The Red Lake Nation Police Department recently received an award from the U.S. Department of Justice, Community Oriented Policing Services Section (COPS Grant) to assist in their internal and interoperable communications capabilities. The grant will allow them to add 32 Allied Radio Matrix for Emergency Response (ARMER)-capable portables and 17 mobiles to their existing fleet. Moving to ARMER will greatly enhance communications for law enforcement covering the vast area of the Red Lake Nation and allow them to communicate seamlessly with surrounding agencies.

The Red Lake Nation is a voting member of the Northwest Emergency Communications Board and a strong and engaged partner in the region. The Northwest Regional Advisory Committee (RAC) and Emergency Communications Board (ECB) directed a significant portion of their current training funds to support the Red Lake Nation in end-user and dispatch training. Welcoming Red Lake Nation law enforcement to the ARMER network is a tremendous move forward in communications interoperability for the region and an excellent example of supportive partnerships between communities and nations.

Please join me in congratulating our very capable 9-1-1 technical engineer, Leslie Sticht, on her recent appointment to two Federal Communications Commission (FCC) Communications Security, Reliability, and Interoperability Council (CSRIC) VII Working Groups. Leslie will contribute to Working Group 1: Alert Originator Standard Operating Procedures, as well as to Working Group 4: 9-1-1 Security Vulnerabilities During the IP Transition. CSRIC is organized under and operates in accordance with the provisions of the FCC. CSRIC’s mission is to provide advice and recommendations to the FCC to improve the security, reliability and interoperability of the nation’s communications systems.

Leslie will have the opportunity to network with a diverse set of industry professionals from across the country in this capacity. Her appointments support one of the strategies in our 2019-2021 Strategic Plan: To support federal interoperability initiatives through participation in federal programs. Leslie joins the ranks of others on the Emergency Communication Networks (ECN) team who are willing to participate and remain engaged at the federal level to contribute our successes and challenges as well as to learn from the experiences of others.

Please plan to attend the quarterly Regional Leadership Meeting in St. Cloud on Monday, Oct. 28. We will announce our new 9-1-1 Program Manager at the meeting!
Introducing Sandi Stroud, new Minnesota Geospatial Information Office (MnGeo) director. Sandi brings strong experience in both the public and private sector. She started her career as the Geographic Information Systems (GIS) manager in the city of Laurel, Maryland, where she was a one-person GIS division supporting all the city departments. She went on to work for the Baltimore Metropolitan Council (Baltimore MPO), coordinating multiple large jurisdictions on data sharing initiatives. During that time, her interests in public safety GIS, specifically 9-1-1, peaked as the requirements for Next Generation 9-1-1 (NG9-1-1) were being developed. She contributed her knowledge in this area via National Emergency Number Association (NENA) committee involvement to the standards documentation in addition to authoring the curriculum for an NG9-1-1 GIS workshop for the Urban and Regional Information Systems Association (URISA) organization. Sandi then joined Michael Baker International, where she took on the challenge to incubate a team of public safety and GIS professionals in developing a suite of GIS solutions aimed at supporting the affected stakeholders involved in readying data for NG9-1-1. In Sandi’s tenure as the head of the DATAMARK incubator, Michael Baker International developed and launched several commercial off-the-shelf GIS applications, and Sandi documented data readiness best practices and built a team of 32 staff.

ECN and MnGeo staff have met all of the regions of the state to discuss the NG9-1-1 Project. We found these meetings to be invaluable and enjoyed meeting everyone in person. Please contact your regional NG9-1-1 GIS representative if you have any follow-up questions regarding the requested GIS data layers, layer status, or validations.

Currently, we are assisting with the rollout of the National Telecommunications and Information Administration (NTIA) grant. If you have questions about the GIS data preparation, contact your regional GIS representative. The requested GIS data layers are address points, road centerlines, Public Safety Answering Point (PSAP) boundaries, fire boundaries, law boundaries, and medical boundaries.

The edge-matching of PSAP boundaries and road center lines continue to make progress. This is a critical step in the development of seamless statewide data layers that will be used in the Emergency Call Routing Function (ECRF) and Location Validation Function (LVF).

You can find the status map for every county, along with the most recent version of the GIS newsletter, on ECN’s website under “911 Program” and “GIS Information.” The successful completion of this first phase (data collection and remediation) is critical for NG9-1-1 implementation.

Norm Anderson (651-201-2483 or 651-201-7559) is the GIS project manager for ECN and MnGeo. Akiko Nakamura (651-201-7558) from our office is also working on the project, so please feel free to reach out to either one of them with questions related to the GIS project.

Text-to-9-1-1

The Rice Steele 9-1-1 Center will be the next PSAP to deploy Text-to-9-1-1 in Minnesota, making them the 33rd PSAP to do so. After that, ECN aims to get Minnesota State Patrol PSAP deployed for all metro highways and interstates, which are currently taken by the airport.

COOP Plans

Of the 102 PSAPs:

- 79 Continuity of Operations Plans (COOPs) were submitted.
- 20 are still on extension request status.
- Two no responses
- 56 COOP reviews have been completed.

There is a breakout session scheduled on Tuesday, April 30, at the Public Safety Communications Conference (PSCC) that will provide ideas for exercising your PSAP COOP. Hope to see you there!

For more information about the breakout session or PSAP COOPs, contact Cathy Anderson (651-201-7548).

Ingress Updates

Vendor bidding remains open through Oct. 18, 2019. Shortly after the bids are gathered, we will begin the award vetting process. This process will involve a team of
people reviewing the solutions offered and their value to the overall E9-1-1 network in the State of Minnesota. The Ingress Network is comprised of all the originating service providers across Minnesota. The Ingress Network request for proposal (RFP) will provide a much more focused and fault-tolerant solution by hubbing these provider connections at multiple host locations, then will deliver traffic to the Core Network where the call data is processed before being delivered to the Egress Network that connects the PSAPs. The Ingress Network update will be the first in a series that will allow the state of Minnesota to move from analog voice and data traffic to digital voice and data traffic, thereby allowing a much greater range of options for technologies at the PSAPs and more options for citizens using the 9-1-1 system. If you have any questions, feel free to reach out to Leslie Sticht (651-201-7550).

ARMER Lifecycle Sustainment

Tusa Consulting continues to work on Minnesota’s negotiations for a new ARMER System Upgrade Agreement (SUA). Recently they have been gathering information by examining our current contract with Motorola and meeting with various partners. By the time this newsletter is published, a survey should have been distributed to all ARMER system and subsystem administrators to gather additional information to aid in our negotiations.

ARMER Encryption Discussion

On two occasions in September, the U.S. Department of Homeland Security’s Interoperable Communications Technical Assistance Program (ICTAP) provided basic encryption webinars. While many ARMER system administrators are very familiar with encryption, others are not. The aim of these webinars was to set levels and provide a baseline understanding of encryption for all ARMER system administrators and interested users in preparation for future discussions.

The next phase of our statewide conversation about encryption will be to survey ARMER users about current encryption usage and future desires. With the information gleaned from the survey, we will form a workgroup to dig deep into encryption. The workgroup will draft a recommendation to the Land Mobile Radio Committee regarding whether to change our current encryption technology and procedures.

Cybersecurity Tabletop

A cybersecurity tabletop exercise is planned for the morning of Nov. 6, 2019, in St. Cloud. The exercise will be facilitated by staff from the U.S. Department of Homeland Security’s Interoperable Communications Technical Assistance Program (ICTAP) in support of the Statewide Emergency Communications Board’s (SECB) Strategic Plan to “Promote the physical and cybersecurity for the ARMER system.”

ARMER system administrators, PSAP managers, dispatchers, and radio end-users are invited to participate. Both technical and non-technical personnel are welcome. Invitations were sent to Regional Advisory Committee chairs, and many RSVPs have already come in. If you are interested in this tabletop exercise, contact Jim Stromberg (651-201-7557).

Please note: The original venue is no longer available and the times were slightly modified. The Cybersecurity Tabletop Exercise will be held on Nov. 6, 2019 at the Stearns County Emergency Operations Center (807 Courthouse Square, #73, St. Cloud). Registration begins at 9 a.m., and the exercise will begin at 9:30 a.m. The exercise will conclude by 1 p.m.

Wireless Broadband - FirstNet

FirstNet Coverage Review Follow-Up

We continue to seek additional information from AT&T and the FirstNet Authority concerning the progress of deploying coverage and advances in technology. One way that ECN is communicating the progress is through our HSIN Community “Minnesota ECN.” Sign up for the community by contacting Melinda Miller (651-201-7554) or Jim Stromberg (651-201-7557) for access.

Consider downloading the OpenSignal app on your AT&T phone for testing coverage. This app is AT&T’s tool for tracking coverage issues. The Wireless Broadband and
Applications (WBB&A) Committee is still considering a similar app where ECN and the SECB committees could get reporting on coverage, but in the meantime OpenSignal will get the information to AT&T and their RAN (Radio Access Network) designers.

The ARMER committee is kicking off a workgroup to build a standard for LTE to LMR bridging. The WBB&A Committee is being asked to offer recommendations for use of apps and devices on the LTE side that would connect up to LMR. The committee is hoping to address the guidelines after the requirements review is complete. Some of the discussion items under consideration are:

- No app or device is labeled “mission critical” for data at this time. What does that mean and what is required? Do we need a standard definition of “mission critical”?
- Guidelines for security.
- Effects of apps and devices on the network, devices and other apps.
- Guidelines on approving developers.

If you have input you would like to share on this topic please let Committee Chair Dave Deal or Program Manager Melinda Miller (651-201-7554) know to be added to the workgroup roster.

In January, we will have our next All-Constituent Quarterly Meeting with AT&T. We have asked to have two meetings, one for the south and one for the north part of the state. Could your agency host? Suggestions for locations are welcome. We did this in May at Oak Ridge Conference Center in Chaska, and the takeaway from participants was that it allowed them to see information that they wouldn’t otherwise see. It brought our Wireless User Forum together for networking, and people walked away with a better understanding of the direction the FirstNet Authority is headed.

The Wireless Broadband Committee is looking for agencies to pilot apps in the state. Ramsey County has offered to pilot FirstNet Blue, but there are lots of different categories of apps that need to be considered. This doesn’t need to be a new app. It could be one of your favorites that you would like to see become a statewide app. The committee wants to hear your opinions and learn from your experiences. ECN can’t provide funding for apps or devices under the grant, but we can offer consultation services from Televate. Contact Melinda Miller (651-201-7554) for more details.

ECN recently filed Federal Communications Commission (FCC) Public Comments to the FCC on PS Docket 19-254 regarding the Boulder Regional Emergency Telephone Service Authority (BRETS) Petitions. Here is the link to see all the comments made http://apps.fcc.gov/ecfs/.

With the help of our consultant, Televate, ECN commented on the requirement that the FirstNet Authority clarify that interoperability is a fundamental responsibility of FirstNet, and that it should ensure interoperability at all levels, including network, services, and applications and devices. ECN supports BRETS and many other organizations supporting the petition, including the Illinois Broadband Working Group and Pennsylvania’s Single Point of Contact (SPOC).

At the Regional Leadership Meeting on Oct. 28 in St. Cloud, we will talk about the 2020 Minnesota PSCC. It will be here before we know it, and ideas for conference sessions, specifically topics related to wireless broadband, are needed. What do you want to know about wireless broadband and data sharing in Minnesota? We will reach out to subject matter experts soon to present at the conference. Our plan is to include a session on the progress of the strategic plan as it relates to wireless broadband, and there was a suggestion to have the FirstNet Authority EMS consultant talk about EMS connections to emergency rooms. You can submit requests for sessions to Melinda Miller (651-201-7554) or any of the program managers at ECN.

### Standards

The standards renumbering and formatting project continues to move forward. Previous updates have indicated that standards will be recategorized and renumbered because they no longer fall solely under the ARMER category.

Standards will ultimately contain both the new SECB standard number and the original legacy number.

Because items placed on our public website are required to be compliant with the Americans with Disabilities Act, standards must also be reformatted to a simpler layout.
Cathy Anderson is out of the office from Thursday, Oct. 10 through Friday, Nov. 22, 2019. In her absence, please contact the following people for specific, immediate needs:

- StatusBoard/Standards: Jim Stromberg (651-201-7557)
- Training classes you want added to the ECN website: Jim Stromberg (651-201-7557)
- Alex Tech Website / Training Modules: Linda Muchow
- PSAP contact information updates: Chris Pedersen (651-201-7547)
- T-CPR: Dana Wahlberg (651-201-7546)

After Nov. 22, you can resume contacting Cathy Anderson (651-201-7548) for these items.

Wireless Emergency Alerts 2.0

In or around the last week of September, some of the mass notification vendors released changes to support Wireless Emergency Alerts (WEA) 2.0.

The Federal Emergency Management Agency (FEMA) has postponed their release until further notice and has not announced an official release date.

If you have the capability of changing the handling value (this is with with WEA 2.0) on your screen now please only use the Imminent Threat WEA - Handling Value. Please do not use Public Safety or WEA Test handling values until after FEMA releases WEA 2.0. Please note that WEA Test guidelines are still in development; do not use this handling code until further guidance is published from the Integrated Public Alert and Warning System (IPAWS) Committee.

The new fields for increased character counts and Spanish messages will not deliver to WEA 2.0-compatible devices until after FEMA's release.

ECN will send out comprehensive information about regional password changes via GovDelivery to the PSAP Manager/Supervisor and Sheriff/Police Chief lists approximately one week in advance of when they will be changing.
Proficiency Demonstrations

If you are an IPAWS point of contact on your Memorandum of Agreement (MOA) with FEMA, you should have received guidance from the FEMA IPAWS office on or about Sept. 27, 2019, with the following, which was on page two of the letter, we will try to clarify some of the items (with notations in red by ECN where needed).

GUIDANCE:

The below guidance applies to sending a successful controlled test message via a Collaborative Operating Group (COG) Alert Originating software to the IPAWS Lab Cloud environment:

- Submit a successful message to the IPAWS-OPEN Lab Cloud Environment using your COG assigned Training/Demo certificate at least once a month.
  - If you do not have your Training/Demo certificate, please contact IPAWS at ipaws@fema.dhs.gov (ECN: or haven’t received your replacement Training Certificate starting with 3xxxxx yet).
- COGs can conduct their Proficiency Demonstration on their own discretion. Any date/time within the given month.
- The message must be for Emergency Alert System (EAS) and/or WEA, depending on your COG’s approved alerting permissions. If a COG is approved for both channels (EAS/WEA), then both channels must be tested simultaneously if the software provides the capability.
- The Proficiency Demonstration message (EAS Description/WEA 90 character message text) shall be as follows: “TEST TEST TEST. This is a Proficiency Demonstration Test Message. No action is required.”
- COGs may use any approved event code for the test message. Neither additional message content nor use of a geotargeting polygon will be evaluated. (ECN: It will not be evaluated by FEMA, but it would be good to practice making polygons according to the guidance that FEMA attached.)
- The IPAWS Message Viewer can provide alert originators with confirmation of whether the test message was successful: (30xxxx= replace with COG ID): (ECN: This is the new address to use. Remember that the xxxx is where you insert your

  - Successful message codes are 600 for WEA & 500 for EAS
  - Further details on the IPAWS message viewer are available at: https://www.fema.gov/media-library/assets/documents/106754

***Live messages sent to the production environment WILL NOT be counted as a Monthly Proficiency Demonstration. (ECN: Although it is not required by FEMA, we still encourage you to do Required Weekly Tests. They will keep you proficient and knowledgeable of your system, and ensure your message can actually make it to the local EAS participants.)

If an issue is encountered causing the test to fail; note the date and time of your alert message and contact IPAWS Customer Support Branch for assistance.

FEMA

Alert Information View

Again please use this as a training opportunity for the things you may not have had to do or would like to know how to do. The monthly Proficiency Demonstration is in the test environment with the Joint Interoperability Test Command (JITC) Lab, so it does not go to the public. Here are some examples of items to work on during the Monthly Proficiency Demonstrations:

- Updating and/or canceling a message.
- Drawing polygons to outside your jurisdictional boundary. Did you get an error?
- Polygons: Circles vs. squares. Do you get any error messages?
- Do your written procedures flow properly?

Good opportunity to see if someone else can follow them without error.
Testing

Please let us know when any of the points of contact on your MOA change so that we can update the ECN data (contact John Dooley with your updates) and keep FEMA up to date also.

IPAWS Training

If you would still like to have a training session conducted in your jurisdiction, we would be glad to facilitate one for you. Contact John Dooley (651-201-7099) to arrange one.

Interoperability

Communications Unit Personnel

Minnesota’s Communications Unit (COMU) is growing leaner and stronger. As time passes, inactive COMU personnel are not renewing and their recognitions are expiring. New COMU personnel are coming on board under the careful scrutiny of the COMU workgroup. Active COMU personnel are renewing using the more rigorous points system spelled out in Minnesota’s COMU Standard Operating Guidelines.

As of September, Minnesota has the following state-recognized COMU personnel:

- Communications unit leaders (COML): 61
- Communications unit technicians (COMT): 19
- Incident communications center managers (INCM): 1
- Incident tactical dispatchers (INTD): 5
- Auxiliary emergency communication specialists (AECS): 7

A full list of state-recognized COMU personnel, as well as trainees and expired personnel, may be found in the Communications Assets Survey and Mapping (CASM) database or the Minnesota ECN community of the Homeland Security Information Network (HSIN). For access to either, contact Jim Stromberg (651-201-7557).

Communications Unit Exercising

The initial training of Communications Unit personnel is typically provided by the U.S Department of Homeland Security (DHS) and comes to Minnesota’s public safety communications personnel at no financial cost. In order to be recognized in the position for which they trained, each student must complete several tasks identified in position-specific Position Task Books (PTBs). These PTB signoffs can be done through real-world or training events.

Training events do not have to be dedicated Communications Exercises (COMMExes). ECN encourages incorporating communications into all aspects of training. By engaging a COML in a non-communications-focused training or exercise:

- The training, exercise, or event can benefit from improved communications.
- The COML can practice their skills.
- A COMU trainee can perform requisite tasks under the COML’s supervision.

Emergency Communications/Services Board (ECB/ESB) regions may independently, or through partnerships with other regions, dedicate grant money to developing a COMMEx for the sole purpose of providing PTB signoff opportunities. It is encouraged that ECB/ESB regions have a regional Communications Unit plan to drive support their request to use grant money.

Push-to-Talk over Cellular Connectivity to ARMER

Conversations continue regarding how to address the groundswell of interest in connecting Push-to-Talk over Cellular (PoC) technology with ARMER. PoC provides radio-like functionality to an LTE device like a cellphone or a tablet. Talkgroups can be created and, by way of an application, users can talk with one or many recipients very much like a two-way radio. The technology also exists to tie an LTE device to ARMER.

A workgroup has been formed to review and update as necessary the operational and technical requisites to patch a PoC device to ARMER. If you have interest in this workgroup or questions, please contact Jim Stromberg (651-201-7557).

CASM

Communications Assets Survey and Mapping (CASM) is an online database hosted by DHS that provides a repository for all communications resources. The database tracks everything from statewide radio systems to individual talkgroups/channels to radio counts and locations to communications unit personnel. Minnesota
has embraced CASM, and each region has identified lead and assistant administrators. Regional and state CASM administrators meet quarterly, twice in person and twice by WebEx. The October meeting will be hosted by WebEx, and administrators will provide updates, share best practices, and continue their mission of keeping CASM current.

If you have questions about CASM or would like to know who serves as your regional administrator, contact the Statewide Interoperability Coordinator Jim Stromberg (651-201-7557).

Grants

The NG9-1-1 grant has two projects that are currently in an open application period. All greater Minnesota PSAPs are eligible to apply for funding to complete their GIS data – the due date for these applications is Oct. 25. In addition, the application period is open for the Call Handling Equipment grant. This grant will cover 50 percent of costs for new call handling equipment for PSAPs who are not direct-SIP and will be encouraged to join or create a shared system if they are a small PSAPs. Financial need will also be considered, and PSAPs will be asked to deploy Text-to-9-1-1 if it is cost-neutral. ECN will have three application periods for this grant project with the first due date on Nov. 8.

AHA/CPR Legislation Status

It has come to our attention that the surveys we distributed earlier in the year soliciting input from PSAPs on how they are managing medical calls (specifically full cardiac arrest calls) may not be entirely conclusive. To this end, ECN would like to double-check PSAP responses from our original survey to verify:

- Does your PSAP provide pre-arrival instructions (PAIs) to callers reporting a full cardiac arrest in your PSAP?
- Does your PSAP transfer full cardiac arrest calls to a secondary PSAP, or another EMS service for PAIs?

If your PSAP currently provides Telephone Cardiopulmonary Resuscitation (T-CPR) in-house for reports of full cardiac arrest, or your PSAP transfers such calls to another location who provides this service, you do not need to make any procedural changes. You are in compliance with the requirements of the new T-CPR legislation.

If your PSAP reported doing neither option on the survey, you should have already received notification from ECN that you have been assigned to one of Minnesota’s five secondary EMS PSAPs (Allina, Ridgeview, Hennepin EMS, Mayo, North Ambulance) who will perform this service on your behalf. An initial coordination call has already taken place between each secondary EMS PSAP and the group of primary PSAPs each has agreed to accept transfers from.

Note: If you are neither providing PAIs nor transferring the call to a location that provides PAIs for full cardiac arrest calls, and your PSAP has not been contacted by ECN with an assignment to transfer full cardiac arrest calls to one of the secondary EMS PSAPs, please contact Cathy Anderson (651-201-7548) ASAP so you may be assigned to a secondary EMS PSAP and your coordination call may be scheduled.

Even though it is early in the process, ensuring that all Minnesota PSAPs will be in compliance with the new T-CPR legislation by July 1, 2021, is critical. Having full disclosure of the PSAPs who need support is the first step in that process.

T-CPR Training Modules

The first of the training modules being created by ECN for T-CPR training has been completed and approved by the Minnesota Resuscitation Consortium! This is a monumental first step.

All modules will end with a quiz to test knowledge, which will enable you to print out a certificate afterward. There will be no trick questions; however, you do need to pay attention to the training.
As an alternative to using the free training, PSAPs may pursue their own training. The free training, which is being approved through the Minnesota Resuscitation Consortium, is a viable option for those who may not want to contract with a training company. Also, remember telecommunicators are not required to be CPR-certified.

More to come...

Upcoming Events

Be sure to join us at the Regional Leadership Meeting on Monday, Oct. 28, 2019, at 10 a.m. at the Minnesota Department of Transportation (MnDOT) in St. Cloud. In addition to regular updates, the regions will be asked to provide suggestions for program sessions and a keynote for the 2020 PSCC.

If there are individuals in your region who would like to assist in planning and implementation of this year’s conference, please bring their names to the meeting or contact Chris Pedersen (651-201-7547). Your input is vital to providing this professional educational opportunity for public safety personnel in the State of Minnesota.