

**STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)**

**INTRODUCTORY COURSE OF INSTRUCTION**

**STUDENT REFERENCE MANUAL**

## **I. MODULE A1 COURSE OVERVIEW**

### **A. Module Description**

The Standardized Emergency Management System (SEMS) Introductory Course is intended to give students a basic overview of SEMS, including reference to the law and regulations, standard terms and definitions, and training needs.

The introductory course will provide students with a basic understanding of the Standardized Emergency Management System (SEMS) and assist them to:

- understand the purpose and scope of SEMS
- learn the basic definitions of some of the most common terms associated with SEMS
- know the basic elements of the SEMS law
- understand the five levels of organization within SEMS
- know the functions and basic concepts of SEMS
- understand basic operating requirements and individual responsibilities
- recognize the importance of training in SEMS.

#### **1. Background, legal basis and intent of the SEMS law**

As a result of the 1991 East Bay Hills Fire in Oakland, Senate Bill 1841 was passed by the legislature and made effective January 1, 1993. The law is found in Section 8607 of the Government Code. The intent of this law, is to improve the coordination of state and local emergency response in California.

The statute directed the Governor's Office of Emergency Services (OES), in coordination with other state agencies and interested local emergency management agencies, to establish by regulation the Standardized Emergency Management System (SEMS). The SEMS Regulations took effect in September of 1994.

#### **2. Purpose and Scope of the SEMS Law**

The basic framework of SEMS incorporates the use of the Incident Command System (ICS) (developed under the Fire Fighting Resources of California Organized for Potential Emergencies (FIREScope) Program,) multi-agency or inter-agency coordination, the State's master mutual aid agreement and mutual aid program, the operational area concept and the Operational Area Satellite Information System (OASIS).

SEMS provides for a five level emergency response organization, activated as needed, to provide an effective response to multi-agency and multijurisdiction emergencies. The five organizational levels in SEMS are:

1. Field
2. Local Government
3. Operational Area
4. Region
5. State

The function and relationships of each of these levels will be described in Module A2.

The use of SEMS facilitates:

- The flow of emergency information and resources within and between involved agencies at all SEMS organizational levels.
- The process of coordination between responding agencies.
- The rapid mobilization, deployment, use, and tracking of resources.

SEMS is designed to be flexible and adaptable to the varied emergencies that can occur in California, and to meet the emergency management needs of all responders.

By law, state agencies must use SEMS when responding to emergencies involving multiple jurisdictions or multiple agencies.

Local governments are strongly encouraged to use SEMS, and they must use SEMS in order to be eligible for state funding of response related personnel costs. While local governments are not required to take the State Approved Courses of Instruction on SEMS, they will be required to maintain minimum training competencies in SEMS.

SEMS is a management system. It is based on a proven system that has been in use for over twenty years. SEMS provides an organizational framework and guidance for operations at each level of the state's emergency management system. It provides the umbrella under which all response agencies may function in an integrated fashion.

### **3. Review of common SEMS terms and definitions.**

In order to gain a better understanding of SEMS, and to allow you to more effectively use the system, it is important to be able to describe the following terms and know their relationships in SEMS.

#### Emergency

A condition of disaster or extreme peril to the safety of persons or property. Emergencies can be small or large.

#### Emergency response agency

Any organization responding to an emergency or providing mutual aid support to such an organization whether in the field, at the scene of an incident, or to an operations center.

Emergency response personnel

Personnel involved with an agency's response to an emergency.

Incident Command System (ICS)

A nationally used standardized on-scene emergency management system.

Multi-agency or inter-agency coordination

Agencies working together at any SEMS level to facilitate decisions.

Mutual Aid

Voluntary provision of services and facilities when existing resources prove to be inadequate. California mutual aid is based upon the State's Master Mutual Aid Agreement. There are several mutual aid systems included in the mutual aid program.

Operational Area

An intermediate level of the state emergency services organization consisting of a county and all political subdivisions within the county area.

Emergency Operations Center

A location from which centralized emergency management can be performed. EOC facilities are found at local governments, operational areas, regions and state.

**4. Need for SEMS Training**

Training is essential to the effective use of SEMS at all levels. The State has developed and provided an approved Course of Instruction that can be used at each of the five levels in SEMS. Agencies at all SEMS levels may use the Approved Course of Instruction developed by the State, or use an internal training program to meet required training competencies. Training competencies are described at each level of the State's training curriculum as performance objectives.

There are four courses within the SEMS Training Program:

1. Introductory (this course) A self-study or instructor based course with four modules.
2. Field Level - Nineteen modules of instruction are available for the Field Response Level. The modules are clustered into four sub-tier courses: ICS Orientation, Basic, Intermediate, and Advanced. Each sub-tier should be taken at different stages of career development. Together they provide over 75 hours of instruction.

3. Emergency Operations Center Level (suitable for local government, operational areas, regional and state levels). This course includes nine modules of instruction which can be adapted for use at all EOC levels. The EOC level course provides sixteen hours of instruction.
4. Executive Level - An executive introductory course provided as self-study or instructor based.

All instructional modules in the State Approved Course of Instruction are self contained. Each includes an instructor guide, student materials, visual material or teaching aids and a test. Stand alone and self-study course material provides a student manual and an optional test.

## **II. MODULE A2 - INTRODUCTION TO SEMS COMPONENTS AND FEATURES**

### **A. Module Description**

Module A2 provides the student with a basic understanding of the four elements of the SEMS law, the five SEMS levels, the five functions of SEMS, and the basic concepts of SEMS.

### **B. Module Content**

#### **1. Five basic components of SEMS**

SEMS will integrate several of the state's primary emergency response programs. The primary components which comprise SEMS are:

- The Incident Command System as developed by FIREScope\*
- Multi-Agency Coordination System (MACS) developed by FIREScope\*
- The Master Mutual Aid agreement
- Use of Operational Areas
- The Operational Area Satellite Information System (OASIS)

\*FIREScope (Firefighting Resources of California Organized for Potential Emergencies) is a cooperative interagency program established by the fire services.

Each of the components is briefly discussed to provide you with a better understanding of their role and importance in SEMS. :

#### **a. The Incident Command System (ICS)**

The ICS was developed as a part of the FIREScope program during the 1970's by an interagency working group representing local, state and federal fire services in California.

After field tests, ICS was adopted by the fire services in California as the standard all hazards response system. ICS also has been adopted nationally by the federal land management agencies as the standard for response to all wildland fires.

A national generic version of ICS has been developed by a multi discipline working group. This system will be used in the State's Field Response Level Approved Course of Instruction. A module on Mutual Aid and a module on EOC, Operational Area and ICS Coordination have been added to that curriculum.

## **b. Multi-agency Coordination**

Multi-agency or inter-agency coordination as it applies to SEMS, means the participation of agencies and disciplines involved at any level of the SEMS organization working together in a coordinated effort to facilitate decisions for overall emergency response activities, including the sharing of critical resources and the prioritization of incidents.

Multi-agency coordination is generally that which takes place among agencies within a jurisdiction. For example, between police, fire, and public works departments working together at an EOC. Inter-agency coordination is generally that which takes place between agencies in different jurisdictions or between agencies at different levels. For example, a county sheriff, municipal police and national guard.

SEMS Guidance and the Approved Courses of Instruction all describe how multi-agency or inter-agency coordination takes place at the various SEMS levels.

## **c. The Master Mutual Aid Agreement**

A Master Mutual Aid Agreement in California was originally signed in 1950. Under this agreement, cities, counties and the State joined together to provide for a comprehensive program of voluntarily providing services, resources and facilities to jurisdictions when local resources prove to be inadequate to cope with a given situation. A copy of the California Master Mutual Aid Agreement is attached to the Student Reference Manual.

Written mutual aid plans and operating procedures have been developed for several discipline specific mutual aid systems that function on a statewide basis within the Master Mutual Aid Agreement. The fire and rescue and law enforcement systems are examples which we hear the most about. Emergency Medical, Coroner and Search and Rescue systems also exist. Public works and building officials mutual aid systems are under development.

The mutual aid systems, current and planned, form essential links in SEMS. A comprehensive discussion of mutual aid is contained in SEMS guidance, and one module of the Field Level Course of Instruction is devoted to the subject of Mutual Aid.

## **d. Operational Areas**

An Operational Area is one of the five organizational levels in SEMS. An Operational Area consists of a county, and all political subdivisions within the county area. The governing bodies of each county and of the political subdivisions in the county may organize and structure their operational area. The county will be the lead agency for the operational area unless another arrangement is established by agreement.

The operational area is used by the county and the political subdivisions within the operational area for the coordination of resources and information, and to serve as a link in the system of communications and coordination between the state's emergency

operation centers and the operation centers of the political subdivisions within the operational area.

**e. OASIS - Operational Area Satellite Information System**

The Operational Area Satellite Information System (OASIS) is a satellite based communications system with a high frequency radio backup. OASIS provides the capability to rapidly transfer a wide variety of information reports between OASIS user agencies. In SEMS, OASIS can be viewed as both a communications network and information dissemination system linking three of the five SEMS organizational levels.

The communications components to the system include a satellite system in each operational area linked to selected state, federal and local agencies. The information processing component of OASIS contains fifteen forms which provide a rapid and accurate means of transferring information between locations on the OASIS network.

**2. Organizational/response levels and activation requirements.**

SEMS regulations describe five organizational response levels. The levels are:

- Field
- Local Government
- Operational Area
- Region
- State

The following is a brief description of each level:

**a. Field Response Level**

The field response level is the level where emergency response personnel and resources carry out tactical decisions and activities under the command of an appropriate authority in direct response to an incident or threat.

SEMS regulations require the use of ICS at the field response level of an incident. The Field Response level is described in Part I - B of the SEMS Guidelines, and in the Field Level Approved Course of Instruction.

**b. Local Government Level**

Local governments include cities, counties, and special districts. Local governments manage and coordinate the overall emergency response and recovery activities within their jurisdiction.

In SEMS, the local government emergency management organization and its relationship and connections to the Field Response level may vary depending upon factors related to



geographical size, population, function, or complexity. The local government level is described further in Part I-C of the SEMS Guidelines.

**c. Operational Area**

Under SEMS, the operational area means an intermediate level of the state's emergency services organization which encompasses the county and all political subdivisions located within the county. The operational area manages and/or coordinates information, resources, and priorities among local governments within the operational area, and serves as the coordination and communication link between the local government level and the regional level.

It is important to note, that while an operational area always encompasses the entire county area, it does not necessarily mean that the county government itself manages and coordinates the response and recovery activities within the county. In most cases, the county EOC will function as both the Operational Area EOC and the EOC for the county.

The decision on organization and structure within the Operational Area is made by the governing bodies of the county and the political subdivisions within the county. The operational area level is described more fully in Part I - D of the SEMS Guidelines.

**d. Regional**

Because of its size and geography, the state has been divided into six Mutual Aid Regions. The purpose of a mutual aid region, is to provide for the more effective application and coordination of mutual aid and other emergency related activities. The Office of Emergency Services (OES) provides administrative oversight over the mutual aid regions through three Administrative Regional Offices. The map shows the relationship between mutual aid regions and OES regional offices.

In SEMS, the regional level manages and coordinates information and resources among operational areas within the mutual aid region, and also between the operational areas and the state level. The regional level also coordinates overall state agency support for emergency response activities within the region. The regional level is described further in Part I - E of the SEMS Guidelines.

**e. State**

The state level of SEMS manages state resources in response to the emergency needs of the other levels, and coordinates mutual aid among the mutual aid regions and between the regional level and state level.

The state level also serves as the initial coordination and communication link between the state and the federal disaster response system. After initial contact at the state level, those federal response elements deemed necessary by the REOC Director will be directed to

co-locate with state counterparts at the REOC. The state level is described further in part I - F of the SEMS Guidelines.

### **3. Basic features used at each SEMS level**

SEMS has several features based on the Incident Command System (ICS). The field response level uses functions, principles, and components of ICS as required in SEMS regulations.

Many of these field response level features are also applicable at local government, operational area, regional and state levels. In addition, there are other ICS features that have application to all SEMS levels.

Described below are the features of ICS which are applicable to all SEMS levels. These features are covered in more detail in appropriate parts of the Guidance, and the approved training courses.

#### Essential Management Functions

SEMS is based on the Incident Command System (ICS). ICS has five primary functions applicable to any emergency. These are: command, operations, planning/intelligence, logistics and finance/administration. These functions are required for use at all SEMS levels. To avoid confusion, and to stress the role of the EOC, the term management is used rather than command at all EOC levels.

#### Management by Objectives

The Management by Objectives feature of ICS as applied to SEMS, means that each SEMS level should identify measurable and attainable objectives to be achieved. The time frame necessary to accomplish these objectives is known as the Operational Period.

#### Action Planning

Action planning should be used at all SEMS levels. The use of action plans provides designated personnel with knowledge of the objectives to be achieved and the steps required for achievement. Once objectives are determined, the operational period action plan provides a framework for establishing the necessary organization, making assignments and allocating resources to accomplish the objectives. At the incident, action plans are known as Incident Action Plans.

#### Organizational Flexibility - Modular Organization

At each SEMS level, only those parts of the planned organization that are necessary to meet current objectives need to be activated, and the organization can be arranged in various ways within or under the five SEMS functions. The tasks assigned to non-

activated parts of the organization will be the responsibility of the next highest level in the organization.

### Organizational Unity and Hierarchy of Command or Management

Organizational Unity means that every individual within an organization has designated supervision.

Hierarchy of command/management means that all parts of the organization within each activated SEMS level are linked together to form a single overall organization within appropriate span-of-control limits.

### Span of Control

Maintaining a reasonable span of control is the responsibility of every supervisor at all SEMS levels. ICS development established a one to seven ratio as the maximum span of control under emergency response conditions. One to five ratio was established as an optimum. This means that in an emergency response organization, one supervisor should have direct supervisory authority of no more than five positions if they are performing separate functions..

### Personnel Accountability

Personnel accountability is accomplished through the Organizational Unity and Hierarchy of Command/management feature along with the use of check-in forms, position logs and various status keeping systems.

### Common Terminology

Common terminology is applied to organizational elements, position titles, facility designations and resources in order to rapidly enable multi-agency, multijurisdiction organizations, disciplines and resources to work together effectively.

### Resources Management

At all SEMS levels, there is a responsibility related to managing resources. This will vary from level to level in terms of tactical directing and controlling, to coordination, to resource inventorying or strategic planning.

### Integrated Communications

At the field response level, integrated communications is used on any emergency involving multiple agencies. At all EOC levels, and between all SEMS levels there must be a dedicated effort to ensure that communications systems, planning, and information flow are being accomplished in an effective manner.

#### 4. Titles and Roles for the five SEMS functions at the Field and EOC levels.

The primary functions found in ICS are:

- Incident Command
- Operations
- Planning/Intelligence
- Logistics
- Finance/Administration

These same functions with some minor variation in titles and associated activity are the key functional activities found at all SEMS EOC levels.

The table below provides a brief summary of the titles and definitions of activities associated with these functions.

<b>PRIMARY SEMS FUNCTION</b>	<b>FIELD RESPONSE LEVEL</b>	<b>EOCS AT OTHER SEMS LEVELS</b>
Command/Management	Command is responsible for the directing, ordering, and/or controlling of resources.	Management is responsible for overall emergency policy and coordination.
Operations	The coordinated tactical response of all field operations in accordance with the Incident Action Plan.	The coordinating all jurisdictional operations in support of the response to the emergency.
Planning/Intelligence	The collection, evaluation, documentation, and use of information related to the incident.	Collecting, evaluating, and disseminating information and maintaining documentation.
Logistics	Providing facilities, services, personnel, equipment, and materials in support of the incident.	Providing facilities, services, personnel, equipment, and materials.
Finance/Administration	Financial and cost analysis and administrative aspects not handled by the other functions.	Financial activities and administrative aspects not assigned to the other functions.

#### 5. SEMS concept of teamwork, coordination and effectiveness

SEMS as a management system provides for a fully integrated and coordinated multiple level response to multi-agency, multi jurisdictional emergencies. The bringing together of the Incident Command System, multi-agency or inter-agency coordination, mutual aid systems the operational area concept and OASIS into a single standardized management

system is a major step forward in increasing the effectiveness of California's response to emergencies.

## **6. SEMS Implementation**

The SEMS Statute requires all state agencies to implement and use SEMS in responding to multi-agency or multiple jurisdiction emergencies.

Local agencies are encouraged to implement SEMS, but are not required to do so under law. Use of SEMS by local government agencies is required to obtain state reimbursement for response related personnel costs.

The following material has been developed by an inter-agency working group to assist state and local agencies in implementing and maintaining SEMS.

1. SEMS Statute - Government Code Section 8607, January 1993
2. SEMS Regulations - California Code of Regulations Title 19. Division 2, Sections 2400-2450.
3. SEMS Guidelines - in three parts
4. SEMS Training Curriculum
  - Introductory Course
  - Field Course
  - Emergency Operations Center Course
  - Executive Course

## **MODULE A3 - SEMS OPERATING REQUIREMENTS AND INDIVIDUAL RESPONSIBILITIES**

### **A. Module Description**

Module A3 provides the student with an understanding of the basic operating requirements needed to individually work within, and support, a Standardized Emergency Management System (SEMS) field response and Emergency Operations Center (EOC) organization.

The following topics will be covered:

- Roles and Functions for Personnel in SEMS organizations at all levels
- SEMS pre-assignment responsibilities
- SEMS Check-in Process
- Reporting to supervisors within SEMS
- Incoming briefings in SEMS
- General operating requirements for SEMS
- General demobilization/release requirements for SEMS
- Where to go for additional field or EOC SEMS training

### **B. Module Content**

#### **1. Roles and Functions for Personnel in SEMS organizations at all levels**

##### Field Level

At the field level, emergency response personnel may assume a variety of roles within the Incident Command System. Agency policy will often dictate what personnel will fill what roles. A concept here is to use the most qualified individuals regardless of rank or position. The determination of what role they will perform will be a function of:

- The kind and size of the emergency
- Disciplines involved
- Personnel background and experience
- Training
- Qualifications and certifications
- Agency policy

ICS provides an emergency management structure which allows for the most qualified personnel to be used at any position.

Incident Commanders may at the onset of the emergency be relatively low ranking personnel. ICS provides a mechanism for the transfer of command if the emergency requires more qualified personnel.

## EOC Level

The five major functions required within the organization at the EOC level may require personnel from a variety of agencies within a municipality, operational area, region or state, depending upon the level being activated.

Shown below, are two examples. One for local government and operational areas, and the other for region and State.

### **LOCAL GOVERNMENT OR OPERATIONAL AREA EOC**

<b>FUNCTION</b>	<b>STAFFING CONSIDERATIONS</b>
Management	Administrative personnel, special district managers, emergency management, fire, law enforcement are recommended for use in initial EOC activations.
Operations	Key dept. managers and public safety personnel will generally coordinate these activities within the EOC during initial activations.
Planning/ Intelligence	Emergency Management, CAO, fire, law enforcement, planning depts., utilities and other departments can contribute personnel depending upon the nature of the emergency.
Logistics	Departments of General Services, Public Works and utilities are good candidates to provide personnel for this EOC function. Other departments may also have the background to manage or assist in this function.
Finance/ Administration	City/County CAO, Finance Departments are candidates for managing this function within an EOC

## REGION/STATE EOC

FUNCTION	STAFFING CONSIDERATIONS
Management	SOC Director - OES Director, Chief Deputy Director, Deputy Directors. REOC Director - Regional Administrators
Operations	To fill Section/Branch Positions: OES, CDF, Fire Marshal, CALEPA, DHS, DFG, CHP, State Police, CNG, EMSA, Mental Health, DSS, ARC, OSHPD, PUC etc.
Planning/ Intelligence	OES Staff, CDF, CNG, DFG, CALTRANS plus Technical Advisors as necessary from CDMG, DHS etc.
Logistics	To fill Section/Branch Positions: General Services, OES, CDF, DFG, CNG, DPA, EDDP
Finance/ Administration	OES, Dept. of Finance

### 2. SEMS pre-assignment responsibilities

The activation of any SEMS level (field or EOC) may require personnel to be temporarily relocated for an indefinite time. While most activation's will generally be of short duration (one day to a few days), there may be situations in which personnel will be absent from their normal workplace and homes for extended periods many days or even weeks.

The following are general guidelines to take before departing for those situations which will require an extended stay or out-of-jurisdiction travel:

- Assemble or update a travel kit containing any special technical information, e.g., maps, manuals, contact lists, and other reference materials that you may need.
- Prepare personal items that you will need for your estimated length of stay.
- Review your emergency assignment. Know to whom you will report and what your responsibility will be.
- Have a clear understanding of the decision-making authority you hold for your agency while at an incident or at an EOC. Determine this as soon as



you realize you may be assigned to an incident or to your own or another EOC.

- Determine what communications procedures should be followed so you can contact your headquarters or home office if necessary.
- Ensure that family members know your destination and how to contact you in the event of a family emergency.
- Familiarize yourself with travel and pick-up arrangements that have been established for you.
- Determine what your return mode of transportation will be if possible.

### **3. SEMS Check-in Process**

#### Field Response Level

All personnel assigned to an incident which is using ICS must check-in upon arrival. The check-in function at an incident ensures that there is complete and continuous accountability over all assigned personnel. There are various specified locations at an incident where personnel and resources check-in can be accomplished. These will be covered in the field level course.

#### EOC Levels

To ensure accountability of personnel, it is essential that a check-in function be established at all EOC levels. Currently, this is done through the use of sign-in sheets, rosters etc. An adaptation of the ICS check-in form and procedure for EOCs may be useful for the EOC level check-in function.

### **4. Reporting to supervisors within SEMS**

Under the unity of command or management feature of SEMS, all personnel operating within a field response ICS organization, or at an EOC level must have a supervisory reporting link established.

### **5. Incoming briefings in SEMS**

All incoming personnel, whether to an ICS organization at the Field Response level, or reporting to an EOC, should be provided with a briefing, prior to their assuming their assigned position. Briefings should include:

- Current situation assessment.
- Identification of specific job responsibilities expected of you.

- Identification of co-workers within your job function and/or geographical assignment.
- Availability of communications.
- Location of work area.
- Identification of eating and sleeping arrangements as appropriate.
- Procedural instructions for obtaining additional supplies, services and personnel.
- Identification of operational period work shifts.
- After receiving your briefing and activating your assignment, give a similar briefing to any personnel assigned to you.

## **6. General operating requirements for SEMS**

Following are several important requirements related to the use of SEMS at any level:

SEMS requires emergency response agencies to use basic principles and components of emergency management including ICS, and multi-agency or inter-agency coordination.

The five primary functions of Command or Management, Operations, Planning/Intelligence and Administration/Finance must be provided for in all organizations at any SEMS level.

Personnel in a SEMS organization at any of the five levels must be assigned to a designated function within the organization, and at all times have designated supervision.

Personnel assigned within a SEMS organization will safely carry out their assignment for an operational period or until relieved, and will brief their relief as required by agency standard operating procedures.

## **7. General demobilization/release requirements for SEMS**

Agency requirements for demobilization at incidents at the Field Response or at EOC levels will vary considerably.

Large incidents and/or EOCs within larger jurisdictions may require the establishment of a Demobilization Unit within the Planning/Intelligence Section to help facilitate the demobilization process.

General demobilization considerations for all personnel at either the Field Response or EOC levels are to:

- Complete all work assignments.
- Brief subordinates regarding demobilization.
- Complete and file required forms and reports.
- Follow agency check-out procedures.
- Evaluate performance of subordinates prior to release.
- Return any communications equipment or other non-expendable supplies.
- Report to assigned departure points on time or slightly ahead of schedule.

#### **8. Where to go for additional field or EOC SEMS training**

An inter-agency group has developed four approved courses of instruction in SEMS.

- Introduction to SEMS
- SEMS for Field Response
- SEMS for EOC's
- Executive SEMS Course

The Field Response SEMS course has been adapted from a generic National ICS training curriculum, and is divided into four sub-courses.

Information on all SEMS courses is available through:

OES Headquarters  
OES Regions  
California Specialized Training Institute (CSTI)