

ARMER Task Force

September Meeting Agenda

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1. MEETING DETAILS

Date: 9-23-26

Time: 1:00–4:00 p.m.

Format: Hybrid via Teams

Location: MnDOT Building, 395 John Ireland Blvd, Saint Paul, MN 55155 | Room G13 & G14 – located on Ground Floor to the right of the information desk

Time	Agenda Item
1:00-1:05	Opening/ Charter vote
1:05-1:15	Local ARMER operating/investment costs
1:15-2:15	Examples from other states
2:15 – 2:20	BREAK

2:20-3:20	Dispatch consoles discussion
3:20-3:50	Facilitated discussion about what the examples mean for Minnesota.
3:50-4:00	Closing remarks

Note: These notes are intended to summarize the discussion and decisions from the meeting. To request a correction or clarification, please contact ARMERTaskForce@theimprovegroup.com

2. ATTENDANCE

Task Force Members Present

- Shane Chatleain, Office of Statewide Radio Communications, Minnesota Department of Transportation
- Brent Christensen, Minnesota Telecom Alliance
- T. John Cunningham, Minnesota Department of Public Safety
- Kristine V. Elwood, Minnesota Department of Transportation
- Mike Gamache, Anoka County
- Dona Greiner, Stevens County
- John Jasinski, Minnesota Senate
- Sara Miller, Gibbon Police Department
- Micah Myers, City of St. Cloud
- Elliott Payne, Minneapolis City Council
- Jake Lestock, CTIA
- Jonathan Rasch, Minnesota State Fire Chiefs Association
- Jill Rohret, Metropolitan Emergency Services Board
- Eamonn Schmitz, Statewide Emergency Communications Board
- Nate Smolinski, Minnesota Homeland Security and Emergency Management
- Terry Stier, Minnesota House of Representatives
- Jake Thompson, Hennepin County
- Eric Wallen, Lyon County Sheriff's Office
- Melissa Wolf, Minnesota Cable Communications Association

Task Force Member Absent

- John Huot, Minnesota House of Representatives
- Ron Latz, Minnesota Senate
- Bruce Lawrence, Pennington County

3. OPENING AND TASK FORCE CHARTER

The task force voted to approve the Charter ([link to view the ARMER Funding Task Force Charter](#)).

4. LOCAL ARMER OPERATING/INVESTMENT COSTS

The representative task force member for DPS is gathering cost information from 40+ Minnesota counties to capture an estimate of expenses, like:

- maintaining generators,
- maintaining HVAC,
- tower inspections,
- staff salaries and/or contracting costs

This information was not available at the time of this meeting, but DPS expects it to be ready soon and will share this information with Task Force members as soon as it's available.

A MnDOT representative task force member clarified that the complete cost of the ARMER backbone also needs to be shared at an upcoming meeting. MnDOT shared the Motorola portion of the full cost at the August meeting, but they have not enumerated and shared the full cost of operating, maintenance, and capital assets. They can provide this at the next meeting.

5. EXAMPLES OF FUNDING MECHANISMS AND MODERNIZATION FROM OTHER STATES

Task force members reviewed a summary of possible funding mechanisms that may be considered when making funding recommendations ([link to view summary of possible funding mechanisms](#)).

The task force heard examples from three other states about how they have modernized their interoperable radio communications systems.

Wyoming

Task force member Nate Smolinski of DPS presented a summary of Wyoming's system, WyoLink, drawing from his experience at WyoLink prior to coming to Minnesota.

WyoLink is built on VHF-based system to cover the state's 100,000 square miles of varied terrain. Other specs include:

- 100 sites.
- Two cores.
- 550 agencies.
- 16,000-30,000 subscribers.
- Average of 12 million calls per year.
- 32 full time employees, 7 of which are fully dedicated to the core.
- The state board overseeing WyoLink approves policy and membership. The board may give funding recommendations, but it does not have fiscal authority.

WyoLink funding was originally built with grants and WyDOT investments/funds. WyoLink needed to request funds from the legislature for large projects. WyoLink started sending informational invoices to user agencies with a summary of what usage would hypothetically cost, and they began seeing local agency usage drop dramatically, and interoperability fractured as a result.

In 2023, WyoLink received \$8.6 million from general fund appropriations. They also explored other funding sources to avoid seeking new general fund appropriations every two years. A key priority was to avoid charging end user fees in order to maintain local agency partnership to support WyoLink interoperability. Telecomm partners also supported, and WyoLink also took advantage of American Rescue Plan Act funds. As a result of secure funding, subscriber usage increased again and those agencies started using their own funds to modernize their radios.

WyoLink made the following updates to modernize their system:

- Started a grant program for local entities to upgrade their radios.
- Microwave upgrades.
- Cyber upgrades.

Following the presentation on Wyoming, the task force discussed:

- Concerns that for sites under local control, those local entities may be under too much demand in their budget and the maintenance for those locally-controlled sites will fall to the wayside instead of receiving necessary upgrades.
- Task force members representing counties and local entities spoke to this concern, saying that they pay for contractors to maintain towers based on existing service agreements.
- From WyoLink's experience, there may have been a small savings for the state to pay contractors to maintain tower sites compared to local entities paying for that same service due to economies of scale.
- Task force members representing local entities also raised concerns that local control over contractor service agreements may allow for more timely maintenance compared to state-owned contracts. Additionally, they raised concerns for maintaining partnership with local vendors.

Montana

Jamin Howell of Montana's Emergency Communications System (MTEC) was invited to present about their system.

MTEC is a customer-maintained Motorola system. Montana holds a service agreement with Motorola to update the software. The agreement does not cover equipment cost or hands-on support. Other specs include:

- 130 tower sites.
 - 79 sites are LMR radio sites, primarily VHF, but recently rolling out 800 MHz to provide inbuilding coverage.
- 2 cores.
- 40 out of 56 counties participate in the system.

- Estimated 500 agencies.
- About 19,000 subscribers using the system.
- Average of 10-250 million calls per year.
- 21 dispatch centers with dedicated Motorola consoles.
- 3 full-time employees as maintenance technicians.

MTEC was originally built out using post-9/11 grant funding awarded to a conglomerate of counties who competed together. They built out the system to 65% completion before that funding ran out. In 2011, all towers, frequencies, and equipment were turned over to the counties where those assets resided. This resulted in equipment falling derelict, and in 2017 the Montana state legislature mandated Department of Justice to take over maintenance of the system, but with no funding. In 2019, funding was appropriated \$37.5 million over 10 years.

MTEC made the following modernization upgrades:

- Microwave upgrade.
- Motorola hardware upgrade.
- SmartConnect with LTE deployment.
- CriticalConnect to link with Idaho and Wyoming, and discussing possible connections to North Dakota, South Dakota, and Canada.
- Starlink satellite for some communications.

MTEC's cost share is currently structured through MOUs with each county. Department of Justice manages radio, antenna, combiner, and power plant components. Counties retained responsibility for towers, buildings, HVAC, generators, and frequency licensing. This has caused some friction; towers need repairs, yet Montana Department of Justice needs to ensure those sites are maintained to keep MTEC operational.

Following the presentation on Montana, the task force discussed:

- The functionality of using Starlink or LTE features with mobile radios, with a priority of ensuring that when a call comes in, it immediately goes through.
- Task force members cited examples from California's wildfire emergency services using Starlink devices, which allowed for more rural operations. They likened this to the Boundary Waters, which do not have LTE or good ARMER coverage, and metro areas where building amplifiers cause issues.
- A task force member also raised a concern that Motorola's new features are not compatible with dispatch center technology, and the task force should be focusing on funding recommendations that allow for moving these technologies forward.

South Dakota

Kendall Light of South Dakota's State Radio system was invited to present.

Prior to modernization, South Dakota used SmartZone. However, interoperability issues contributed to the state's shift to P25. For example, the presenter described a severe weather event during which the Governor was unable to communicate with other responding agencies.

In moving to P25, South Dakota used technology upgrades to expand the system and support more users. The current system has approximately 75 towers on one core system, 130 participating agencies, and 30,000 subscribers. Technology and system improvements discussed included:

- SmartConnect
- Critical Connect
- A dedicated Wi-Fi network
- Firewall support for cellular and satellite connectivity
- Core and tower redundancy
- Simulcast in partnership with local agencies
- Drones to inspect towers and provide information to maintenance contractors

Patrol vehicles can connect through Wi-Fi and use cradle points to access cellular or satellite services. South Dakota has also worked with local businesses, hospitals, and schools to configure Wi-Fi that can support first responders when RF coverage is limited.

Some dispatch centers are not directly connected to the Motorola system. South Dakota described using SmartConnect-enabled radios configured to prefer broadband connections in these situations. Portable LTE devices have also helped maintain communications with dispatch and reduce system traffic when other connectivity is unavailable.

Critical Connect has enabled integration with FirstNet, Verizon, and T-Mobile, expanding portable communication capabilities in areas with limited RF coverage. South Dakota continues to work with the three carriers to expand connectivity.

During periods of unusually high demand, such as the Sturgis Motorcycle Rally, South Dakota uses approaches including geofencing, additional channels on local towers, and LTE resources. The presenter reported that these approaches allowed the system to handle a 295% increase in radio traffic while reducing tower-site busy events by 98%.

South Dakota reported targeting a 2% grade of service, described by the presenter as less than approximately one second of busy time.

The state manages network connections to facilities and provides network equipment to maintain security. Circuit costs that were previously paid entirely by the state are now split 50/50 with participating local partners.

Following the presentation on South Dakota, task force members discussed:

- Members asked whether LTE and Starlink could be incorporated at ARMER sites and potentially reduce reliance on some local infrastructure. Nate noted that Minnesota is not at that point yet, while South Dakota has used LTE and Starlink at some sites to reduce dependence on microwave connections.
- Rather than removing sites, one suggestion was to explore whether LTE could serve as a backup and allow Minnesota to reduce RF capacity at some sites. Members noted that reducing the number of channels could potentially reduce recurring system costs.
- Members also raised the need to consider ISO ratings when evaluating changes to system design. One member noted that changes affecting end-to-end communications capabilities could affect an agency's ISO rating.

- Ramsey County's experience with VHF paging illustrated some potential local costs of modernization. Replacing legacy paging systems could require significant remapping of tones/frequencies and replacement of subscriber equipment that may not be compatible with newer technology.
- Local operating models may also affect modernization choices. Ramsey County uses Everbridge for mass notifications, while some departments are moving toward fully staffed models and relying less on notifications or paging. Members noted that these approaches may not be feasible for all jurisdictions statewide.

General discussion following state examples

- The task force discussed whether LTE + Starlink at ARMER sites could eventually let Minnesota remove some local towers. A task force member thinks ARMER is not there yet, since South Dakota/Montana's similar approaches depend on subscriber devices already supporting that technology, which Minnesota's don't yet.
- Alternative framed as "load shedding": rather than removing sites, reduce channel capacity/base stations at high-traffic sites (e.g., Hennepin/Minneapolis) by shifting lower-priority users (transit, etc.) to LTE as primary with ARMER as backup — would lower Motorola upgrade/maintenance (SUA) costs.
- Open question on whether Starlink-type services could support VHF paging (via the Informer system). No one had tested this yet or knew if it could integrate with interoperable core systems.
- A task force member raised a concern about relying on cloud/microwave replacement services could hurt ISO insurance ratings if the agency doesn't maintain end-to-end control of the system.
- Ramsey County case study on VHF paging: exploring a switch to 800 MHz paging devices, but tone sequences are too closely spaced, requiring a full retoning/remapping effort across the county's nine departments; described as an expensive, disruptive undertaking likely needed statewide.
- A task force member noted that current subscriber radios (even recently replaced ones) may not be compatible with newer pathways, meaning any transition could require costly new field devices.
- Ramsey County uses multiple redundant alerting pathways (VHF paging, Active911, Everbridge tied to CAD) but noted most of the state still relies more heavily on traditional paging since fewer agencies have moved to fully-staffed models.

6. DISPATCH CONSOLES DISCUSSION

The task force discussed dispatch consoles, and whether the replacement of this technology should be included in the recommendations the task force needs to make.

Currently, consoles are run under a service agreement with Motorola. Counties are responsible for replacing their consoles, but Motorola has signaled that future software updates may not be supported on older consoles.

Task force members emphasized that consoles are a critical, integrated part of ARMER interoperability. They argued that leaving these upgrades solely to county responsibility risks some counties being disconnected. Other task force members noted that local entities are in control of deciding how many consoles are needed.

Task force members discussed ideas for how to include consoles in the funding recommendations:

- Raising 911 fees. This option would need to be differentiated from fees raised for traditional center operations and would require additional policy work due to restrictions on how these fees can be spent.
- A dedicated fund. Regardless of how funds are raised for consoles, task force members suggested an allocated fund that counties could apply to based on demonstrated need to upgrade consoles (e.g., call volume growth). This may prevent over-requesting of state funds to upgrade consoles before those upgrades are warranted.

7. FACILITATED DISCUSSION ABOUT WHAT THE EXAMPLES MEAN FOR MINNESOTA

The task force held a final discussion about considerations for their next meeting.

A related work group, which includes some members of the ARMER funding task force, is working on the long-range cost estimate needed for ARMER.

The following items were raised as needs for the task force to continue with its charge of identifying funding sources:

- A cost estimate from the horizon working group.
- Direction/decisions about the modernization recommendations (e.g., LTE, Starlink, or something else).
- An estimate showing how much an increase on 911 fees (e.g., 1 cent) will raise as possible funding. Task force members noted again that “911 fees” may be too broad as this carries federal compliance requirements. Therefore, this estimate needs take that into consideration.
- Whether there are other existing revenue sources than can be leveraged outside of 911 fees (e.g., capturing sales tax).

8. NEXT STEPS AND CLOSING

The Improve Group and DPS will:

- **DPS will share the summary of estimated expenses to counties as soon as this is ready.** This estimate from approximately 40 counties will capture expenses like maintaining generators and HVAC, tower inspections, staff salaries, and contracting costs related to ARMER.

- **DPS will share information on who can prepare funding estimations.** Funding estimations can support future ARMER task force conversations by modeling the estimated value of potential funding sources (e.g., the value generated by increasing 911 fees).

Task Force members will:

- **Prepare to come to Meeting 4 (October 14th) with ideas about funding sources.** The next meeting will focus on discussing potential sources that may fund ongoing maintenance and modernization.

Next meetings:

- **Meeting 4:** Wednesday, October 14, 2026
 - Time: 1:00pm-4:00pm
 - Format: Hybrid
 - In-person location: MnDOT Central Office, 395 John Ireland Blvd, Saint Paul, Room G13/14
- **Meeting 5:** Wednesday, October 28, 2026
 - Time: 1:00pm-4:00pm
 - Format: Hybrid
 - In-person location: State Emergency Operations Center, 3925 Pheasant Ridge Dr NE, Blaine, MN 55449
- **Meeting 6:** Wednesday, November 18, 2026
 - Time: 9:00am-3:00pm
 - Format: In-person preferred (hybrid setup will be available)
 - In-person location: MnDOT Training & Conference Center, 1900 County Rd I, Shoreview
- **Meeting 7:** Wednesday, December 16, 2026
 - Time: 1:00pm-4:00pm
 - Format: Hybrid
 - In-person location: TBD
- **Meeting 8:** Wednesday, January 27, 2027
 - Time: 1:00pm-3:00pm
 - Format: Hybrid
 - In-person location TBD