarly, there are regions that have built upon this RRB structure to approach other issues. In this breakout session, a representative of each region will be ask to give an overview of

the regions accomplishments, unique initiatives and issues over the last year. They will also be asked to give an overview of the regions approach to public safety communication training and the use and allocation of grant funds.

Session 3E The role of COM-L/COM-T for Incident Managers

The breakout session is designed to provide leaders and Incident Managers with a detail overview of the role of a Communication Leader (COM-L) and Communication Technician (COM-T) in the Incident Command Structure. The breakout session will also provide an overview of resources available to the COM-L/COM-T, including Minnesota's Strategic Technology Reserve (STR) resources. With ____ certified COM-L's and ___ certified COM-T's, a statewide trunked radio system, documentation of local communication resources in CASM and STR resources the effective use and deployment of these resources, as part of the Incident Command structure is designed to minimize communication issues from any incident response.

Session 3F DHS-Region V, Interoperability, Broadband and Other Current Issues

This breakout session will provide a broad overview of the role of the various federal agencies involved in MN interoperable communications. There are similar public safety communication initiatives underway throughout DHS-Region V (Minnesota, Wisconsin, Illinois, Indiana, Ohio and Michigan) and throughout the nation. Also noted is the fact that Minnesota is bordered by two additional regions (Region VII-lowa and Region VIII-North & South Dakota) and this breakout may include information upon the interaction between those regions from that federal perspective. Topics may include discussions and issues currently considered by the National Council of Statewide Interoperability Coordinators, (which is hosting their meeting the same week as our conference), what piece of the public safety communication pie is administered by each agency.

Track #4. Technology

Session 4A Intelligence Lead Policing-Rochester Artificial Intelligence Project

Intelligence-Led Policing is a concept of local police operations articulated by Professor Jerry Ratcliffe of Temple University. Based upon that concept, the Rochester Police Department is collaborating with IBM to expand their analysis capability with new artificial intelligence software to implement the concepts of Intelligence-Led Policing. This breakout session will provide a current example of the kind of resources (applications) public safety broadband network can place in the hands of public safety officials on a day to day basis.

Session 4B MnDOT ARMER Update

This breakout session will discuss the status upcoming 7.15 upgrade (due: May 2016) and any future planned upgrades or adjustments. The panel will also provide an

updated status report on the ARMER project, overall, and discuss current issues related to the ARMER systems, operation, maintenance and status of operations from the system owner's perspective.

Session 4C Talkgroup Profiles and other Local Programming Issues

This workshop is a comprehensive discussion of ARMER system local programming issues, including talk group profiles, interpreting ARMER administrative monthly reports, provisioning manager, and radio preferences policies. As part of this discussion, panelists may review standards adopted by the Metro Region to monitor and mitigate capacity issues in their region.

Session 4D New Public Safety Equipment

This breakout session will provide an overview of broadband resources under consideration as we plan for the implementation of a public safety board band network. That network will ultimately provide us with the ability to monitor the wellbeing of responders, capture video for real time assessment and to provide real time coordination of resources. Through this breakout session, participants will be given some insight into applications and equipment that might be routinely available in the future over existing and over a public safety broadband network.

Session 4E FirstNet RFP

This breakout will provide a summary and overview of the impact of for the development of a public safety broadband network within the State of Minnesota. It will include references to the State's requirements and of the potential advantages and risks.

Session 4F BCA Fusion Center

This breakout session will highlight the role of Minnesota Fusion Center in collecting, evaluating, analyzing and disseminating information regarding organized criminal, terrorist and all-hazards activity in Minnesota. As part of this process, MN Fusion Center has faced challenges similar to those confronting PSAP's and Incident Responders of "How to we manage all this information?" and what new sources of information do we need to monitor.

Track 5 Broadband and Data (FirstNet)

Session 5A FirstNet Consultancy Process (2016)

This breakout will provide an overview of the outreach efforts that will be taken and the next steps leading to MN Opt-In/Opt-Out decision.

Session 5B Public Safety Broadband-Elk River Pilot Project

In 2015 a tabletop exercise was conducted in Elk River, MN in connection with the Elk River LTE Pilot Project. The final aspect of the pilot project was a table top exercise was conducted in conjunction with the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) Interoperable Communications Technical Assistance Program (ICTAP) involved 72 local participants from 43 different local agencies. The After Action Report and Improvement Plan from that exercise will provide the basis for the discussion of the exercise portion of this project. This breakout will review the Elk River Pilot Project and provide a summary of lessons learned in that project.

Note: May extend over into Session 5C

Session 5C Continuation of Session 5B (if needed)

Session 5D LTE Technology (Technical)

This breakout session provides a technical overview of Long Term Evolution (LTE) technology with is utilized by all major cellular carriers for 4G networks worldwide, and is the technology to be used for the Nationwide Public Safety Network. The session will include an overview of the 3GPP standards, 700 MHz\4G spectrum, LTE air interface and system architecture and LTE/SAE subsystems.

Session 5E Technical Review of Equipment Options for Wireless Data

This breakout will provide a cost benefit review of the performance of various wireless data configurations, such as: MDT with Exterior Antenna (traditional); MDT with Hotspot; Smartphone as hotspot. This discussion may require a small side project to collect and analyze empirical data.

Session 5F Incident Response exercise (Table Top) in Broadband Environment (Small Group Exercise)

This breakout is directed at a small group of public safety officials from a single vocational group (Police, Fire, EMS or EM (to be determined) and will involve the initial presentation of table top exercises that will be used to develop capacity needs of MN future public safety broadband network. Participants are encouraged to develop an understanding of the kind of applications that might be available in such a network as the presenters layout scenarios that will be used to develop local input into the FirstNet planning process.

Track 6 Interoperable Data-SLIGP Process

Session 6A Broadband Data networks & Applications-Vendor Presentation

This series of breakout sessions is designed to provide key vendor(s) in the public safety broadband space to help educate public safety personnel to their approach to the FirstNet initiative and the various applications that are under consideration and development for public safety users. Decisions about the final network design may close at hand, but the realm of equipment (sensors and monitors) and public safety applications that might be needed are rapidly expanding. Broadband Data Networks & Applications-Vendor Presentations

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Track 7 Training Opportunities

Session 7A Alex Technical College Training (On-Line and PSAP Training)

This breakout session will provide an update on the current online course offerings developed and provided by the Alexandria Technical College. It will also provide an indepth overview of PSAP training facilities available at ATC in Alexandria and PSAP training offered by ATC in conjunction with various Regional Radio Boards. (Note: ATC facilities are made available for individualized PSAP training by contractors or other local resources.)

Session 7B Developing a Regional Training Plan (Central MN Model)

This breakout session will discuss the requirements for communication training and the mechanics of developing a regional training plan. The Central MN Emergency Services Board, has incorporated this process into their annual communication planning process and routinely sponsors training events which have offered (on a available space basis) to other public safety agencies and personnel.

Session 7C CASM Training Refresher

This breakout session is directed to a limited number (12-15) people who have been previously trained and are actively involved as administrators on the Communication Asset Survey and Mapping (CASM) system. The session will involve hands on access to

the CASM system and will involve an overview of standards developed to assure statewide consistency in MN CASM data.

Session 7D COM-L/COM-T (What's next)

This breakout session is directed at MN COM-L's and COM-T's in an effort to begin the discussion of "what next". Topics of discussion will include maintaining skills, educating leaders and incident managers in the need to incorporate a COM-L/COM-T, potential integration of broadband skills into the function and other topics related the expanding communication infrastructure.

Session 7E Dealing with Stolen or Lost Radios

This breakout session will provide an overview of the resources that are available to locate and recover lost or stolen radios on the ARMER system. The ability to simply turn off a subscriber radio has always been discussed, but the reality is there additional system based tools and capabilities that can be used to locate and return the equipment. This breakout will review the lessons learned on how to use those system resources to locate and recover radios from two local fire departments in Washington County in September 2015 which also led to the recovery of additional radio equipment stolen in August 2014.

Session 7F Designing a Communication Element in Exercises and Events

This breakout session will discuss ways to integrate purposeful communication elements in every exercise and event. It will highlight the need to designate a COM-L on all exercises and events to assure long term capabilities, on-going review and assessment of communication capabilities, and the enhanced response capability derived from assessing the communication element in all exercises and events. Communications is routinely designated as an issue in exercise and incident evaluations. This breakout session is designed to assure that those trained to provide disaster communications are routinely integrated into the process and able to make changes for the better.

Track 8 Working Together

Session 8A Neighboring States. (Iowa, North Dakota, South Dakota & Wisconsin)

Session 8B Canadian Border Interoperability

This breakout session will deal with the challenges of cross border communications along Canadian border. Ontario borders Cook, Lake, St. Louis and Koochiching County and operates on a VHF communication system. Manitoba borders Lake of the Woods, Roseau and Kittson County and operates on a 800 MHz trunked communication system. There are major roadways and rail crossings along the border with significant potential for routine and disaster cross border public safety response. This breakout session will discuss the current status of Minnesota-Canadian interoperability, the challenges to implementation and plans to be implemented in the future.

Session 8C Communicating and Operating with Railroads

This breakout session will focus on communication practices and procedures involved with responding a railroad incident. It will involve an overview of existing communication resources used by the railroads, methods and protocols for coordinating and communicating with railroad response personnel and how the ARMER system can enhance that coordination.

Session 8D National Guard as an Interoperability Partner.

This Panel discussion regarding National Guard capabilities, and support services will explore the use of the National Guard as a partner in interoperability for various situations. The Panel will present on National Guard communication capabilities, Army MARS, interoperability systems and integration with the ARMER system. There will be a presentation on how to request National Guard assets for emergencies and non-emergencies. In particular, this breakout session the National Guard will review the results of the Vigilant Guard exercise conducted in August, 2015. That exercise involved 1,400 NG members from Minnesota, lowa and Wisconsin units and 500 participants from various state, federal and local emergency response agencies at there exercise sites (Duluth, St. Paul and Camp Ripley).

Session 8E Interoperating with Tribal Government Public Safety

This breakout session will provide an overview of considerations and practices related to interoperating with tribal governments. It is noted that a number of counties have developed processes and procedures to coordinate public safety responses with tribal government s. The discussion will include an overview of the various tribal governments, their public safety networks and communication resources, their integration on to the ARMER network, potential integration into the FirstNet network and how they interoperate in regional communications.

Session 8F Volunteer Organizations-Civil Air Patrol (CAP), Amateur Radio

The breakout session is designed to provide an overview of the support that the Civil Air Patrol (CAP) can provide public safety and how to integrated and incorporate communications with CAP units into your response capability. This segment of this breakout will also be dedicated to a brief overview of potential changes to the incident management structure to add an auxiliary communication capability that may of interest to public safety. (Note: Amateur radio was the focus of a breakout in 2015, so this segment will predominately be used to provide an update on the Amateur AUXCOMM initiatives.)

Track 9 NG911

Session 9A NG911 Update.

This breakout session will provide an update on status and operational impacts from the continued implementation of Minnesota's Next Generation 9-1-1 network. DPS-ECN continues to document the details of the existing 9-1-1 network as part of the process of transitioning to an end to end IP network. This breakout session will review the status and the requirements and deliverables of the next NG911 contract with CenturyLink.

Session 9B PSAP Network Security

This breakout session will expand upon the Keynote speech by David Mahon, Century Link, Chief of Security related to assuring 9-1-1 systems are protected and that adequate redundancy and other protective measures are designed into our vital networks.

Note: Suggestions for content (as related by Coordinator): Keynote Address: To some extent, there is still a perception amongst our stakeholders that public safety infrastructure is not a likely target for cyberattacks. It seems prudent we emphasize the importance of network security and how it isn't something you do after the problem is discovered. It is about being proactive and not about being reactive. Events like Ferguson will be relevant to public safety folks, and I think this group will be extremely interested in a detailed account of the cyberattacks you referenced in our visit that occurred amidst the shooting incident and chaotic aftermath, and how it impacted so many aspects of the Ferguson PD operations, including their web site. Examples like the Target credit card breach and the US Bureau of Personnel Management breach also bring that message home. Break out session: A more substantive presentation directed at the operational folks who might be responsible for infrastructure management.

Session 9C GIS Update

This breakout session will be a update to the Minnesota's NG9-1-1 Geographic Information System (GIS) addressing project. This update will review what has been

accomplished over the last year and the next steps necessary to coordinate the diverse collection of GIS data in the future. This breakout session is designed to build upon the presentation of "GIS for PSAP Professionals" offered last year.

Note: Basic principles and definitions of GIS will be incorporated into Workshop #3-NG 9-1-1 (The Basics-how it Works and How it Developed), April 25, 2016 10:00 a.m. -12:00 p.m.

Session 9D Test to 9-1-1 (Michigan Implementation, Impact & Lessons Learned)

This breakout session will provide an update on the status and progress of Minnesota's "Text to 9-1-1" project. It is anticipated that a contact for the implementation of "Text to 9-1-1 in Minnesota will have been awarded by the time of this session. As part of this session, Michigan's State 9-1-1 Program Coordinator will provide an overview of their "Text to 9-1-1" project which has been operational for over a year. The Michigan Coordinator will provide an overview of their implementation, including operational impact and lessons learned through the process.

Session 9E MN-ND-SD-IA (Intestate Wireless Call Transfer Special Project)

This breakout session will provide an overview of the four state 9-1-1 Special Project to develop a capability to transfer wireless 9-1-1 calls to our neighboring states (Minnesota, North Dakota, South Dakota and Iowa). With different 9-1-1 governance structures and service providers in each state and with different wireless vendors providing wireless service, this project requires significant coordination between the states and vendors.

Session 9F The Future PSAP Environment

This breakout session is designed to begin addressing the challenge confronting Public Safety Communication professionals (PSAP managers and others) by the new data that will be available to public safety responders. Text to 9-1-1 may incorporate multimedia data (photos and video), broadband may provide unique new data elements (video from alarm sites, medical response data, on site video and telemetric data from responders plus expanded access to critical data bases). Through this breakout session (designed to promote the futuristic discussion), we will begin to examine some of the thoughts and ideas about how the PSAP environment will change and how the data might be managed without any initial assumptions of "who will handle it" or "how it might be processed."

Workshop Session Schedule 2016 Interoperability Conference April 25-27, 2016

Workshop Sessions (April 25, 2016)

Workshop #1 Broadband Table Top Exercise (8:00 a.m. -12:00 p.m.)

This workshop will engage participants in the conduct of a multi-discipline table top disaster exercise in a location where a public safety broadband network is in place and operational. The exercise may directly involve up to 45 participants with additional workshop attendees participating as observers. The processes involved here will be similar to those used in the Elk River LTE Demonstration Project conducted in 2015.

Workshop #2 ARMER (The Basics-How it Works & History of Governance) (10:00 a.m. - 12:00 p.m.)

This workshop is designed to provide participants with a basic understanding of trunked radio technology used in the ARMER public safety radio system and of other elements of the system, the history of ARMER system development and the evolution of the governance structure now represented by the Statewide Emergency Communication Board (SECB). This workshop is intended for new conference participants who have little or no background with ARMER and the SECB.

Workshop 3 N G 9-1-1 (The Basics-How it Works and How it Developed) (10:00 a.m. - 12:00 p.m.)

This workshop is designed to provide participants with a basic understanding of technology behind Minnesota's traditional 9-1-1 network and of basic technical aspects of NG9-1-1. NG 9-1-1 involves the transition of the existing analog 9--1-1 network to an Internet Protocol (IP) based network. The workshop will also include basic principles and definitions of GIS addressing that will accompany the NG 9-1-1 environment. And, it will review how we got to where we are, Minnesota's overall governance and the process of transitioning to NG 9-1-1. This workshop is intended for new conference participants who have little or no background with 9-1-1 or GIS.

Workshop 4 IPAWS Update and Implementation (1:00 p.m. - 2:45 p.m.)

This workshop will provide a comprehensive update to the operation and use of Minnesota's implementation of IPAWS. IPAWS is a modernized and integration of the nations alert and warning infrastructure which allows federal, state, territorial, tribal, and local alerting authorities to use Common Alerting Protocol (CAP) standards with the

IPAWS infrastructure. IPAWS provides public safety officials with an effective way to alert and warn the public about serious emergencies using the Emergency Alert System (EAS), Wireless Emergency Alerts (WEA), the National Oceanic and Atmospheric Administration (NOAA) Weather Radio, and other public alerting systems from a single interface (AMBER Alerts).

Workshop 5 Case Studies-Contemporary Interoperability Cases (1:00 p.m.-3:00 p.m.)

This workshop will provide a panel discussion of various contemporary public safety events where communication and interoperability between responding agencies played an important role in the outcome of events. Presenters will describe an event, who responded, and the communication challenges encountered during the event. They will also describe how those communication challenges were addressed and the lessons that were learned from the event. Case studies will include: Lake County BWCA rescue, the Galina Illinois Oil Tran Derailment and Black Lives Matter demonstration (Mall of America, Light Rail and MSP)

Workshop 6 Broadband Data for Public Safety (The Basics-How it Works and Proposed Governance) (1:00 p.m. - 2:45 p.m.)

This workshop is designed to provide participants with a basic technical understanding of Long Term Evolution (LTE) broadband networks. LTE is the technology that will be used in the implementation of FirstNet. The workshop will also review the history of the FirstNet project, the FirstNet governance, the FirstNet planning process and the status of that planning process. This workshop is intended for new conference participants who have little or no experience with LTE or FirstNet.

Workshop 7 Public Safety Broadband-Early Adopters (1:00 p.m. - 3:00 p.m.)

This breakout session will present an update of the status of Public Safety Broadband Network Early Builder Projects. These projects were initially funded under the NTIA Broadband Technology Opportunities Projects (BTOP) prior to the formal adopting of the FirstNet initiative. Their technology (LTE) and business objectives are consistent with FirstNet priorities and were integrated into the FirstNet project as Early Builder (EB) utilizing FirstNet spectrum for their implementation. The five EB projects are New Jersey, Adams County, Colorado, Los Angeles County Regional Interoperable Communications Authority (LA_RICS), New Mexico and Harris County, Texas.

Workshop 8 COM-L/COM-T Practical Training Workshop

This workshop will provide participants, who have completed COM-L/COM-T training, with practical training reinforcing those skills.

