

CALIFORNIA'S STANDARDIZED EMERGENCY MANAGEMENT SYSTEM

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ABSTRACT

The State of California is in the process of changing to a new statewide "Standardized Emergency Management System." The new system will become effective on December 1, 1996, and will be mandatory for all state agencies. All 58 counties, 467 cities, and thousands of special districts have been invited to participate. To encourage all organizations to agree to participate, the law provides that if any decide not to participate, they will not be eligible for any post-disaster funding of emergency-related personnel costs.

The new system builds on the twenty-year-old Incident Command System. It provides procedures for five levels of activity: field level, local jurisdiction, county, State region, and Governor's Office of Emergency Services. Mutual aid and multi-agency / inter-agency coordination issues are addressed. Counties will become Operational Areas responsible for coordination of all local jurisdictions and special districts within their area. A new Operational Area Satellite Information System will provide communications among the counties and with the State's regions and the Governor's office.

INTRODUCTION

Southern California had a number of big fires about twenty-five years ago. A method of coordinating the response of the various fire departments which provided mutual aid was later developed by a group called "Fire Fighting Resources of California Organized for Potential Emergencies" (FIREScope). The method was called the "Incident Command System" (ICS). In this system, each incident had an "incident commander" who had an organization of four sections: operations, planning, logistics, and finance. Procedures were specified so that assisting units would report to a staging area, receive assignments, use a common communications plan, keep records in a uniform manner, etc.

This system spread throughout California and was widely adopted by many fire departments. It was not adopted by all fire departments, however. More importantly, it was perceived to be a "Fire Department" sys-

tem and, therefore, was not adopted by law enforcement agencies, public works departments, and school districts.

In October 1991, there was a disastrous fire in Oakland and Berkeley. This "East Bay Hills" fire caused 25 deaths and 150 injuries. There were 3,354 houses and 456 apartments destroyed. It was the worst urban fire in the history of the United States. The estimated cost of the fire was \$1.5 billion. There were a number of contributing factors to the poor performance of the Oakland and Berkeley fire departments according to the official "lessons-learned" report prepared by the East Bay Hills Fire Operations Review Group (1992). The weather made firefighting almost impossible with temperature of 92 degrees Fahrenheit, relative humidity of 16 percent, and winds of 30 knots gusting to 50 knots. The streets were narrow and clogged with burned-out hulks of a thousand automobiles. The water supply for firefighting came from hilltop reservoirs which were soon emptied. The wood poles carrying electrical wires up the hills to the pumps burned so that there was no electricity to pump more water into the reservoirs. The fire ignited 790 houses in the first hour.

There were other factors, however. The Oakland Fire Department did not use the Incident Command System and had no formal mutual aid agreements. The Fire Department moved its command post to three different locations during the fire, while the Police Department established two different command posts. It was difficult for the Governor to find out who was in charge and what was going on.

Furthermore, the Oakland Fire Department had a different size hydrant from all other California cities so that mutual aid engines from other cities needed to use an adapter which was in short supply. The Oakland Fire Department's budget had been cut so much in the preceding ten years that about 40% of the personnel had retired without replacement, and there had not been money for wildland fire training. With little money available for modernization, the fire engines had to rely on antiquated four-channel radios for communication

instead of modern sixteen-channel radios. This made it difficult to communicate with the 300 mutual aid fire engines which had arrived.

As a result of the fires, new laws were passed to improve the coordination of state and local emergency response in California. State Senator Petris, whose home in Oakland had been burned, prepared the draft of Senate Bill 1841 which was subsequently approved by the state legislature and signed by the Governor. This law is found in Section 8607 of the Government Code (1993). The new "Standardized Emergency Management System" (SEMS) is scheduled to go into effect on December 1, 1996.

SEMS TRAINING

A comprehensive training program was developed for all emergency personnel because this is a new system. Four courses were developed by the Governor's Office of Emergency Services:

- Introductory Course - Four modules
- Field Level - Nineteen modules covering ICS orientation, basic, intermediate, and advanced SEMS instruction.
- Emergency Operations Center Level - Nine modules covering EOCs at local government, operational area, region and state.
- Executive Level - One module

BASIC COMPONENTS OF SEMS

The new Standardized Emergency Management System was based on improvements to existing systems and some new concepts. These components are:

- Incident Command System (ICS) - The ICS, as developed by FIRESCOPE, will be used at the field level by all responders.
- Multi-Agency Coordination - Multi-agency coordination is the coordination among different agencies within a jurisdiction, such as Fire and Police. Inter-agency coordination takes place between different levels, such as city police, county deputy sheriffs, state police and California Highway Patrol officers.
- Master Mutual Aid Agreement - State, counties and cities originally signed a master agreement in 1950. This has been further developed to cover fire, law enforcement, coroner, emergency medical, and search and rescue systems.
- Operational Area - An operational area consists of a county and all political subdivisions within that

county's area.

- Operational Area Satellite Information System (OASIS) - A satellite communications system with a high frequency radio backup installed in each of the 58 counties, the regions and the State.

RESPONSE LEVELS

There are five organizational response levels described by the SEMS regulations. These levels are:

1. Field Response - The field response level is at the scene of an incident where the emergency responders are actively carrying out their missions of search and rescue, putting out fires, stopping the spread of hazardous chemicals, etc. An Incident Commander is in command of all response actions.
2. Local Government - Cities coordinate the overall emergency response and recovery activities within their jurisdictions by activating an emergency operations center.
3. Operational Area - Each county and all political subdivisions of cities and special districts within the county's area constitute an "Operational Area." The operational area coordinates information, resources, and priorities among local governments within the area. Also, it provides a communications link between the local government level and the regional level.
4. Regions - The State of California has three administrative regions to provide coordination of mutual aid, information and other emergency-related activities among the six mutual aid regions of the State.
5. State - The Governor's Office of Emergency Services manages state resources, coordinates mutual aid among the three regions, and is the initial coordination and communications link with the federal disaster response system.

BASIC FEATURES OF SEMS

Essential Functions - Each of the five response levels of SEMS has five primary functions: management, operations, planning/intelligence, logistics, and finance/administration. At the field level, the ICS term "command" is used for the management function. The other four levels have emergency operations centers where the term "management" is more appropriate for the coordination of resources and information than the term "command".

Management by Objectives - Each level of SEMS should identify measurable objectives and plan the op-

erational time period necessary to accomplish them.

Action Planning - Action planning is used at each level to provide participants with objectives and steps required for accomplishment. The plans contain assignments and allocation of resources to accomplish the objectives.

Modular Organization - Only those parts of an organization that are necessary are activated.

Hierarchy of Management - Everyone in the organization has designated supervision. SEMS is organized to provide a single overall organization with appropriate span of control.

Span of Control - SEMS considers that one supervisor should have direct supervision of no more than seven positions.

Common Terminology - Standardized terminology is used for position titles, organizational elements, facility designations and resources to enable multi-agency, multi-jurisdiction organizations to work together without confusion.

Resource Management - All levels are involved in coordinating, inventorying, and managing resources.

Communications - SEMS emphasizes good information flows and adequate communications for all agencies.

SEMS ACTIVITIES

The primary functions of SEMS in emergency operations centers and the associated activities are:

FUNCTIONS	ACTIVITIES
Management	Responsible for over all emergency policy and coordination.
Operations	Responsible for coordination of all jurisdictional operations in support of the response to the emergency.
Planning/Intelligence	Responsible for collecting, evaluating, and disseminating information and maintaining documentation.
Logistics	Responsible for providing facilities, services, personnel, equipment, and materials.
Finance/Administration	Responsible for financial activities and other administrative matters.

EMERGENCY OPERATIONS CENTERS

Although the field responders at an incident work together using the basic Incident Command System, the four higher organizational levels (local jurisdictions, operational areas, regions and the State) will activate SEMS emergency operations centers. Here in California we seem to have a wide variety of disasters including earthquakes, tsunamis, wildland/urban fires, hazardous chemical spills, ocean oil spills, transportation accidents involving aircraft and railroads, floods, and major rain, wind and snow storms. Unless the local Emergency Manager has already done so, the emergency operations center is usually activated when a local disaster is declared or proclaimed.

SUMMARY

The Standardized Emergency Management System was developed as a management system to cope with both large and small disasters. It will coordinate the response from various jurisdictions and agencies and uses new technologies, such as satellites, to improve the reliability of communications. SEMS makes the resources of all state agencies available to support counties and local jurisdictions. All emergency response personnel are being given training appropriate for their level of responsibilities and multi-hazard emergency plans are being rewritten to incorporate the principles of the new Standardized Emergency Management System.

REFERENCES

East Bay Hills Fire Operations Review Group. The East Bay Hills Fire: A Multi-Agency Review of the October 1991 Fire in the Oakland/Berkeley Hills. Report by the Governor's Office of Emergency Services, State of California, Sacramento, CA, February 27, 1992

SEMS Statute, California Government Code, Section 8607, Chapter 7, Division 1, Part 2, January 1, 1993.