

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

Document Section 1	<b>Management of System</b>	<b>Status:</b> Complete
State Standard Number	<b>1.11.1</b>	
Standard Title	<b>System Administrators Definition and Minimum Training Requirements</b>	
Date Established	<b>10/01/2003</b>	<b>SECB Approval:</b> 01/28/2016
Replaces Document Dated	<b>09/01/2005</b>	
Date Revised	<b>03/30/2015</b>	

### **1. Purpose or Objective**

The purpose of this standard is to establish the minimum training standards for system administration staff. This is to ensure that system functionality and integrity are maintained because qualified personnel are performing system administration functions.

There are four levels of system administrators that will be described below.

### **2. Technical Background**

- **Capabilities**  
Different levels of access allow different changes to the system.
- **Constraints**  
N/A

### **3. Operational Context**

System functionality and integrity must be maintained by ensuring that only qualified personnel perform system administration functions.

### **4. Protocol/ Standard**

Local System Administrators are responsible for maintaining system configuration databases for local infrastructure, subscriber databases, and console configuration databases. Therefore, they shall have successfully completed the appropriate training as defined by each class of administration duties:

**System Admin Level 1. Statewide System Administrator.** This Administrator is assigned to MnDOT or its designee and has full access and rights to the system and all subsystems. This Administrator assigns network authority for all other levels. Administrators performing at this

Level must also have qualifications of System Admin Levels 2, 3, and 4. Minimum training for Admin Level 1 consists of formal manufacturer training and MnDOT Best Practices Training.

**System Admin Level 2.** This Administrator handles any or all of the following based on security rights given by System Admin Level 1: local network controls, databases, console infrastructure administration, system and site maintenance, and other system resources as required.

Administrators performing at this Level must also have qualifications of System Admin Levels 3 and 4. Minimum training for Admin Level 2 consists of formal manufacturer training or Operations and Technical Committee (OTC) approved vendor training (see Section 6, Management) and MnDOT Best Practices Training.

**System Admin Level 3.** This Administrator has access to the system software tools used to manage subscribers. They can add, update, or delete radio and talkgroup id's, handle code plug creation and management, and run appropriate reports. Administrators performing at this Level must also have qualifications of System Admin Level 4. Minimum training for Admin Level 3 consists of formal manufacturer training or OTC approved vendor training (see Section 6, Management) and MnDOT Best Practices Training.

**System Admin Level 4.** This Administrator has no access to network management. Tracks local ID's, handles mandated reporting, managing their talkgroups, request talkgroup use permissions from others, and responsible for security group permission and for the Communications Subsystem. Minimum training for Admin Level 4 consists of training from a System Administrator at any level and an overview of MnDOT Best Practices Training.

It is recommended that all System Administrators view ARMER training modules.

These courses, created on behalf of the Statewide Emergency Communications Board (SECB) and reviewed and approved by subject matter experts, are hosted through the Alexandria Technical & Community College online website. They can be accessed from the Emergency Communication Networks (ECN) website under ARMER Standards.

A user name and password will be needed for these training modules, and instructions for obtaining these are posted on ECN's website under ARMER Standards. While web-based training is supplemental, except for the Minimum Training Requirements, all users must attend formal training for the ARMER system.

All System Administrators shall be familiar with the ARMER State Standards.

The appropriate Local System Administrator shall certify that:

- Personnel acting as system administrators are properly trained.
- A current record of personnel who are trained and acting as system administrators will be maintained. The Local System Administrator shall forward this list to the Statewide System Administrator as changes are made. This list will also be included as part of the annual report sent to the Statewide System Administrator each December.
- System access rights shall not be given to personnel who have not met the minimum training requirements for their respective level

## **5. Recommended Procedure**

It is highly recommended that System Administrators read and familiarize themselves with all Minnesota Communications Best Practice Guides as part of their training. The Best Practice Guides are available on ECN's website under Allied Radio (ARMER).

## **6. Management**

Local System Administrators are responsible for ensuring that:

- An appropriate training plan has been developed for their agency that includes statewide interoperability training.
- Minimum training requirements are met, as listed in #4, Recommended Protocol/Standard.
- Only qualified personnel perform system administration functions.
- Local System Administrators are familiar with all applicable sections of the system standards manual.
- The annual MNDOT report is compiled and submitted.

### Approval of Curriculum

- All vendors who wish to perform System Administrator training must submit current curriculum for each level of training to the OTC for approval.
- System Administrators with credentials to the ARMER system prior to February 1, 2016, shall retain their current system rights.