
STANDARDIZED EMERGENCY MANAGEMENT SYSTEM
APPROVED COURSE OF INSTRUCTION

INTRODUCTORY COURSE
G606

PARTICIPANT
REFERENCE
MANUAL
2003

STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)

INTRODUCTORY COURSE OF INSTRUCTION

PARTICIPANT REFERENCE MANUAL

I. Course Overview

A. Introduction and Objectives

The Standardized Emergency Management System (SEMS) Introductory Course is a self-study or instructor based course intended to give participants a basic overview of SEMS, including reference to the law and regulations, standard terms and definitions, and training needs.

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

- The purpose and scope of SEMS;
- Common terminology associated with SEMS;
- Basic elements of the SEMS law;
- The five levels of organization within SEMS;
- The functions and basic concepts of SEMS;
- Basic operating requirements and individual responsibilities; and
- The importance of training in SEMS.

B. 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.

C. Purpose and Scope of the SEMS Law

The basic framework of SEMS incorporates the use of the Incident Command System (ICS), Inter-agency coordination, and the State's Master Mutual Aid Agreement and mutual aid program.

SEMS provides for a five level emergency response organization, activated as needed, to provide an effective response to emergencies involving multiple agencies or jurisdictions.

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 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 SEMS Approved Courses of Instruction, they are required to ensure through training, that responders can successfully implement SEMS when necessary.

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.

D. 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 (ACI). Agencies 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 in the State's training curriculum as course objectives.

There are four courses within the SEMS Approved Course of Instruction:

1. Introductory Course - A self-study or instructor based course.
2. Field Level Course - Seventeen modules of instruction on the Incident Command System are available for the Field Response Level.
3. Emergency Operations Center (EOC) Course - This course consists of three chapters that can be adapted for use by all agencies or organizations utilizing emergency operations centers.
4. Executive Course - An executive overview of SEMS, provided as self-study or instructor based.

E. Course Materials

The Approved Course of Instruction includes participant reference materials, instructor guidelines, visual materials and a test.

II. SEMS Terminology, Components, and Features:

A. Important SEMS Terms and Definitions:

1. 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 in an emergency operations center.

2. Emergency Response Personnel:

All personnel involved with an agency's response to an emergency.

3. Emergency Operations Center:

A location from which centralized emergency management can be performed. EOC facilities are found at the local government, operational area, region and state levels in SEMS.

B. Four Components of SEMS

SEMS integrates several of the State's primary emergency response programs. The primary components within SEMS are:

1. The Incident Command System (ICS)

ICS was developed as a part of the FIREScope program, (Firefighting Resources of California Organized for Potential Emergencies), during the 1970's, by an inter-agency 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 was developed by a multi-discipline working group. This system is used in the SEMS Field Response Level Course. A module on Mutual Aid and a module addressing coordination between the field and other SEMS levels have been added to that curriculum.

2. Inter-agency Coordination

Inter-agency coordination as it applies to SEMS, means the participation of various 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.

The cooperative and collaborative working relationship between police, fire, public works, and parks departments in an EOC is an example of Inter-agency Coordination as intended in SEMS. Another example would be the collaborative operational coordination that might occur between municipal police, county sheriff, California Highway Patrol, and National Guard elements that are involved in the same response.

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

3. 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.

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. Examples of these are fire and law enforcement.

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

4. 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 shall organize and structure their operational area. The county will be the lead agency for the operational area unless another arrangement is established by agreement. Overall responsibility for the formation of the Operational Area rests with the Chairman of the Boards of Supervisors in each county.

Operational Areas facilitate the coordination of resources between its member jurisdictions. Operational Areas also serve as a communication and coordination link between the Region and State level EOCs and local government EOCs within the Operational Area.

B. 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:

1. 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 the SEMS Guidelines, and in the Field Level Approved Course of Instruction.

2. 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 the SEMS Guidelines.

3. Operational Area Level

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 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 governing bodies of the county and the political subdivisions within the county make the decision on organization and structure within the Operational Area. The operational area level is described more fully in the SEMS Guidelines.

4. Region Level

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.

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 the SEMS Guidelines.

5. State Level

The state level of SEMS operates the State Operations Center at OES Headquarters in Sacramento. It is responsible for coordinating resource requests and resolving priority issues that might arise at the region level, between the three OES Administrative Regions.

The State Operations Center is also responsible for coordinating with FEMA and other federal agencies involved in the implementation of the Federal Response Plan in California. The state level is described further in the SEMS Guidelines.

C. 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, and region 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 SEMS Guidelines and the SEMS ACI.

1. 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. It should be noted that only the SEMS Field level uses the term “Command.” SEMS levels above the Field use the term “Management” to describe the function having overall responsibility for activated EOCs.

2. 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.

3. 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 for the operational period, the action plan provides a framework for establishing the necessary organization, making assignments and allocating resources to accomplish those objectives. Action plans developed at the Field level are referred to as “Incident Action Plans.” Action plans developed at other SEMS levels are referred to as “EOC Action Plans.”

4. Organizational Flexibility and Modular Organization

At each SEMS level, only those elements necessary to achieve the desired objectives should be activated. The organization can be arranged in various ways within or under the five SEMS functions. The next highest level within the activated organization must accomplish tasks normally assigned to elements not activated for the event.

5. Unity of Command

Unity of Command is a management principle that requires individuals working within an organizational structure to report to only one supervisor. Unity of Command also requires that all organizational elements within each activated SEMS level be linked together to form a single overall organization with appropriate authority relationships.

6. 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. A 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 different functions. This ratio may be altered in some situations. For example, a supervisor may remain effective if supervising more than five responders who are all performing the same tasks, particularly if the tasks are not complex in nature.

7. 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.

8. Common Terminology

Common terminology is generally applied to describe organizational elements, position titles, facility designations and resources. There may be slight variations in certain terms to facilitate communication and coordination in some disciplines.

9. Resources Management

Resource management occurs at all SEMS levels in various ways. At the Field level, the use of resources is “tactically directed.” At levels above the Field, resources are “coordinated and prioritized” for use at the Field level.

10. Integrated Communications

At the field response level, integrated communications is used on any emergency involving different 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.

D. Titles and Roles for the Five SEMS functions at the Field and EOC Levels-

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

PRIMARY SEMS FUNCTION	FIELD RESPONSE LEVEL	EOCS AT OTHER SEMS LEVELS
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 coordination of all jurisdictional operations in support of the response to the emergency in accordance with the EOC Action Plan.
Planning/ Intelligence	The collection, evaluation, documentation, and use of information related to the incident.	Collecting, evaluating, and disseminating information and maintaining documentation relative to all jurisdiction activities.
Logistics	Providing facilities, services, personnel, equipment, and materials in support of the incident.	Providing facilities, services, personnel, equipment, and materials in support of all jurisdiction activities as required.
Finance/ Administration	Financial and cost analysis and administrative aspects not handled by the other functions.	Broad fiscal and recovery responsibility as well as overall fiscal accountability.

E. SEMS Concept of Teamwork, Coordination and Effectiveness

SEMS as a management system provides for a fully integrated and coordinated response to emergencies involving multiple agencies and jurisdictions at all SEMS levels.

F. SEMS Implementation

The SEMS Statute requires all state agencies to implement and use SEMS in responding to emergencies involving multiple agencies and jurisdictions.

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 Approved Course of instruction.
 - Introductory Course
 - Field Course
 - Emergency Operations Center Course
 - Executive Course

III. SEMS Operating Requirements And Individual Responsibilities

A. Roles and Functions for Personnel in SEMS Organizations at All Levels

1. Field Level

At the field level, emergency response personnel may assume a variety of positions within the Incident Command System. Agency policy will often dictate what personnel will fill each position. The concept here is to use the most qualified individuals regardless of rank or normal organization assignment. The assignment of ICS positions to personnel will be determined by:

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

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.

2. EOC Level

Each SEMS function within the EOC is generally staffed with individuals who have developed appropriate skills from their normal daily organization assignment. Placing the right person in each EOC position can facilitate the effective operation of the EOC. Appropriate training can also be beneficial to those assigned to perform various SEMS functions.

The table below provides examples of how staffing might occur at various EOC levels within SEMS.

LOCAL GOVERNMENT OR OPERATIONAL AREA EOC

FUNCTION	STAFFING SOURCES
Management	Chief Administrative Officers, City Managers, Chief Executive Officers and their respective support staffs, to include Public Information or Public Affairs.
Operations	Key department managers and supervisors within public safety agencies, public works, parks, and other entities that possess resources and personnel that can be utilized in the response. The configuration of Operations may vary in other types of organizations such as special districts and schools.
Planning/Intelligence	Community Development, Planning Departments, together with representatives from public safety and public works staffs.
Logistics	Departments of General Services, Public Works and utilities are often used to staff Logistics. Other departments such as telecommunications may also assist with this function.
Finance/Administration	Finance, Budgets, Purchasing, Risk Management and other similar departments are appropriate sources of staffing for this function.

Again, the desired approach is to ensure that personnel are utilized based on their position, area of responsibility, ordinances, regulations, policies and the level of training they have received.

REGION / STATE EOC

FUNCTION	STAFFING SOURCES
Management	SOC Director - OES Director, Chief Deputy Director, Deputy Directors. REOC Director – Regional Administrators
Operations	To fill Section/Branch Positions: OES, CDF, CALEPA, DHS, DFG, CHP, CNG, EMSA, DMH, DSS, ARC, OSHPD, CEC etc.
Planning/Intelligence	OES Staff, CDF, CNG, DFG, CALTRANS plus Technical Specialists as necessary from CDMG, DHS etc.
Logistics	To fill Section/Branch Positions: General Services, OES, CDF, DFG, CNG, DPA, EDD
Finance/Administration	OES, Dept. of Finance
<i>Note: If needed, refer to the Acronym Guide at the end of this manual</i>	

B. 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 activations 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).

During protracted activations, responding personnel should follow these guidelines:

- 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.
- Pack personal items such as prescription drugs and other necessities in sufficient quantities.
- Review your emergency assignment. Know to whom you will report and what your responsibilities 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.

C. SEMS Check-in Process

1. Field Response Levels

All personnel assigned to an incident 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. This is covered in the field level course.

2. 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.

D. 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 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.

E. General Demobilization/Release Requirements for SEMS

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

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 checkout 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.

IV. Summary

SEMS requires emergency response agencies to use basic principles and components of emergency management including ICS, and Inter-agency Coordination.

The five primary functions of Command or Management, Operations, Planning/Intelligence, Logistics 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 provide a briefing for incoming relief personnel as required by agency procedures.

V. Where To Go For SEMS Training And Guidelines

The SEMS Approved Course of Instruction as well as the SEMS Guidelines may be obtained from the California Specialized Training Institute (Governor's Office of Emergency Services, Training Branch), or through the OES Web site at <http://www.oes.ca.gov/>

Acronym Guide

ACI	Approved Course of Instruction
ARC	American Red Cross
CALEPA	CA Environmental Protection Agency
CALTRANS	CA Department of Transportation
CDF	CA Department of Forestry
CDMG	CA Division of Mines & Geology
CEC	CA Energy Commission
CHP	CA Highway Patrol
CNG	CA National Guard
DFG	Department of Fish and Game
DHS	Department of Health Services
DMH	Department of Mental Health
DSS	Department of Social Services
EMSA	Emergency Medical Services Authority (state level) Emergency Medical Services Agency (local level)
EOC	Emergency Operations Center
EDD	Employee Development Department
FEMA	Federal Emergency Management Agency
FIRESCOPE	Firefighting Resources of CA Organized for Potential Emergencies
ICS	Incident Command System
OES	Office of Emergency Services
OSHPD	Office of Statewide Health, Planning and Development
REOC	Region Emergency Operations Center
SEMS	Standardized Emergency Management System
SOC	State Operations Center

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TEST

INTRODUCTORY COURSE TEST

1. SEMS falls under the direction of the state's _____.

2. State agencies with responsibility for responding to emergencies involving multiple jurisdictions or multiple agencies must use SEMS.

_____ True

_____ False

3. SEMS is a system for _____ emergencies.

4. The basic framework of SEMS incorporates the use of ? (check three):

_____ The Incident Command System

_____ Hospital Emergency Act

_____ Inter-agency Coordination System

_____ The Master Mutual Aid agreement

_____ Mobilization Centers

_____ FEMA Response Plan

5. List the five organizational levels of SEMS:

6. The Incident Command System (ICS) was developed under the _____ program in the 1970s.

7. Operational Areas are defined by city boundaries.

_____ True

_____ False

8. How many Mutual Aid Regions has the state of California been divided into?

_____ Three

_____ Six

_____ Eight

_____ Ten

9. Match the following terms and definitions:

a. Emergency Operations Center

b. Emergency Response Agency

c. Inter-agency Coordination

d. Mutual Aid

e. Operational Area

_____ Voluntary provision of services and facilities when existing resources prove to be inadequate.

_____ Any organization responding to an emergency or providing mutual aid support.

_____ An intermediate level of the state emergency services organization.

_____ A location for which centralized emergency management can be performed.

_____ Agencies and disciplines at any SEMS level working together in a coordinated effort to facilitate decisions.

10. Primary coordination with the federal disaster response system takes place at the local government level.

_____ True

_____ False

11. List the five primary SEMS functions.

12. Optimum span of control is _____ supervisor to no more than _____ positions.

13. Local agencies are encouraged to implement SEMS, but are not required to do so under law.

_____ True

_____ False

14. Under ICS, Incident Commanders are always the most senior personnel at the incident.

_____ True

_____ False

15. List four factors at the field level that can influence how personnel are selected for ICS positions.

16. The _____ activity at an incident ensures complete and continuous accountability over all assigned personnel.

17. Briefings should be provided to:

_____ All personnel

_____ All supervisory personnel

18. Name three elements provided in a briefing:

19. Personnel working within a SEMS organization may be assigned to several positions, and may work under several supervisors at the same time.

_____ True

_____ False

20. General demobilization requirements for personnel at the field or EOC levels include:
(check all that apply)

_____ Complete all work assignments

_____ Prepare After Action Report

_____ Clear with the Safety Officer

_____ Brief subordinates

_____ Complete and file required forms and reports

_____ Evaluate performance of subordinates

_____ Obtain next assignment

_____ Return all non-expendable supplies