

How California Uses the Incident Command System As Part of Its Standardized Emergency Management System

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Abstract: Across the bay from San Francisco, in the Oakland-Berkeley Hills in October of 1991 a fast moving brush fire erupted and burned for approximately 20 hours. In those twenty hours of hell on earth, over 3000 homes were turned into smokey gray oblivion. Only the earth and stones remained.

One of those homes that burned in sacrifice to the god of confusion belonged to a State Senator, Nicholas Petris. As in all catastrophic human events, hearings were held to inquire into the chain of events. A number of factors were uncovered that affected the ability of the emergency responders to gain the upper hand quickly.

The Oakland Fire Department placed a call to the California Division of Forestry (CDF) and requested "aerial support." The "aerial support" provided by CDF consisted of sending a small observation plane to locate the fire and inform the Oakland Fire Department. What the Oakland Fire department wanted was "water dropping aircraft." The terminology they used had a different meaning to the CDF. This resulted in a critical delay of water dropping aircraft and borate bombers.

Neighboring Fire Departments dispatched engines to assist the Oakland Fire Department. The crews of these "Mutual Aid Strike Teams" found that the connectors on their hoses could not attach to the Oakland fire hydrants. They were different sizes.

This presentation will provide an comprehensive overview of the integrated emergency management system of one of the most disaster prone states in the United States.

Introduction:

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 intent of the law is to improve the coordination of state and local emergency response in California.

Organizational Value of SEMS

In an emergency, SEMS helps to facilitate the following:

- The flow of emergency information and resources within and between the organizational levels
- Coordination between responding agencies
- 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. SEMS is a system for managing emergencies.

Training and Use of SEMS

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. Compliance with SEMS shall be documented in the areas of planning, training, exercise and performance.

The use of SEMS shall be included in emergency plans and procedures.

SEMS training for emergency response personnel shall be documented.

SEMS shall be incorporated in all levels of exercises.

SEMS use shall be documented and include activities performed during the emergency.

State Approved Course of Instruction

There are four courses within the SEMS Training Program:

Introductory: For all personnel who may become involved in multi-agency or multi-jurisdictional response at any level.

Field Level: Seventeen modules are available for the field response level. The modules are clustered into four groups: Orientation, Basic, Intermediate and Advanced.

EOC Level: This course includes nine modules of instruction which can be adapted for use at all EOC levels (local government, operational area, region and state)

Executive Level: An executive stand-alone introductory course.

The Five Components of SEMS

1. 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 agencies in California. 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.

2. Multi-Agency or Inter-Agency Coordination

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, i.e., between various city departments or agencies outside the city's jurisdiction.

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.

4. The Operational Area Concept

An Operational Area is both one of the five components of SEMS and one of the five organizational levels of SEMS. An Operational Area consists of each county and all of the political subdivisions within the county area.

5. The Operational Area Satellite Information System (OASIS)

OASIS is a satellite based communications system. OASIS provides the capability to rapidly transfer a wide variety of information reports between the state, regions and operational areas.

Definitions

Action Plan: The plan prepared in the EOC containing the emergency response objectives of that SEMS level reflecting overall priorities and supporting activities for a designated period. The plan is shared with supporting agencies.

Department Operations Center: An EOC used by a distinct discipline, such as police, fire, medical, hazardous material, or a unit, such as Department of Public Works, Department of Health, or local water district. Department operations centers may be used at all SEMS levels above the field response level, depending upon the impacts of the emergency.

Emergency: A condition of disaster or of extreme peril to the safety of persons and property within the state caused by such conditions as air pollution, fire, flood, hazardous material incident, storm, epidemic, riot, drought, sudden and severe energy shortage, plant or animal infestation or disease, the Governor's warning of an earthquake or volcanic prediction, or an earthquake or other conditions, other than conditions resulting from a labor controversy. Can also be an imminent threat of one of the above.

Emergency Operations Center (EOC): A location from which centralized emergency

management can be performed.

Emergency Response Agency: Any organization responding to an emergency, whether in the field, at the scene of an incident, or to an EOC, in response to an emergency, or providing mutual aid support to such an organization.

Emergency Response Personnel: Any personnel involved with an agency's response to an emergency.

Incident: An occurrence or event, either human-caused or by natural phenomena, that requires action by emergency response personnel to prevent or minimize loss of life or damage to property and/or natural resources.

Incident Action Plan: The plan developed at the field response level which contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period. The plan may be oral or written.

Incident Commander: The individual responsible for the command of all functions at the field response level.

Incident Command System (ICS): The nationally used standardized on-scene emergency management concept specifically designed to allow its users to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of resources to effectively accomplish stated objectives pertinent to an incident.

Local Government: Local cities and special districts.

Multi-Agency or Inter-Agency Coordination: 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.

Mutual Aid: Voluntary provision of services and facilities when existing resources are inadequate.

Office of Emergency Services: The Governor's Office of Emergency Services.

Five Organizational Levels of SEMS

State	Manages state resources in response to emergency needs of other organizational levels and serves as the communications link between the state and federal disaster response system.
Region	Manages and coordinates information and resources among operational areas in the regions. There are six Mutual Aid Regions to provide for mutual aid coordination, and three Administrative Regions to provide administrative oversight to the Mutual Aid Regions
Operational Area	The county and all its political subdivisions. It is an intermediate level of the state's emergency services organization. The Op Area coordinates information, resources and priorities among local governments. It is a coordination and communication link between local governments and OES Region.
Local Government	Cities, counties and special districts responsible for managing and coordinating overall emergency response and recovery activities within their jurisdictions.
Field	Persons involved in direct tactical response to an incident or threat. SEMS requires use of ICS at the field response level.



Five Essential ICS Management Functions

FIELD LEVEL	EOC LEVEL
Command: Responsible for all incident activity.	Management: Responsible for establishing and implementing agency/jurisdiction policy and overall coordination of jurisdictional activities.
Operations: Responsible for directing the tactical response of all incident operations.	Operations: Responsible for coordinating all jurisdictional operations in support of the response.
Planning/Intelligence: Responsible for collecting, processing and documenting information for use on the incident.	Planning/Intelligence: Responsible for collecting, analyzing and documenting information for use in jurisdiction-wide planning.
Logistics: Responsible for providing services, personnel and equipment in support of the incident.	Logistics: Responsible for providing services, personnel, equipment and facilities in support of all jurisdictional operations.
Finance/Administration: Responsible for providing financial accounting and cost control at incidents.	Finance/Administration: Responsible for overall fiscal accounting, compensation and claims and for jurisdiction's disaster survey reports.

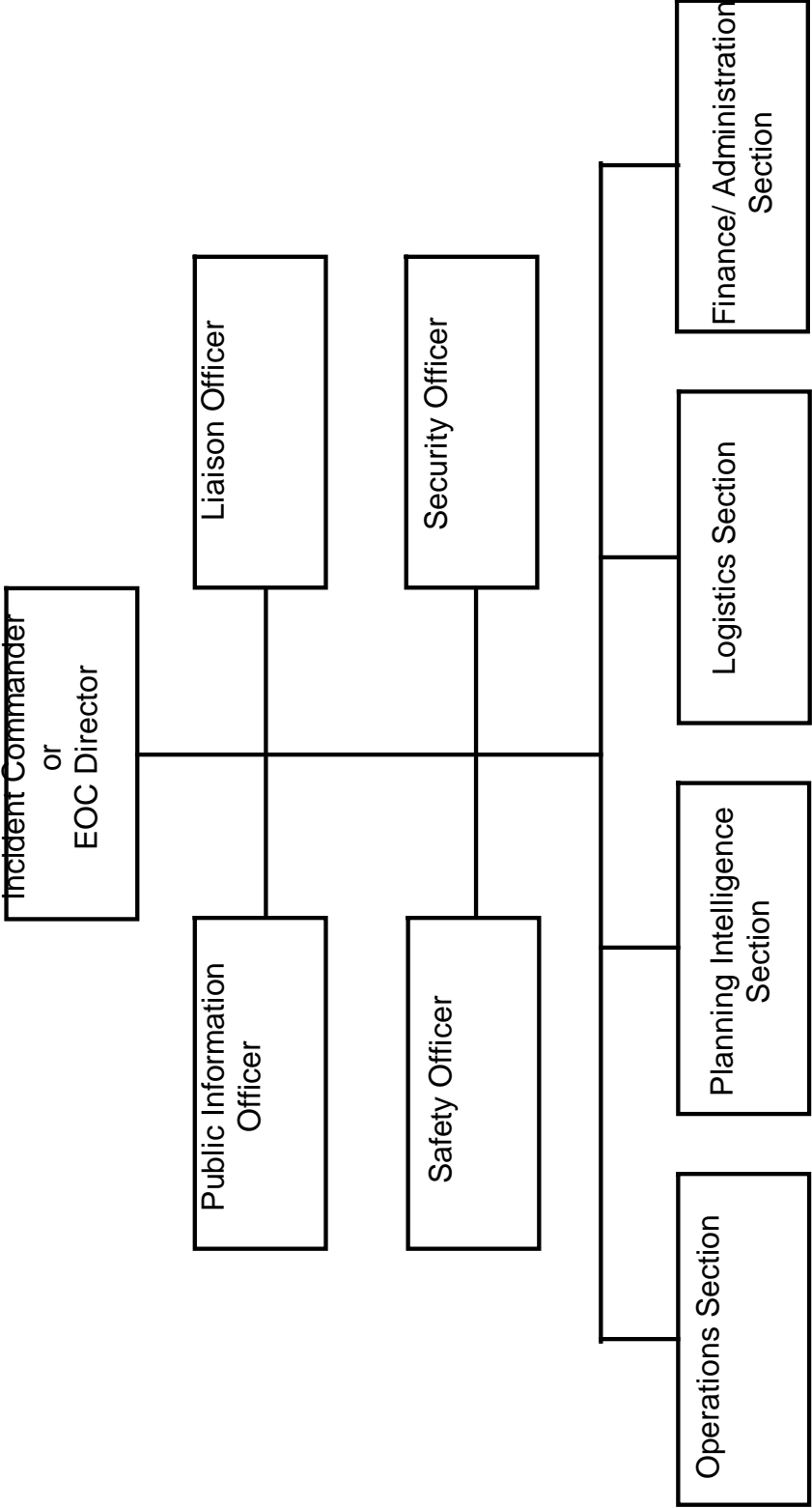
Personnel Roles and Functions at the Field Level (ICS)

At the field level, emergency response personnel may assume a variety of roles within the Incident Command System (ICS). Agency policy will often dictate what personnel will fill what roles. 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.

Sample SEMS Organization Chart



Personnel Roles and Functions at the EOC Level

The five major functions required within the organization at the EOC level may require personnel from a variety of agencies within the jurisdiction. The table below shows an example of city/operational area EOC staffing:

FUNCTION	STAFFING CONSIDERATIONS
Management	City/County administrators, department heads, PIO team, safety officer, security officer, liaison officer, elected officials (optional), emergency manager.
Operations	Fire, law, public works, parks, medical and other disciplines. Activities are coordinated in “branch” configurations during initial activation.
Planning/ Intelligence	Planning, community development, engineering, building and safety, along with fire, law and other support staff.
Logistics	Usually staffed by general services, public works, fire and law, administrative services, with assistance from other departments.
Finance/ Administration	Finance departments and administrative services typically manage and coordinate this function. <i>Get this section going early on to help bring order to the paperwork at the onset of a disaster.</i>

Basic SEMS Features

The following features are applicable to each SEMS organizational / response level:

- Five Essential ICS functions: (1) Management/Command; (2) Operations; (3) Planning/Intelligence; (4) Logistics; (5) Finance/Administration
- Management by Objectives: Identifying measurable and attainable objectives to be achieved within a specified Operational Period.
- Action Planning: Developing a plan that states objectives to be achieved and the steps required for achievement.
- Organizational Flexibility - Modular Organization: The concept of activating only those organizational elements that are required to meet current objectives, and arranging these elements in various ways within or under the five SEMS essential functions. The organization’s staff building from the top down, with responsibility and performance placed initially with the Incident Commander. The functions of any non-activated organizational element will be the responsibility of the next highest level in the organization.
- Organizational Unity and Hierarchy of Command or Management: System of management wherein every individual has designated supervision, and all organizational elements within each activated SEMS level are linked together to form a single overall organization within appropriate span-of-control limits.

- . Span of Control: Under ICS, the maximum span of control is a supervisor/staff ratio of one supervisor to seven staff persons. The optimum ratio is one to five.
- Common Terminology: Shared usage of words or terms to describe organizational elements, position titles, facility designations, and resources in order to rapidly enable multi-agency, multi-jurisdiction organizations, disciplines, and resources to work together effectively.

Basic SEMS Pre-assignment Responsibilities

The activation of any SEMS level (field or EOC) may require personnel to be temporarily relocated for an indefinite time. Following are general guidelines for preparing for an extended stay or out-of- jurisdiction travel.

- Prepare your family by letting them know that you may be assigned to work during an emergency. Develop family emergency plans that will promote the safety and self-sufficiency of your family during an emergency.
- Assemble or update a travel kit containing maps, manuals, SOPs, contact lists and any other reference materials that will assist you in carrying out your emergency duties.
- Prepare a personal travel kit, including hygiene supplies, prescription medicines, comfortable shoes and extra clothing.
- 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 learn that you are being assigned to an incident or an 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.
- If you do not have your own transportation, familiarize yourself with the travel and pickup arrangements that have been established for you.

SEMS Check-in and Briefing Procedures

Field Level: All incident personnel must check in upon arrival, which ensures that there is complete and continuous accountability over all assigned personnel.

EOC Levels: A check-in function must be established at all EOC levels with rosters, etc.).

Reporting to Supervisors: All personnel operating within a field response ICS organization or at an EOC level must have a supervisory reporting link established.

In-Coming Briefing Procedures: All incoming personnel (ICS Field Level or EOC), should be briefed on the following:

- 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 you have been briefed and have activated your assignment, be prepared to give a similar briefing to any personnel assigned to you.

Demobilization

In a large scale incident, it may be necessary to establish a Demobilization Unit in the Planning/Intelligence Section to help facilitate the demobilization process.

General demobilization considerations for all personnel 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 ahead of schedule.

General Operating Requirements for SEMS

In review, several important requirements related to the use of SEMS at any level are:

- SEMS requires emergency response agencies to use basic principles and components of emergency management including ICS and multi-agency/inter-agency coordination.
- The five primary functions of Command or Management, Operations, Planning/Intelligence, Logistics and Finance/Administration 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.

References

California Government Code Section 8607
California Code of Regulations, Title 19, Division 2

Michael E. Martinet is the Disaster Management Area Coordinator for Area G. Area G is a sub division of Los Angeles County in California, incorporating 14 cities. He is a Certified Emergency Manager and a graduate of California State University, Dominguez Hills. He has 12 years experience in disaster management, most recently assisting in the Alaska Airlines Flight 261 Crash recovery efforts.