

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

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Standard Title	Agency Maintenance	
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1. Purpose or Objective

The purpose of this standard is to define the maintenance responsibilities and roles of the ARMER managers/owners. The maintenance levels for the ARMER system and subsystems must be set to a standard to protect the overall functionality and integrity of the system for all users. A proper maintenance standard will also protect the warranties of the system and subsystems.

2. Technical Background

▪ Capabilities

Standards in maintenance protect the integrity of the system and protect the warranties of the sites and equipment. Coordinated maintenance is simplified by having one set of maintenance standards, especially at shared sites.

▪ Constraints

Improper maintenance not only poses a risk to the operational functionality of the ARMER system and subsystems, but it could also risk equipment warranties and potentially cause confusion at shared sites.

3. Operational Context

Each site and each piece of equipment shall be considered “owned” by one of the appropriate owners of the system. The individual owners will then be responsible for the maintenance of the sites and equipment they own. Agreements between the owners and/or maintenance contractors are at each agency’s discretion, but the owner is ultimately responsible for their portion of the system.

Maintenance of the system and subsystems falls under one of two categories:

- **Day-to-day routine:** For general day-to-day maintenance activities

- Emergency and urgent repairs: Serious system and subsystem impairment which may cause an unacceptable loss of service to the users of the system

4. Recommended Protocol/ Standard

N/A

5. Recommended Procedure

Any broad maintenance issues that affect multiple owner agencies should be discussed and resolved at System Managers meetings.

For day-to-day maintenance, individual agencies or contractors will maintain equipment they are responsible for.

For emergency and urgent repairs, the owning agency may request and expect cooperation in support resources (i.e., support staff and/or parts) from other System Administrators to restore equipment or the system to normal operation.

Repair of any equipment not owned by an agency requires notification and consent of the responsible System Manager of the owning agency.

System Managers/Owners or their contracted service providers will be responsible for:

- Notifying the responsible agency of equipment and location issues that require attention.
- Managing the inventory of the equipment that they are responsible for, as defined by their internal department inventory processes.
- Making sure equipment at shared sites is clearly labeled to indicate agency ownership.
- Managing the equipment maintenance logs, such as "Lights, Generator, Frequency-Modulation-Power, etc.," of the equipment they are responsible for, as defined by their internal department logging processes.
- Posting Federal Aviation Administration (FAA) and Federal Communications Commission (FCC) licenses or reference to the location of the licenses at the sites.
- Posting service technician information at the sites.
- Keeping routine equipment maintenance logs at the sites.
- The Statewide System Administrator will be responsible for maintaining a system event log.

- Keeping current copies of all as-built documentation at each site and at the offices of the local System Administrators. The Statewide System Administrator shall be responsible for ensuring the accuracy of all as-built data related to the infrastructure equipment. Any changes or alterations that come to the knowledge of one of the local System Managers will be immediately forwarded to the Statewide System Administrator for entry into the records. The Statewide System Administrator will then distribute the updated information to the other System Administrators.
- The Statewide System Administrator will be responsible for coordinating, implementing, and/or overseeing configuration changes affecting the system Infrastructure.
- All maintenance work being scheduled that may affect the system and/or subsystem's performance shall be preceded by reasonable notification to the other local System Managers.
- The Statewide System Administrator shall ensure that all technicians assigned to work on system equipment have successfully completed appropriate training on that equipment. Training requirements are referenced in the training section of the standards manual.
- Following a preventive maintenance plan, as defined in the Preventative Maintenance section of the standards manual.
- Each local System Administrator will maintain a list of qualifications and contact information of their technical staff, providing updated copies of this list to other local System Administrators.
- Each System Administrator will maintain a list of the system and subsystem spare parts/equipment they have available. This provides other managers the option to request use of this spare equipment. The borrowing agency is responsible for returning the original spare parts/equipment, or, at the lending agency's discretion, the successfully tested replacement component.
- Any infrastructure hardware and software upgrades or changes that may have an impact on the system will need reasonable discussion and approval by the Statewide System Administrator.
- The local System Administrator for the impaired system and subsystem will determine how critical an equipment failure is operationally, determine the appropriate action, and escalate or de-escalate the repair process as needed. For example, a single failed channel on a main simulcast cell would not be a critical failure, but a simulcast cell failure would be.

- It shall be the intent to share the identified support information electronically within a common/secure area of the system. The System Administrator will be responsible for determining the operational details of information sharing.

6. Management

The System Administrators are responsible for managing maintenance of the equipment and sites they are responsible for, as well as managing emergency repair situations.