

Allied Radio Matrix for Emergency Response System (ARMER) Standards, Protocols, Procedures

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1. Purpose or Objective

The purpose of this standard is to establish minimum qualification requirements for system technical staff, both in-house and contracted. This will ensure that functionality and integrity is maintained by requiring system configuration, maintenance, and repair functions be performed by qualified personnel.

2. Technical Background

▪ Capabilities

This standard protects the integrity of the system by ensuring training and background requirements of all personnel working on the system and by describing the authorized activities of a contract service provider who is to provide maintenance and programming services.

▪ Constraints

Some sensitive and non-public system security information will be available to businesses and people operating outside of the ARMER System. It is possible that the integrity of the system may be jeopardized if no standard or agreement is in place to ensure the appropriateness of the businesses' activities.

3. Operational Context

System functionality and integrity must be maintained by ensuring that only qualified personnel perform system configuration, maintenance, and repair functions. Not all user agencies participating in the region wide system have technicians on staff to program and perform configuration, maintenance, and repair on radios and other electronic infrastructure. Agencies may need to contract with one or more service providers for these services. The choice of service provider is at the discretion of the user agency, but the contract service provider must enter into an agreement with the user agency, and the user agency must ensure the requirements of this standard are met prior to execution of the service.

4. Recommended Protocol/ Standard

System Owners' Internal Technical Staff

- Employed technical staff of owning agencies will follow the same or an equivalent internal process of ensuring absence of criminal history, as outlined below in the Contract Service Providers section. The minimum standard for criminal history checks will be the Interstate Identification Index.
- Employed technical staff of owning agencies will follow the same process of ensuring technical competency, as outline below in the Technical Staff Requirements (Internal and External) section.
- System managers shall maintain a list of technical training completed by internal technical staff.

Contract Service Providers

User agencies may contract radio programming and system infrastructure work provided the following requirements are met:

- A service shop must prove it is a qualified service center eligible to conduct business in the state of Minnesota.
- A service shop must prove it has specified insurance coverage and may, prior to commencement of work, be asked to purchase a security bond by the user agency.
- When a user agency contracts with a contract service provider for the purpose of providing maintenance, repair, programming, and related service on electronic infrastructure to include dispatch consoles and/or radio subscriber equipment, the service provider must obtain and pay for all permits, licenses, and approvals necessary for programming and maintenance to fulfill the provisions.
- Due to the sensitive and non-public nature of the programming information, the contract service provider must provide written assurance that it is authorized and has all necessary permits and licenses to conduct business in the state of Minnesota. Unless specifically authorized by the System Administrator and user, in writing and on an individual radio-by-radio basis, the contract service provider may not directly or indirectly permit any third person to view, read, print, extract, copy, transmit, archive, edit, create, clone, transfer, release, tamper with, reverse engineer, or otherwise compromise the security of any radio code plug programming file, system key file, encryption key file, or any infrastructure configuration database file for any radio, console, or other infrastructure element on the system.
- The contract service shop must provide references and enter into a provider agreement with the requesting agency. The System Administrator and/or the user agency have the right to view the resume of any staff member of the contract service provider or to conduct background checks.

- The contracted technician must submit to a background check. The contracting agency is responsible to ensure the background check has occurred.
- Contracting agencies shall use the contract service provider's technical staff in their certified areas of competency.
- The contract service provider shall maintain all training certifications for its personnel and provide copies of these certifications to System Administrators when requested.
- Contracting agencies may contract for services only for equipment they have jurisdiction over.
- Contracting agencies shall notify the appropriate System Administrator of any contract for services. The appropriate System Administrator is the Administrator of the system or subsystem the agency has contracted with to be operating on. For example, subscriber-only agencies contracted with Hennepin County must notify the Hennepin County System Administrator, and a regional subscriber-only user contracted with a Regional Radio Board (RRB) or the Minnesota Department of Transportation (MnDOT) must notify the Statewide System Administrator.

Technical Staff Requirements (Internal or External)

- The technical staff that is assigned to work on system and/or subsystem equipment shall successfully complete appropriate training on all equipment they are assigned to work on. This training will be completed prior to working on the equipment.
- The technician must have or possess satisfactory knowledge and experience in either the equipment being maintained or radio programming.
- Personnel who are not trained shall not perform configuration, maintenance, or repair work unless this work is performed under the direct supervision of trained and approved personnel.
- The technicians must attend a common practices class and any informational meetings as specified by the System Administrator before they may work on the system or program radios for use on the system.
- Technicians shall only work in the areas which they have completed the common practice classes or informational meetings.
- Technicians must be familiar with and abide by ARMER standards established by the Statewide Emergency Communications Board (SECB), including but not limited to, the standards contained in Section Four that pertain to maintenance, as well as any relevant regional standards.
- System and subsystem technical staff shall be familiar with the site access procedures, equipment outage, and maintenance notification requirements of this standards manual.

- System and subsystem technical staff shall have access to and use radios for required Sys-Tech announcements before performing any work on the system.
- Technical staff connecting to the radio network shall have a clean computer and follow all standards regarding security. Before they connect to the network, they shall work with the appropriate System Administrator to ensure they have the latest anti-virus protection on their computers.

5. Recommended Procedure

This manual does not contain specific training procedures or training modules.

Agencies requiring contract services must enter into an agreement with the contractor providing service. The agreement will specify enforcement provisions, including consequences of misuse and the release of non-public system security information.

The contract service provider's technical staff must attend the common practices/system overview class and any other training as determined by the System Administrator.

6. Management

The Statewide System Administrator, the appropriate System Managers, and the contracting agencies are responsible for managing and maintaining the agreement process.

The Statewide System Administrator will:

- Facilitate the development of and maintain the current version of the common practices for the different categories of work.
- Maintain a list of the overview/common practices trainers for the contract workers.

System Managers are responsible to ensure that:

- Minimum training requirements of in-house staff are met.
- Only qualified personnel perform system maintenance functions.
- System technicians are familiar with all applicable sections of the ARMER system standards.
- Lists of technical contractors in use are to be submitted to the Statewide System Administrator.

Contracting Agencies shall:

- Ensure that these system standards are followed when using contract services.
- Ensure that only qualified personnel perform system maintenance work.
- Notify the System Administrator when contracting for service.