

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

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Procedure Title:	<b>How to Use Scene of Action (SOA)</b>	
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### **1. Purpose or Objective**

Provide standards, protocols, procedures, and operating parameters for Scene of Action (SOA) channels.

The public safety/service interest is best served by creating an operating procedure that maintains safety of personnel in situations where they are out of range of the system. The range of mobiles and the “walk over” issue is a critical point. With the limited number of available SOA channels and the number of potential users, it is important the use of mobiles on these channels be restricted. Once a radio is keyed, there is no way to control the footprint of the transmission other than limiting the power of that transmission. Personnel talking on a mobile radio will have no way of knowing if they are walking over a portable in the next community, because they will not be able to receive it or realize that the channel is in use by the portable. With six available SOA channels, limiting the use of mobile radios on specific SOA channels will address the emergency scene needs of the Fire Service and still meet the needs of greater range of mobiles for Police, Fire, EMS, and Public Works/Transit on the remaining SOA channels.

### **2. Technical Background:**

#### **▪ Capabilities**

The ability to communicate radio unit to radio unit when radios are out of range of the radio system.

#### **▪ Constraints**

Portable units will have limited range of operation depending upon the situation and conditions.

SOA channels included in a multi mode (trunked & conventional) scan list of a radio unit will not allow that unit to priority scan.

Dispatch centers will not be able to monitor SOA channels or assign them for usage.

There are six (6) shared SOA channels available statewide.

Four (4) SOA channels will be allowed in mobiles and portables and mobile command posts. Two (2) additional SOA channels will be restricted to portables only. The limitation of mobiles is due to their greater range capabilities. It is possible for mobile units to walk over portable units in the next community without knowing it and endangering personnel operating on emergency scenes. The number of potential users could easily cause conflict during emergency operations.

SOA channels shall be utilized only by authorized personnel on their assigned service SOA channel for urgent or emergency situations, and/or for task teams or other purposes **where the system is not available**. This limits the usage of each SOA channel to the service(s) to which it is assigned. It is not intended to be as a “chat channel”, administrative channel, or any other non-emergency use.

**3. Operational Context:**

SOA channels shall be utilized only by authorized personnel on their assigned service SOA channel for urgent or emergency situations, and/or for task teams or other purposes **where the system is not available**. SOA channels are intended to be used by personnel who have lost contact with the radio system controller as a result of location (basement, subbasement, buildings or areas with poor or no coverage) or due to unavailability of the system.

**4. Recommended Protocol/ Standard:**

<b><u>SOA TG Requirements</u></b>	<b><u>For Whom?</u></b>
Highly Recommended	None
Recommended	All <b><u>Authorized</u></b> Users
Optional	None
Not Allowed	None

- The need or necessity for SOA channels in each agency’s portable radios will be determined by that agency. If an agency opts to not place these in their portable radios they will be responsible for any limitations on their abilities to communicate on the emergency scene.

Names and uses of the six SOA channels shall be as indicated in the table below:

Name Level	Eligibility	Which Radios	Recommendation
SOA1	All Users	All Radios	Recommended in all radios
SOA2	All Users	All Radios	Recommended in all radios
SOAP1	Public Safety Only	All Radios	Recommended in all public safety radios
SOAP2	Public Safety Only	All Radios	Recommended in all public safety radios
SOAFIRE1	Fire & EMS Only	Portables only	Recommended in all Fire portables, EMS optional
SOAFIRE2	Fire & EMS Only	Portables only	Recommended in all Fire portables, EMS optional

- Only Project 25 Phase I digital modulation shall be used on the SOA channels.
- Project 25 DES Encryption may be used.
- Emergency operations require these communications capabilities to maintain safety of personnel.

The restriction of the two SOA channels to portable radios is to minimize the walk over issues with the greater range associated with mobile radios.

### **5. Recommended Procedure:**

- Unit to unit communications is initiated when one or more units operating on scene are out of range of the radio system.
- SOA channel location on portable radios will be set by individual system users in their fleet maps.
- SOA channels shall be utilized only by authorized personnel on their assigned service SOA channel for emergency operations.
- **Mobile and Portable** SOA channels shall be assigned by service:
  - ✓ **Two (2)** all users.
  - ✓ Two (2) additional for Public Safety only (EMS, Law Enforcement and Fire Service.)
- Public Safety shall have access to all four mobile & portable SOA channels. This is due to the possibility of Public Safety services working closely with different agencies depending upon the community. There is also a need for some SOA channels that are common among all users.
- **The two (2) Portable Only** SOA channels are reserved for Fire/EMS.
- SOA channels shall be utilized by on scene personnel at their discretion. **The dispatch centers will normally not be able to monitor each SOA channel to assign them for usage.** With SOA channels available for each service, on scene units requiring the usage of a SOA channel should announce their intent to utilize the channel.
- SOA channels shall be capable of being included in scan lists. Personnel will need to be aware that if the SOA channel is included in the scan list, the radio will lose the priority

revert feature. If they are scanning, they may miss important radio traffic even on the channel selected.

## **6. Management**

System managers will be responsible for ensuring that only portable radios are utilized for SOA channels that are restricted to portables. Elevated external antennas connected to portable radios and/or external power amplifiers shall not be allowed on portable radio only SOA channels.

System managers will be responsible for ensuring that users and units utilizing scene of action channels follow the standards, protocol, and procedures.

### **Special Note on Training**

- SOA procedures will need to be addressed in the training of all emergency personnel operating within the system. This will need to cover the different on scene procedures utilized by police, fire, EMS, and Public Works/Transit personnel. It will also be crucial to system users that all emergency personnel are aware of the rules and procedures to utilize these channels. Improper usage or misuse could result in a scene safety issue for operating personnel.