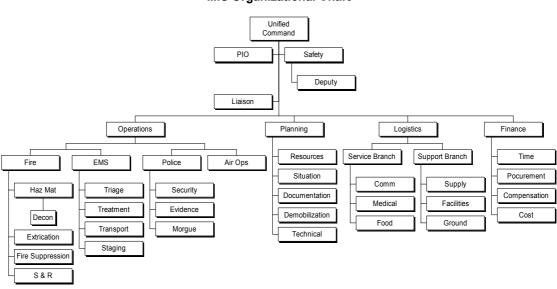
The International Emergency Management Society 9th Annual Conference Proceedings University of Waterloo, Canada, May 14-17, 2002

INCIDENT MANAGEMENT SYSTEM: A DISASTER MANAGEMENT TOOL WORKSHOP

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IMS Organizational Chart

The Incident Management System (IMS) provides a comprehensive structure and system for conducting both emergency and non-emergency operations. It is equally applicable to small-scale daily operational activities as well as major mobilizations. IMS, because of its standardized operational structure and common terminology, provides a useful and flexible management system that is particularly adaptable to incidents involving multi-jurisdictional or multi-disciplinary responses. IMS provides the flexibility needed to rapidly activate and establish an organizational format around the functions that need to be performed.

Initial IMS applications were originally designed for responding to the wild land fires in California during the 1970s. A task force comprised of local, state and federal agencies developed the basic structure of what is now known as the Incident Management System. Early in the development process, several problems were identified:

- Too many people reporting to one supervisor.
- Different emergency response organizational structures.
- Lack of reliable incident information.
- Inadequate and incompatible communications.
- Lack of structure for coordinated planning between agencies.
- Unclear lines of authority.
- Terminology differences between agencies

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• Unclear or unspecified incident objectives.

The task force also established four essential requirements for the structure being designed:

1. The system must be organizationally flexible to meet the needs of incidents of any kind and size.

2. Agencies must be able to use the system on a day-to-day basis for routine situations as well as for major emergencies.

3. The system must be sufficiently standard to allow personnel from a variety of agencies and diverse geographic locations to rapidly meld into a common management structure.

4. The system must be cost effective.

IMS should not be unfamiliar to most people, as it is based on common managerial concepts:

- Unified Command Structure
- Common Terminology
- Modular Organization
- Incident Action Plan PCDA
- Span-of-Control
- Comprehensive Resource Management
- Integrated Communications

The IMS is designed to be implemented in the following types of situations, regardless of the specific nature of the incident:

- Single jurisdiction responsibility with single agency involvement
- Single jurisdiction responsibility with multi-agency involvement
- Multi-jurisdictional responsibility with multi-agency involvement

Within IMS, there is a concept of Unified Command that simply means, that all agencies which have a jurisdictional responsibility, at a multi-jurisdictional incident, contribute to the process of:

- Determining the overall incident objectives.
- Selection of strategies and tactical operations.
- Integrating appropriate tactical operations.
- Making maximum use of all assigned resources.

The proper selection of participants to work within a Unified Command structure will depend upon the location of the incident, the nature of incident, i.e. HazMat, Fire, and Police Action. Selection of the Unified Command staff typically consists of a responsible official from each jurisdiction in a multi-jurisdictional situation or from each agency in a multi-agency response. Within the IMS, all members of the "Unified Command" structure *share equally* in the overall management of the incident and all personnel assigned must have a clear understanding of the goals and objects as well as the IMS process. The goals of Unified Command are to:

- Improve the information flow and interfaces among agencies.
- Develop a single collective approach to the incident regardless of its functional or geographical complexity.
- Ensure that all agencies with responsibility for the management of the incident have an understanding of their organization's goals, policies and restrictions.
- Optimize the efforts of all agencies as they perform their respective missions.
- Reduce or eliminate duplicated efforts.

With the Unified Command Structure, the Incident Commander is responsible for incident activities including the development and implementation of strategic decisions and for approving the ordering and releasing of resources. The IC, regardless of rank, has complete authority and responsibility for conducting the overall operation.

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These responsibilities include:

- Assume command and assess incident situation.
- Setting up an appropriate Incident Command Post
- Assign personnel to General Staff positions as appropriate.
 - Operations
 - Planning
 - Finance
 - Logistics
- Assign personnel to Command Staff positions as appropriate.
 - Public Information Officer
 - Safety Officer
 - Liaison Officer
- Conducting initial briefing.
- Ensuring that planning and intelligence meetings are conducted, if necessary.
- Approving and authorizing the implementation of an incident action plan.
- Establishing a flow of pertinent information for command personnel.
- Authorizing the release of information to news media.

The success and acceptance of IMS nationally have led to its inclusion in a number of regulations and standards. The primary reason for this is IMS's ability to be adopted and utilized by jurisdictions and agencies needing one common emergency management system capable of dealing with all types of emergencies and suitable for use when multiple jurisdictions or agencies are involved.

As a result of the Superfund Amendments and Reauthorization Act (SARA) of 1986, the Occupational Safety and Health Administration (OSHA) has implemented regulations that require departments to utilize an IMS at all hazardous materials incidents: 29CFR 1910.120(q)(3)(i-ix).

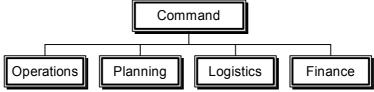
For those departments in states that do not require following OSHA standards, the Environmental Protection Agency has adopted regulations that impose the same requirements in non-OSHA states. The regulation states, "The incident command system shall be established by those employers ("employers" includes fire departments) for the incidents that will be under their control and shall be interfaced with the other organizations or agencies who may respond to such an incident."

After the Exxon Valdez oil spill, the federal government passed the Oil Pollution Control Act of 1900 (OPA-90), which mandates the use of an IMS and specifies that when a spill occurs, the management of the incident will incorporate a Unified Command Structure.

The National Fire Protection Agency has also implemented guidelines that require the use of an IMS. Standard 1500: Fire Department Occupational Health and Safety Program, states that all departments shall establish written procedures for IMS, and that all departmental members shall be trained in and familiar with the system. It fixes responsibility for firefighter safety at all supervisory levels at an incident and requires a method of tracking and accounting for personnel. It places strong emphasis on scene safety and the role of the incident safety officer. Standard 1561: Fire Department Emergency Management Systems, provides broad guidelines for what should be included in any emergency management system; the appendix gives examples of successful systems currently in use. It does not provide a new emergency management system or impose rigid rules for adoption.

IMS is broken down into five interrelated functional areas:

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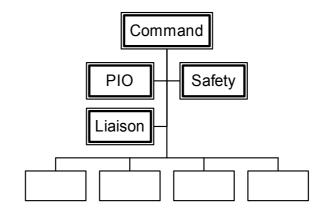
The function of Command is to assume responsibility for the overall management of the incident. Command establishes the strategy and tactics for the incident and has the ultimate responsibility for the success or failure of the incident activities. The Command role is filled by the Incident Commander (IC) and is the position that is established at every incident no matter how small or whether it involves only a single resource. The IC will assign personnel to the remainder of positions. Only those positions that are needed to help get the job done should be implemented. The others remain available for an incident in which they may be required. However, the IC remains responsible for the functions of any unfilled position. The IC should avoid falling into the trap of creating a complex organizational chart with a variety of subordinate positions and having no one left to manage the incident.

Operations direct all of the tactical operations in order to accomplish the goals and objectives developed by Command and assists in the development of the action plan.

The Planning function is to collect and evaluate information that is needed for preparation of the action plan. Planning forecasts the probable course of events the incident may take and prepares alternative strategies for changes in or modifications to the action plan. The planning section will also display the current status of the incident.

Logistics provides services and supplies in support of the tactical operations. Included in Logistics' responsibilities are providing for facilities, transportation, supplies, equipment maintenance and fueling, and feeding and medical services for response personnel.

Usually formally implemented during large-scale incidents, Finance is responsible for the required fiscal documentation needed and produced as a result of the emergency. This includes payroll, workman's compensation issues and paying for equipment obtained by the Logistics sector.



The Command Staff positions are designed to provide aid and assistance in helping the IC fulfill the responsibilities associated with managing the emergency. They handle key incident activities that enable the IC to concentrate on managing the incident. Command Staff is not part of the line organization and does not count when determining the number of positions under the IC's span of control. The three positions that form the Command Staff positions are Safety Officer, Liaison Officer and Public Information Officer (PIO).

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The Safety Officer is responsible for monitoring and assessing safety hazards or unsafe situations and developing measures for ensuring personnel safety. After identifying the hazards, the information is conveyed to the IC, and any necessary adjustments are made to the action plan. The Safety Officer can take immediate action to correct an unsafe act or practice or to remove personnel from the threat of imminent danger. A Safety Officer should be appointed when the IC cannot adequately monitor hazards or unsafe conditions due to the size, complexity, or numbers of resources involved in the incident. Anyone given the responsibility of Safety Officer should have the background knowledge and a clear understanding of what dangers the incident can present to personnel.

An incident where multiple agencies are involved may require a Liaison Officer whose responsibilities are to provide the point of contact and coordination for assisting agencies not involved in the Command function, i.e. the Red Cross.

The PIO, in conjunction with the IC, is responsible for the development and dissemination of information regarding the incident and to serve as the point of contact for the media

An individual can only process so much information at any given time before reaching a point of overload, where you can no longer effectively understand what is being said. You need to maintain an appropriate span of control. This theory basically states that no more than five people should report to any individual in a crisis setting. As you exceed this ratio, you will not be able to give your full attention to any one person or problem. In the disaster setting, when you have six or more people reporting to an individual, you should add another link in the chain of command or assign that person a deputy.

Whenever possible, you should use face-to-face communications. This is very import when unpopular policy decisions need to be implemented. This type of communications allows you to receive instantaneous feedback. It also permits a dialogue (the whole purpose of communications) with a group of people, which is an often very difficult using radio. Another essential communication procedure is to use plain text messages. Avoid using radio codes. Neighboring agencies may use codes with vastly different meanings from yours. Every version of the Incident Management System requires the use of plain English radio traffic.

Every incident must have a written or an oral action plan. The purpose of this document is to provide all managerial elements with a working blue print of the event. The main elements to be included in the IAP are the statement of objectives, the organization structure, specific assignments that outline the strategy, tactics and resources to be used. The supporting materials section should have a map of the incident, communications plan, medical plan and so on.

The most important point to remember is the IMS is a tool that is only useful if it is implemented early in the incident and everyone needs to buy into it. Also it does not replace common sense.

Biographical Sketch

Peter I. Dworsky, is Assistant Director, Office of Domestic Preparedness, St. Barnabas Health Care System, 95 Old Short Hills Road, West Orange, New Jersey 07052. He has a BS in EMS Management, and a Masters Degree in Public Health, (concentration in health systems administration) from New York Medical College. He has worked as a paramedic at St. Clare's Hospital in New York City and was the Paramedic Director at Jersey City Medical Center. Currently he is completing the requirements to become Board Certified in Emergency Management by the International Association of Emergency Managers. He has a technical background in Hazardous Materials and Fire Fighter certification. He has published several articles related to EMS and Emergency Management.