RADIO TECHNICAL OPERATIONS COMMITTEE
AGENDA
Board Room, Metro Counties Government Center
March 28th, 2018
1:00 – 3:00 p.m.

1. Call to Order

2. Approval of February 2018 Minutes

3. Agenda Items
   a. Washington County Excess T1 Capacity – Timm
   b. Use of Grant Funds for Genesis Training – Jansen
   c. Scott County Talkgroup Addition – Haas
   d. April TOC Meeting Change - Haas

4. Moves, Additions & Changes to the System
   a. IP Simulcast Conversion – Washington County

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 Committees
      i. Steering – Tretter / Rohret
      ii. OTC – Gundersen / Timm
      iii. Interoperable Data Committee – Olson / Thompson
      iv. IOC –Thompson / Timm
         1. STR Sub-Committee – Tretter / Gundersen
         2. COMU Sub-Committee - Timm / Anderson
      v. IPAWS – Haas / Williams
      vi. Finance / Grants Workgroup- Tetter

6. Other Business
   a. Regional Talkgroup Permission Requests
   b. Next Meeting: April 25th

7. Adjourn

Scott Haas, Chair
Members Present:
Ron Jansen, Jon Eckel, Chad LeVasseur, Jake Thompson, Rod Olson, Scott Haas, Nate Timm, Nancie Pass, Chuck Steier, John Gundersen, Heidi Hieserich, Peter Sauter.

Guests Present:
Dana Rude; Met Council, Scott Wosje, Northland Business Systems, Scott Wiggins; Federal Engineering, Christine McPherson; City of Minneapolis, King Fung; Hennepin County Sheriff, Jill Rohret, Troy Tretter, Martha Ziese; MESB

Call to Order:
Scott Haas called the meeting to order at 1:02

Approval of Minutes
M/S/C Motion made by Sauter to approve minutes from January 24, 2018. Eckel seconded.

John Gunderson requested the agenda for February 28, 2018 be amended to include Hennepin County request to install a new five site VHF simulcast paging system.

M/S/C Motion made by Jansen to approve February 28, 2018 agenda with amended addition. Pass seconded. Motion carried.

Agenda Items:
U of M MCC7100 console addition
Jeff Lessard said that there was now documentation and that the primary issue was the process that was followed. The VPN was set up in the specs. Troy said the printed packets had the IP addresses, source and destination ports in the diagram. The packet posted online had that information redacted. Jeff added that this is a resource they would be happy to share if there was a need.

M/S/C Motion made by Timm to approve the request for the U of M MCC7100 console addition. Gunderson seconded. Motion carried.

Troy Tretter COMT Packet
Personal information for cell phone numbers in the packet has been redacted on the online version. This will be the practice for online postings in the future.

M/S/C Motion made by Timm to approve Troy Tretter’s COMT packet. Olson seconded. Motion carried.

Changes to Radio TOC bylaws
Tretter said the recommended changes include deleting the Minnesota Department of Transportation, language updates to reflect current practices, changing Administrative Officer to Executive Director and removing the language of reimbursement of the TOC chair for attending the MESB Board meetings.
Ron Jansen asked when did MnDOT stop attending? Rohret responded when the Radio Bylaws were drafted, and the Radio Board merged with the 9-1-1 Board, the TOC included MnDOT; they declined but were kept in the by-laws. They have not attended since the merger of the two boards. Rohret said that Chiefs of Police also have not attended nor answered any letters regarding their seat on the TOC. Jansen said he felt they both should be removed from the by-laws.

Tretter said that when Sherburne County joined the MESB, the bylaws will not need to be amended because the membership section states membership of all members who are party to the MESB JPA.

Pass asked what the current practice was in Section 2; the Chair shall attend all meetings of the board and upon the resolution of the Board may be reimbursed, if not otherwise compensated, for expenses, if any per diem, for such attendance? Troy said that meant that the Chair of the Radio TOC would attend MESB meetings and receive compensation for mileage, however this sentence would be deleted to reflect current practice since current practice is that Troy attend the MESB meetings as the representative.

Eckel asked if there would be a quorum concern to keep MnDOT and Chiefs of Police in the by-laws if they are not going to show up? Tretter said that in his opinion it would not count against an attendance quorum because there was no person assigned from either of those entities.

Rod Olson asked if the TOC could ask for a formal response from the Chiefs of Police stating they no longer wished to participate? Rohret said another letter could be sent but they have not responded to numerous requests.

M/S/C Motion made by Jansen to approve amended Radio TOC Bylaws with all edits included in the document. Thompson seconded. Motion carried.

TOC Comments for Strategic Planning Meeting
Haas said he will be attending the State Strategic Planning Meeting March 8 and 9th. There was a meeting after the MOG (Metro Owners Group) to discuss the elements they would bring to that meeting. Pass is a metro rep also. The other members are: B.J. Batting, Dave Diehl, George McMahon. Rohret said that she, Pete Eggimann and Marcia Bromann also plan to attend.

Haas said in summary the discussions included: costs are going up; what parties would be responsible, sustaining hardware and would ARMER be the primary voice system in the future, the need for VHF Interoperability upgrades across the state, encryptions; AES vs. DES, cost management model, freezing system as is or upgrade and balancing the check book, i.e. who would pay for the upgrade. A separate system for FirstNet for the next fifteen to twenty years.

Tim said that a possible KMF management system was also discussed.

Jansen said that there was discussion on the number of users and TDMA solution.
Olson said there are other technical limitations that should be looked at before going forward.

Haas said that if there were any other comments, to send them to him before the planning meeting.

Hennepin County request to install a new five site VHF simulcast paging system
King Fung presented that In November 2017 the MESB approved a request to install a new five site VHF paging system at the following sites: Minnetrista, Rogers, Golden Valley, Medina and Braemar Park.
After further design research with Motorola, Hennepin County determined adding a conventional sub-site (C-Subsite) would be the best option for functionality. Adding a C-subsite to the ARMER system would provide redundant links to the sites, Unified Event Manager (UEM) control of the sites as well as monitoring the status of the sites.

The addition to ARMER would be done within the Zone 2 MSO which is currently located at the Hennepin County Golden Valley Location.

M/S/C Motion made by Jansen to approve Hennepin County's request to add their VHF Simulcast paging system to the ARMER Zone 2 MSO. Gundersen seconded. Motion carried.

**Move, Additions & Changes to the System**

IP Simulcast Conversion- Washington County.

Nate Timm said the new T1s MnDOT-Oakdale line were installed, they will be updating their microwave link between Oakdale and Valley Creek. They will be cutting their paging over to a separate T1 in spring. Parts will be shipping soon.

**Committee Reports**

**Metro Mobility System Usage Update**

Dana Rude said they have received a revised statement of work from Trapeze about the Motorola interface. Olson said their airtime seems to be creeping up again so its good it is moving forward.

**System Manager’s Group/Metro Owner’s Group Update**

Jansen said that Peter Matthes was at that meeting. They went through the system upgrade. Part of the 717 upgrade has the Z420s that have an internet issue and will be replaced. That is 3-400 computers. They will send Jansen a list of what will be replaced.

The list servers have been deleted without any notification by MNIT, John Anderson is building the lists again through Outlook.

There were discussions on DC battery power replacement, Genesis update, Super Bowl follow up, the VHS overlay, and MSO Zone 2 move.

**Reports from SECB Committees**

**Steering**

Tretter said they met in February. They discussed the Radio TOC membership, and the strategic planning meeting.

**OTC – Cancelled**

**Interoperable Data Committee – Cancelled**

Tretter said that potential meeting locations were discussed for the FirstNet presentation with Televate and MnDOT. The location would need to accommodate 150 people.

Jansen confirmed the facility at the Rosemont Community Center would be available for that presentation or possibly the Dakota County Government Center.

**IOC**

Tretter said only the STR and COMU sub committees met. Tretter was voted Chair to the STR committee. First meeting was this month.
Timm said Dan Anderson was voted Chair and Dave Pike, Vice-Chair of the COMU. Nate Timm attended by phone. The IOC meets opposite of the Interop Committee. Jim Stromberg did a presentation on the health of the COML program. Doris Lakes COML packet was approved, the official communications positions in the state were approved; COML, COMT, Radio Operator Tactical Dispatcher NTD and the INCM. The Auxiliary Communications Specialist was not initially approved it is still in discussion.

Tretter said the Incident Tactical Dispatch class taught by First Contact 911 needs to be an approved class by OEC to be considered a certifiable course in Minnesota. Tretter said the goal is to seek a waiver to the standard to allow those previously trained to become certifiable.

**IPAWS**

Haas said that the Chair of the IPAWS Committee suggested some by-law changes that would attempt to resolve some longstanding quorum issues. His suggestions were to remove the Regional Radio Board Representative and have representation from AMEM and APCO, Chiefs of Police instead. Haas said his reservation is that these are private organizations; how would they go about filling their seat of representation thereby possibly affecting IPAWS quorums.

Out-state just does not come to the meetings and the chair does not want IPAWS to be just a metro group.

Rohret said all the other SECB Committees have a 75% attendance requirement language in their by-laws.

**Finance/Grants Workgroup - No meeting**

Tretter said that there are funds to send people to the communications conference in St. Cloud. Funds would pay for registration and two nights. Timm said the agenda is now up on the website. The last day of the conference is the same as the April TOC on the 25th.

**Other Business**

**Regional Talkgroup Permission Requests**

Tretter said there was a request by Marcus Bruning on behalf of Mille Lacs Band Public Safety. The request also went to Isanti County requesting their fire main and safety main. They denied by Sheriff Caulk in favor of regional or state interoperability talk groups. Tretter asked members if anyone had had a need for interoperability with the Mille Lacs Band Public Safety?

Haas said it might have occurred at an event. Rohret said that a lot of agencies are approved but chances are they will never use them. If similar approvals have been made in the past, then this request should be granted also.

Gundersen said this issue came up at the OTC. Their chief said it is mostly for Interoperability. Tretter said that in the email from Mr. Bruning, previous agreements that were transferred it was for the Mille Lacs Band Public Safety.

*M/S/C Motion made by Timm to approve request Mille Lacs Band Public Safety for METAC’s 1-10. Jansen seconded. Motion carried.*

**Next meeting March 28th.**

*The meeting adjourned at 2:18.*
3/13/2018

Metro Technical and Operations Committee  
Chair Scott Haas  
301 Fuller Street South  
Shakopee, MN 55379

Dear Mr. Haas,

Washington County and MnDot will be converting the Washington County simulcast from circuit to IP transport this spring. Washington County maintains a simulcast VHF paging network for fire paging and weather sirens. These transmitters are collocated on the majority of the system subsites. Due to the older age of these stations, circuit based connections will need to be maintained to them.

Current connections on these stations are packed into site links. To reduce the complexity of the IP transport to these sites, we plan to move all paging to dedicated T1 links. Washington County internal microwave will be able to handle all the connections with the exception of two sites:

- MnDot site in St. Paul Park. No county link to this site. MnDot has capacity on their network. The route will be Newport (Washington County site) to Water’s Edge to St. Paul Park (South Loop)
- MnDot site at Citation (Scandia). No county link to this site. MnDot has capacity on their network. The route will be King Stack (Washington County network presence) to Citation (North Loop)

Our plan is to begin converting to the new paging network as soon as possible. Having paging cut over before IP simulcast conversion will greatly reduce the complexity of the IP transition and will allow for reduced down times of both subsites and paging.

MnDot fully supports this excess capacity request. **This request was approved (contingent on TOC approval) by the OTC meeting on 3/13/2018.**

Sincerely,

Nathan Timm  
Radio Systems Manager  
Washington County Sheriff’s Office  
651-430-7863

Nate.timm@co.washington.mn.us
RECOMMENDATION
The 9-1-1 TOC recommends including three items as regional funding priorities for FY2018 grants:
- PSAP cybersecurity
- Continuing the plan for CAD-to-CAD interoperability

The Radio TOC recommends including the following items as regional funding priorities for FY2018 grants:
- Motorola technical training courses
- Exercise for the Metro Communications Response Taskforce (CRTF)
- Financial assistance for attendance at the State Interoperability Conference
- Expanded regional exercise involving the CRTF and partner agencies
- Portable radio replacements: cache radios and patrol radios
- Dakota County bi-directional amplifier (BDA)

Staff recommends including equipment or other one-time costs related to cybersecurity monitoring at PSAPs.

BACKGROUND
Emergency Communication Networks (ECN) Division and the Statewide Emergency Communications Board (SECB) now require regions to approve regional funding priorities. These priorities are to include projects/items/concepts for which regions can apply for grant funds through the SECB process. In the past, grants were only open to radio projects.

ISSUES & CONCERNS
9-1-1 projects are eligible for grant funding. Due to this, both the 9-1-1 and Radio TOCs developed projects are included as a regional funding priority.

Grants are structured that both 9-1-1 projects and radio projects are applied for in the same grant and are all included in the competitive structure.

Staff plans to apply for all projects during the application process. However, the top priorities are, Motorola technical training, and PSAP cybersecurity.

FINANCIAL IMPACT
None to the MESB other than staff time.
GENWATCH3®
ENHANCED PERFORMANCE MANAGEMENT
FOR ASTRO 25® AND DIMETRA NETWORKS
SOLD AND SUPPORTED BY MOTOROLA

MONITOR. MANAGE. REPORT.

One integrated solution allows centralized management of all system-wide data to display real-time activity, send critical notifications, and archive data for forensic reporting and comprehensive analysis.

MONITOR

GenWatch3® combines power and innovation to provide the tools necessary to monitor, manage and report on ASTRO® 25 and Dimetra two-way communications networks. GenWatch3 gathers information from multiple connection points and provides at-a-glance views of network performance from every angle from system-wide down to the subscriber level.

LIVE VIEWS

GenWatch3 captures data from the ATIA, UEM (as well as other SNMP devices), GGSN, and UNS/MUPS data streams. It displays the data in a way that provides a complete picture of real-time activity, such as affiliations, PTTs, diagnostics, busies, radio rejects and much more.

STATISTICAL VIEWS

The GenWatch3 Key Performance Indicators (KPI) interface displays up-to-the-minute, interactive and statistical information on WACN, System, Zone and Sites over time.

MAP VIEWS

GenWatch3 mapping solutions display live unit and site activity over an entire network as a dynamic layer in Google Earth™ (EGLView) and Microsoft Virtual Earth (SkyView).

CONTACT GENESIS

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MANAGE

- GenWatch3® manages communication between Motorola interfaces, such as CADI, UNS/MUPS, and the multiple agencies that share a single system.
- When there are critical system events, alerts are sent in level of priority to the people who need the information the most.
  - SNMP
  - Audio-visual alerts
  - Text messages
  - Email
- Comprehensive billing and customer management module simplifies administration of multiple commercial or public safety agencies.
- Subscriber Access Manager (SAM) — formerly CloneWatch — identifies and helps eliminate the threat of cloned radios. SAM monitors resources (groups and radios) for suspicious activity.

REPORT

- Every packet of data received from the ASTRO® 25 or Dimetra network is decoded, sorted and stored in MS SQL databases for multiple years without any loss of detail.
- Reports offer in-depth forensic analysis of archived system activity.
- Trend system utilization for resource planning
- Usage reporting for cost allocation
- GenWatch3 reports are flexible and may be modified and saved to create custom variations.

CONTACT GENESIS

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March 21, 2018

Ron Jansen
Vice Chair MESB RTOC
2099 University Ave W
St. Paul, MN 55104

RE: Additional Talkgroup request

Dear Mr. Jansen,

Scott County is requesting an amendment to our participation plan for an expansion of fifteen authorized talkgroups. Scott County intends to migrate to a rolling talkgroup assignment with different encryption keys in the next years. Implementation of additional talkgroups this year will provide the opportunity to program the resources into subscriber radios efficiently. The total number of concurrently used talkgroups will not be increasing. Scott County has made a substantial investment in expanding the capacity of the Norwood subsystem. This change is not expected to create any loading problems for the subsystem.

Scott County will pursue approval from the OTC and SECB pending approval from the RTOC.

Sincerely,

Scott Haas
Director of Emergency Management and Communications
(952) 496-8381
shoas@co.scott.mn.us

Enclosures
Metro REGION

FIRSTNET Workshop

WHEN
April 20th, 2018
10:00 am - 2:30 pm

WHERE
Carver County Government Center
Lower Level 606 E 4th St, Chaska, MN

ECN is hosting a regional gathering of public safety and supporting agencies to listen, learn about, and discuss the current FirstNet National Public Safety Broadband Network offering.

Meet with FirstNet and AT&T, software and hardware vendors, and learn about coverage in your area and what assets you may be able to officer to enhance coverage [tower sites and infrastructure].

ATTENDEES WILL:
- Learn more about FirstNet
- Hear from AT&T reps and vendors
- Have discussions with ECN staff

WHO SHOULD ATTEND:
- Public Safety Personnel
- Subject Matter Experts
- Local Officials
- Tribal Staff and Leadership

OTHER INFO:
- Lunch will be provided
- Attendees should RSVP to Melinda Miller at melinda.miller@state.mn.us, or call 651-201-7554
FirstNet/AT&T Regional Workshops
Minnesota Department of Public Safety – MnFCP

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**Takeaway Forms**

Surveys & Workbooks