FOUNTAIN OFFICE OF EMERGENCY MANAGEMENT (OEM)

COFFEE BREAK TRAINING

Coffee Break Training #6

Topic: **Understanding Multiagency Coordination (MAC) Systems**

Learning :

- **Provides a brief overview of the National Incident Management System (NIMS).**
- **Introduces Multiagency Coordination Systems.**

Homeland Security Presidential Directives

Due to attacks on September 11, 2001, the President issued the following Homeland Security Presidential Directives (HSPDs):

- HSPD-5 identified steps for improved coordination in response to incidents. It requires the Department of Homeland Security (DHS) to coordinate with other Federal departments and agencies and State, local, and tribal governments to establish a National Response Framework (NRF) and a National Incident Management System (NIMS).
- HSPD-8 directed DHS to lead a national initiative to develop a National Preparedness System—a common, unified approach to "strengthen the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies."

NIMS and NRF

NIMS provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment.

The NRF is a guide to how the Nation conducts all-hazards response – from the smallest incident to the largest catastrophe. This key document establishes a comprehensive, national, all-hazards approach to domestic incident response. The Framework identifies the key response principles, roles, and structures that organize national response. It describes how communities, States, the Federal Government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response.

NIMS Components

NIMS is much more than just using the Incident Command System or an organization chart.

NIMS is a consistent, nationwide, systematic approach that includes the following components:

- [Preparedness](#)
- [Communications and Information Management](#)
- [Resource Management](#)
- [Command and Management](#)
- [Ongoing Management and Maintenance](#)

The components of NIMS were not designed to stand alone, but to work together.

Command and Management Elements

The NIMS Command and Management component facilitates incident management. Incident Command System, Multiagency Coordination Systems, and Public Information.

What Is Multiagency Coordination?

Multiagency coordination:

- Is a **process** that allows all levels of government and all disciplines to work together more efficiently and effectively.
- Occurs across the different disciplines involved in incident management, across jurisdictional lines, or across levels of government.
- Can and does occur on a regular basis whenever personnel from different agencies interact in such activities as preparedness, prevention, response, recovery, and mitigation.

What Is a Multiagency Coordination System?

A Multiagency Coordination System is not simply a physical location or facility. Rather, the MAC System:

- Defines business practices, standard operating procedures, and protocols by which participating agencies will coordinate their interactions.
- Provides support, coordination, and assistance with policy-level decisions to the ICS structure managing an incident.

Cooperating agencies and organizations may develop a MAC System to better define how they will work together and to work together more efficiently.

Why Multiagency Coordination?

Multiagency coordination provides critical resource and information analysis support to the Incident Command/Unified Command.

Coordination does **not** mean assuming command of the incident scene.

Primary Multiagency Coordination Functions

A MAC System will generally perform common functions during an incident; however, not all of the system's functions will be performed during every incident, and functions may not occur in any particular order. Primary MAC System functions include:

- Situation Assessment
- Incident Priority Determination
- Critical Resource Acquisition and Allocation
- Interagency Activities

Other Coordination

Situation Assessment

This assessment includes the collection, processing, and display of all information needed. This may take the form of consolidating situation reports, obtaining supplemental information, and preparing maps and status boards.

Incident Priority Determination

Establishing the priorities among ongoing incidents within the defined area of responsibility is another component of a MAC System. Typically, a process or procedure is established to coordinate with Area or Incident Commands to prioritize the incident demands for critical resources. Additional considerations for determining priorities include the following:

Life-threatening situations.

Threat to property.

High damage potential.

Environmental impact.

Economic impact.

Other criteria established by the Multiagency Coordination System.

Incident complexity.

Critical Resource Acquisition and Allocation

Designated critical resources will be acquired, if possible, from the involved agencies or jurisdictions. These agencies or jurisdictions may shift resources internally to match the incident needs as a result of incident priority decisions. Resources available from incidents in the process of demobilization may be shifted, for example, to higher priority incidents.

Resources may also be acquired from outside the affected area. Procedures for acquiring outside resources will vary, depending on such things as the agencies involved and written agreements.

Interagency Activities

A primary function of MAC Systems is to coordinate, support, and assist with policy-level decisions and interagency activities relevant to incident management activities, policies, priorities, and strategies.

Coordination

With Other MAC System Elements: A critical part of a MAC System is outlining how each system element will communicate and coordinate with other system elements at the same level, the level above, and the level below. Those involved in multiagency coordination functions following an incident may be responsible for incorporating lessons learned into their procedures, protocols, business practices, and communications strategies. These improvements may need to be coordinated with other appropriate preparedness organizations.

With Elected and Appointed Officials: Another primary function outlined in a MAC System is a process or procedure to keep elected and appointed officials at all levels of government informed. Maintaining the awareness and support of these officials, particularly those from jurisdictions within the affected area, is extremely important, as scarce resources may need to move to an agency or jurisdiction with higher priorities.

Command vs. Coordination

Command is the act of directing, ordering, or controlling by virtue of explicit statutory, regulatory, or delegated authority at the field level. The ICS command structure allows that authority to be delegated from the agency administrator to the Incident Commander and/or Area Command in response to an emergency.

Coordination is the process of providing support to the command structure and may include incident prioritization, critical resource allocation, communications systems integration, and information exchange.

Remember . . . Direct tactical and operational responsibility for conducting incident management activities rests with the Incident Command/Area Command.

MAC Systems Elements: Overview

MAC Systems are a combination of:

- Facilities
- Equipment
- Personnel
- Procedures

These components are integrated into a common system with responsibility for coordinating and supporting domestic incident management activities.

Facilities

A MAC System should identify facilities or locations—such as a communications/dispatch center, EOC, city hall, virtual location—to house system activities. The facilities identified depend on the anticipated functions of the system.

Equipment

A MAC System should identify and acquire the equipment needed to accomplish system activities (such as computers, software, and communication devices).

Personnel

Typically, the personnel who are part of the MAC System include Agency Administrators/Executives, or their appointed representatives, who are authorized to commit agency resources and funds in a coordinated response effort. Personnel can also be authorized representatives from supporting agencies, nongovernmental organizations, and the private sector who assist in coordinating activities above the field level.

Procedures

Procedures include processes, protocols, agreements, and business practices that prescribe the activities, relationships, and functionality of the MAC System. Critical components include the interactive communications activities and associated implementation plans.

From Simple to Complex

The type, size, complexity, and probable duration of incident operations determine the level of complexity for Multiagency Coordination Systems. MAC Systems:

MAC System Elements: Overview

Common coordination elements may include:

- [Dispatch Center](#)
- [Emergency Operations Center (EOC)](#)
- [Department Operations Center (DOC)](#)
- [Multiagency Coordination (MAC) Group](#)

Dispatch Center

A Dispatch Center coordinates the acquisition, mobilization, and movement of resources as ordered by the Incident Command/Unified Command.

Emergency Operations Center (EOC)

During an escalating incident, an EOC supports the on-scene response by relieving the burden of external coordination and securing additional resources. EOC core functions include coordination; communications; resource allocation and tracking; and information collection, analysis, and

dissemination. EOCs may be staffed by personnel representing multiple jurisdictions and functional disciplines and a wide variety of resources.

Department Operations Center (DOC)

A DOC coordinates an internal agency incident management and response. A DOC is linked to and, in most cases, physically represented in the EOC by authorized agent(s) for the department or agency.

Multiagency Coordination (MAC) Group

A MAC Group is comprised of administrators/ executives, or their designees, who are authorized to represent or commit agency resources and funds. MAC Groups may also be known as multiagency committees or emergency management committees. A MAC Group does not have any direct incident involvement and will often be located some distance from the incident site(s) or may even function virtually. A MAC Group may require a support organization for its own logistics and documentation needs; to manage incident-related decision support information such as tracking critical resources, situation status, and intelligence or investigative information; and to provide public information to the news media and public. The number and skills of its personnel will vary by incident complexity, activity levels, needs of the MAC Group, and other factors identified through agreements or by preparedness organizations. A MAC Group may be established at any level (e.g., national, State, or local) or within any discipline (e.g., emergency management, public health, critical infrastructure, or private sector).

Emergency Operations Centers

An EOC is:

- Activated to support the on-scene response during an escalating incident by relieving the burden of external coordination and securing additional resources.
- A physical location staffed with personnel trained for and authorized to represent their agency/discipline.
- Equipped with mechanisms for communicating with the incident site and obtaining resources and potential resources.
- Managed through protocols.
- Applicable at different levels of government.
- Used in varying ways within all levels of government and the private sector to provide coordination, direction, and support during emergencies.

An EOC **does not** command the on-scene level of the incident. However, Incident Command Posts at the scene need good communication links to EOCs to ensure effective and efficient incident management.

EOC Organization

EOCs may be organized by:

- Major discipline (e.g., fire, law enforcement, or emergency medical services).
- Emergency support function (e.g., transportation, communications, public works and engineering, or resource support).
- Jurisdiction (e.g., city, county, or region).
- Some combination thereof (most likely).

EOC Staffing

EOCs may be staffed by personnel representing multiple jurisdictions and functional disciplines and a wide variety of resources.

For example, a local EOC established in response to a bioterrorism incident would likely include a mix of law enforcement, emergency management, public health, and medical personnel (local, State, or Federal public health officials, law enforcement officials, and possibly representatives of health care facilities, emergency medical services, etc.).

MAC Group

A MAC Group can provide strategic guidance and direction to support incident management activities, provide coordinated decisionmaking and resource allocation among cooperating agencies, establish the priorities among incidents, and harmonize agency policies. A MAC Group:

- Does not have any direct incident involvement and will often be located some distance from the incident site(s).
- Can function virtually to accomplish its assigned tasks in many cases.
- May be established at any level (e.g., national, State, or local) or within any discipline (e.g., emergency management, public health, critical infrastructure, or private sector).

MAC Groups may also be known as multiagency committees, emergency management committees, or as otherwise defined by the system.

MAC Group Membership

Typically, elected senior officials, Agency Administrators/Executives, or their designees, who are authorized to represent or commit agency resources and funds are members of MAC Groups.

The success of the MAC Group depends on the membership. Sometimes membership is obvious—organizations that are directly impacted, and whose resources are committed to the incident. Often, however, organizations that should be members of a MAC Group are less obvious. These may include:

- Business organizations such as local Chambers of Commerce,
- Volunteer organizations, and
- Other organizations with special expertise or knowledge.

While these agencies may not have "hard" resources or funds to contribute, their contacts, political influence, or technical expertise may be key to the success of the MAC Group.

MAC Group Support

A MAC Group may require a support organization for:

- Providing its own logistics and documentation needs.
- Managing incident-related decision support information such as tracking critical resources, situation status, and intelligence or investigative information.
- Coordinating public information to the news media and public.

MAC Groups vs. Area Command

Area Command is an organization to direct the management of multiple incidents handled individually by separate Incident Command System organizations.

When incidents are of different types and/or do not have similar resource demands, they are usually handled as separate incidents or are coordinated using MAC System principles and procedures.

Remember that Area Command oversees management coordination of the incident(s), while a MAC System element, such as a dispatch center, EOC, or MAC Group, coordinates support.

Chain of Command

The establishment of an EOC/MAC Group does not change the chain of command at the incident scene. It is critical to eliminate any confusion that could be caused by multiple, conflicting direction. Therefore, the EOC/MAC Group has a coordination and communication role rather than command authority over the incident operations.

Effective Multiagency Coordination

In summary, effective multiagency coordination includes the ability to:

- Provide reliable systems and resources to support the Incident Command.
- Acquire, analyze, and act on information.
- Be flexible in the face of rapidly changing conditions.
- Anticipate change.
- Promote public confidence

Concept Review (1 of 2)

Make sure not to lose sight of the entire system. You should keep in mind the following concepts:

- Command is the authority to direct agency resources to take specific action. The ICS command structure allows that authority to be delegated from the Agency Administrator to the Incident Commander and/or Area Command in response to an emergency.

- Coordination is the process of making and implementing the decisions required to ensure policies, resources, and activities support the needs of the incident.
- Direct tactical and operational responsibility for conducting incident management activities rests with the Incident Command, Unified Command, and/or Area Command.

Concept Review (2 of 2)

Other important concepts to remember include:

- Multiagency coordination takes place at many points in the MAC System, including the command organizations:
  - The ICS organization, particularly through the Unified Command structure, the use of Deputies and Assistants, and the Liaison Officer and Agency Representatives.
  - Area Command/Unified Area Command.
- Multiagency coordination also takes place in MAC System elements, such as EOCs and MAC Groups, which are specifically designed to coordinate policies, resources, and activities needed to support the incident.

MAC System Preparedness Factors

MAC System preparedness encompasses the following factors:

- **People**—the people who make the system work.
- **Communications and Information Systems**—two-way mechanisms to ensure that personnel have the most accurate information possible and can relay that information efficiently.
- **Public Information**—systems required to provide accurate, timely information to the public.
- **Nonpersonnel Resources**—the equipment, tools, and supplies needed to complete response and/or coordination activities.

People

To determine the number and types of people required to support the Multiagency Coordination System, you may want to consider:

- What needs to be done?
- How many people are needed to do it?
- What skills and knowledge do they need?
- How many people are available?
- From which agencies?
- Where will you get the others?
- How long will it take?

Broad Functions

You should think in terms of broad functions when determining what needs to be done.

For example, if organized using Federal Emergency Support Functions (ESFs), the functions would include ESF #1—Transportation, ESF #2—Communications, ESF #3—Public Works and Engineering, and so on as needed by the system.

No one in any MAC System should be called the Incident Commander. There is only one Incident Commander, and that person manages the on-scene response.

Identifying Personnel Needs

The next step requires identifying the number of people with the required skills and knowledge that are available. Because there may be little or no time to assemble staff, it is important that key staff positions be identified and personnel assigned before an incident occurs. This step requires:

- Identifying the agencies for which the personnel work on a daily basis.
- Making the personnel aware of their assignments.
- Managing their expectations about the work environment.
- Assisting the personnel in preparing themselves and their families for a possible emergency that will require them to be away from home for an extended period.
- Providing any additional training or cross training that may be required for the system to work.

Identifying Personnel Shortages

If you have identified personnel shortages, you must:

- Identify sources for additional personnel (e.g., from other agencies, jurisdictions, etc.).
- Determine how long it will take for those personnel to become a functioning part of the system.
- Develop a strategy for getting the work done in the interim.

Communications and Information Systems (1 of 2)

When determining communication needs, you should identify critical linkages between the incident command and the various layers of the MAC System. Means of communicating may vary depending on the type of information being communicated and the proximity of the persons communicating.

For example, communication between the EOC/MAC Group and the incident scene may be made by radio, whereas communication between the local EOC/MAC Group and the State EOC/MAC Group may be made by telephone, fax, or email.

Communications and Information Systems (2 of 2)

Communications planning must also address communications flow within the EOC/MAC Group. This should include:

- Message documentation and routing procedures.
- Communicating major events.
- Documenting actions taken.

NIMS requires that communications systems must be interoperable and redundant.

Additional training on communications and information systems is available in IS-704 - NIMS Communications and Information Management.

Communications System Failure (1 of 2)

Communications networks are often overloaded or fail completely following a major incident. You should have redundant systems in place and ensure that all members of the MAC System know:

- What those systems are.
- How they will be notified to switch to a backup system.

Communications System Failure (2 of 2)

Systems may work in one situation but not in another. Developing several different types of backup systems, together with procedures for switching to the backup systems, helps ensure that all parties are able to communicate throughout an incident.

Remember that the media and, often, the general public listen to police scanners to get information about the goings-on at incident scenes. Some operational information must be protected from widespread dissemination; this information should be communicated only by a secure method.

Information Systems (1 of 2)

The key requirements for information systems are to:

- Link to critical functions.
- Make information readily available.
- Ensure interoperability and redundancy.

Information Systems (2 of 2)

Linking information system needs to critical activities or operations will help determine:

- What information is needed, by whom, and in what form;
- The timeframes in which the information is needed; and
- The best ways to gather, analyze, and disseminate the information.

At most incidents, there will be information that should not be generally available because it could adversely affect operations, ongoing investigations, etc. Consider information security when establishing information systems. Information systems must also be interoperable and redundant to ensure efficient information flow throughout the MAC System.

Public Information

Public information is one of the most critical areas for multiagency coordination. Public information includes the processes, procedures, and systems for communicating timely, accurate, and accessible incident information.

Public information deals with all matters of general interest to the public, responders, and additional stakeholders (both directly affected and indirectly affected), including:

- Alerts and warnings.
- Incident cause, size, and current situation.
- Actions being taken and resources committed.
- Short-term and long-term community recovery plans.

Public Information Officer

The Public Information Officer represents and advises the Incident Commander on all public information matters relating to the management of the incident. The Public Information Officer handles:

- Media and public inquiries.
- Emergency public information and warnings.
- Rumor monitoring and response.
- Media monitoring.

The Public Information Officer also oversees other functions required to coordinate, clear with appropriate authorities, and disseminate accurate and timely information related to the incident, especially information related to public health and safety or protection.

The Public Information Officer is the on-scene link to the Joint Information System and Joint Information Center.

Joint Information System

The Joint Information System (JIS) provides a structure and system for developing and delivering coordinated interagency messages. JIS responsibilities include:

- Developing, recommending, and executing public information plans and strategies.
- Advising the Multiagency Coordination System and Incident Command concerning public affairs issues that could affect a response effort.
- Controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

Federal, State, tribal, territorial, regional, or local Public Information Officers and established Joint Information Centers (JICs) are critical supporting elements of the JIS.

Joint Information Center

The Joint Information Center (JIC) is:

- A central location that facilitates operation of the Joint Information System.
- A location where personnel with public information responsibilities perform critical emergency information functions, crisis communications, and public affairs functions.

JICs may be established at various levels of government or at incident sites, or can be components of Multiagency Coordination Systems (e.g., MAC Groups or EOCs). A single JIC location is preferable, but the system is flexible and adaptable enough to accommodate virtual or multiple JIC locations, as required.

Public Information Preparedness

The answers to the following questions should determine how the JIS will be established and how it will operate:

- Who is the public (including all stakeholders)?
- What does the public need to know?
- Who will provide that information?
- How will the information flow be managed and coordinated?
- How will the information be transmitted?
- When? How often?

For a more in depth look at the NIMS Resource Management component, you should take the IS-702 – NIMS Public Information course.

Resource Management Systems

A significant incident response issue is acquiring, assigning, and deactivating resources. Resources are critical for coordinating the on-scene response and ensuring that communications and information management systems work as required.

NIMS has established guidelines to manage resources more effectively by:

- Establishing systems for describing, inventorying, requesting, and tracking resources.
- Activating these systems before and during an incident.
- Dispatching resources before and during an incident.
- Deactivating or recalling resources during or after an incident.

This course provides a brief overview of Resource Management. For a more indepth look at the NIMS Resource Management component, you should take the IS-703 – NIMS Resource Management course.

Resource Management Basic Requirements

Effective resource management requires four basic activities:

- Developing a uniform method for identifying, acquiring, allocating, and tracking resources.
- Developing an effective mutual aid and donor assistance program based on a standardized classification of the kinds and types of resources needed to support incident management.
- Developing a credentialing system that is tied to uniform training and certification standards to ensure that requested personnel resources are integrated successfully into ongoing incident operations.
- Ensuring that all of these activities are managed through the MAC System and the Incident Command.

Identifying and Typing Resources

Resource typing is categorizing, by capability, the resources requested, deployed, and used in incidents. The National Integration Center typing protocol provides incident managers the following information:

- **Resource Category:** Identifies the function for which a resource would be most useful.
- **Kind of Resource:** Describes what the resource is (for example: medic, firefighter, Planning Section Chief, helicopter, ambulance, combustible gas indicator, and bulldozer).
- **Type of Resource:** Describes the size, capability, and staffing qualifications of a specific kind of resource.

Resource typing must be a continuous process based on measurable standards.

Use of Agreements

Agreements should be developed:

- Before an incident occurs.
- Among all parties, whether governmental or nongovernmental, that might provide or request resources during an incident.

All agreements specify how resources will be requested, how potential claims will be handled, and whether and how reimbursement will be made. Local resource requests at large or complex incidents should be made through the State to facilitate resource tracking.

Click the title of the sample agreements below to view examples:

- [Agreement for Mutual Aid Fire Protection](#)
- [Intergovernmental Agreement](#)

Credentialing

The credentialing process involves an objective evaluation and documentation of an individual's:

- Current certification, license, or degree,
- Training and experience, and
- Competence or proficiency.

Credentialing personnel ensures that they meet nationally accepted standards and are able to perform specific tasks under specific conditions. Credentialing is separate from badging, which takes place at the incident site in order to control access.

Credentialing Process

Scroll down to review the process, as recommended by the National Integration Center, for credentialing under NIMS.
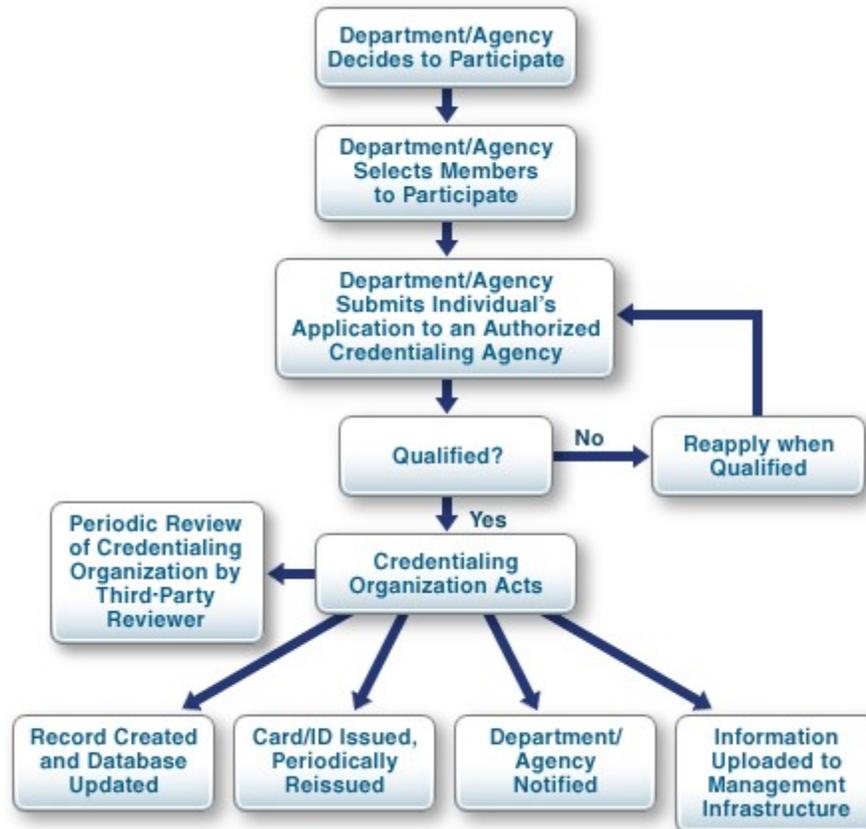
Advantages of Credentialing

Some advantages of credentialing are that it:

- Ensures that all personnel assigned to an incident are qualified for their assignments.
- Makes ordering personnel resources easier because personnel can be typed based on qualifications.
- Assists incident personnel in matching personnel with equipment.
- Allows personnel from outside the jurisdiction to integrate into the incident organization quickly.
- Reduces the jurisdiction's liability suits based on claims that personnel were unqualified for their assignments.

Coordination Through MAC Groups

Resource coordination through MAC Groups is perhaps the most critical aspect of resource management. Coordination is essential to ensure accurate resource tracking and resource availability.

During a major incident, local EOC/MAC Groups should fill requests from the Incident Command **only when they can be filled using resources from that jurisdiction**. If a mutual aid agreement or assistance agreement must be implemented, local jurisdictions should work through the State EOC so that the State always has a complete picture of resource status and availability.

Resource Coordination Through the EOC/MAC Group

Resource coordination through the EOC/MAC Group should begin when:

- Dispatch can no longer provide effective logistical support to the incident(s).
- A predicted event of the scope and duration requiring multiagency coordination is imminent.
- The jurisdiction's policy dictates EOC/MAC Group involvement.
- The Incident Commander exceeds his or her legal authority for the resources requested.

Incident Commanders can exceed their legal authority when:

- Resources from multiple agencies are required.
- Activation of mutual aid agreements and assistance agreements is required.
- Operational restrictions are set by statute.

MAC System Policies and Procedures

Policies are high-level guidance that are generally developed by senior management. Policies provide goals and direction to all agencies that may respond to an incident.

Procedures specify the methods or steps to be followed routinely for the performance of designated operations or in specific situations. Procedures describe how policies will be implemented.

Together, policies and procedures clarify:

- What key players will do.
- How they will interact.
- How they will be held accountable.

Issues Affecting Multiagency Coordination

Listed below are three common types of issues affecting multiagency coordination.

- [Conflicting Policies](#)
- [Communications Issues](#)
- ["Turf" Issues](#)

Conflicting Policies: Suggested Strategies

Get senior-level endorsement and support. The Chief Elected Official sets the tone for all pre-incident activities. Getting his or her endorsement and support for working as a team will enhance coordination among all agencies.

Involve decision makers from all participating agencies. Involving key decision makers from all participating agencies throughout the planning process helps to ensure that all will work together toward a common goal. It also provides an opportunity to identify and resolve issues before they affect response or coordination.

Communications Issues: Suggested Strategies

Document decisions. To the extent possible, decisions should be documented in writing. All entities that are affected by the decisions made should be provided an opportunity to review documentation. Memorandums of Understanding, Memorandums of Agreement, Emergency Management Assistance Compacts, and other agreements should include details about procedures that must be followed to request, activate, assign, track, deactivate, reconditions, and pay for resources.

Communicate directly. Direct communication among key personnel, either face-to-face or by phone or radio, is always preferable to communicating through an intermediary. Direct communication allows for asking questions and gaining clarification, where necessary, to resolve issues.

"Turf" Issues: Suggested Strategies

Keep copies of all policies and procedures at the EOC. Often turf issues can be resolved by referring to existing policies and procedures that have been agreed to during pre-incident planning. Ensure that copies of all pertinent policies and procedures are available at the EOC in case they are needed.

Have a senior decision-maker at the EOC. Having a senior decision-maker (e.g., the Mayor, a member of the city council, etc.) at the EOC enables decisions to be made in the moment, settling turf issues quickly, if only for the current response. (Note that these issues should be revisited as part of the after-action reporting process to develop a permanent solution.)

Homeland Security Exercise and Evaluation Program

The DHS Homeland Security Exercise and Evaluation Program (HSEEP):

- Offers a common exercise policy.
- Provides program guidance that constitutes a national standard for exercises.
- Fosters consistent terminology that can be used by all exercise planners, regardless of the nature and composition of their sponsoring agency or organization.
- Provides useful tools that exercise managers can use to plan, conduct, and evaluate exercises to improve overall preparedness.

Testing, Training, and Exercises

Developing a progressive testing, training, and exercise program that crosses agencies, jurisdictions, and levels of government helps to resolve these issues before an incident occurs.

Many coordination issues can be identified through:

- Testing
- Training
- Discussion-based exercises
- Operations-based exercises

Testing

Tests are used to verify whether systems perform to expected standards. Systems that should be tested include:

> Computer and other data systems.

> Communications systems.

Systems include hardware and equipment, as well as the human tasks needed to activate and operate them.

Systems should be tested any time a change to the system has been made to ensure that they work as intended.

Training

Training should be conducted when:

> Post incident analysis indicates a performance problem.

> There is a change to policy or procedure that affects job performance.

Two types of training are commonly used to train incident personnel:

> **Briefings**, which are good for disseminating information about policy and or procedure changes. They are often used as a precursor to hands-on training. Briefings typically take one-half day or less and are intended to transfer knowledge or change attitudes.

> **Hands-on training**, which is intended to provide skills that are required during an incident. Hands-on training should be performance-based, build on the participants' existing knowledge base, and incorporate increasingly complex, job-related skills.

Discussion-Based Exercises

Discussion-based exercises include:

Seminars

Seminars bring together those with a role or interest in the plan—owner and State, tribal, and local emergency management agencies—to discuss the plan and initial concepts for an annual drill or more in depth comprehensive exercise. Seminars:

> Are typically conducted in a lecture-based format with limited feedback or interaction from participants.

> Do not involve an actual exercise of the plan.

> Enable each participant to become familiar with the plan and the roles, responsibilities, and procedures of those involved.

> Can also be used to discuss and describe technical matters with involved, nontechnical personnel.

Workshops

During workshops, participant interaction is increased and the focus is on achieving or building a product (such as a draft plan or policy). Workshops are often used in conjunction with exercise development to:

Determine objectives.

Develop scenarios.

Define evaluation criteria.

To be effective, workshops must be highly focused on a specific issue, and the desired outcome or goal must be clearly defined.

A workshop is ideal for obtaining consensus on how NIMS command and management principles (ICS, MAC System, and Public Information System) can be integrated into community emergency operations policies, plans, and procedures.

Tabletop Exercises

Tabletop exercises are effective for evaluating group problem solving, personnel contingencies, group message interpretation, information sharing, interagency coordination, and achievement of specific objectives. The tabletop exercise:

Involves a meeting of the owner and the State, tribal, and local emergency management officials.

Begins with the description of a simulated event and allows participants to assess the plan and response procedures.

Encourages participants to discuss issues in depth and develop decisions through systematic problem solving, rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions.

Tabletop exercises can be aimed at:

Facilitating an understanding of NIMS concepts,

Identifying strengths and shortfalls, and/or

Achieving changes in attitudes or perceptions.

Games

Games are a simulation of operations that often involve two or more teams and use rules, data, and procedures to depict an actual or assumed real-life situation.

The goal of a game is to explore decision making processes and the consequences of those decisions. A game differs from the tabletop in that the sequence of events affects, and is in turn affected by, decisions made by players.

Computer-generated scenarios and simulations can provide a more realistic and time-sensitive method of introducing situations for analysis during the game. They also provide a collaborative environment that reflects realistic occurrences.

Operations-Based Exercises

Operations-based exercises include:

Drills

A drill is a coordinated, supervised activity usually employed to test a single specific operation or function in a single agency.

Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills.

A drill could be used to test:

>   A particular function within ICS, such as the development of an Incident Action Plan.
>   Elements of a community's notification or warning system.

Functional Exercises

A functional exercise is designed to test and evaluate individual capabilities, multiple functions or activities within a function, or interdependent groups of functions.

A functional exercise focuses on exercising policies, plans, procedures, and resources of ICS and/or the EOC. Events in a functional exercise are simulated through a series of messages that provide event updates that drive the activity.

During a functional exercise, the actual movement of personnel and equipment is simulated. One of the major characteristics of a functional exercise is the simulated feedback provided to the exercise participants from a simulation cell/exercise control group.

Full-Scale Exercises

A full-scale exercise is the most complex exercise. Full-scale exercises are multiagency, multijurisdictional exercises that can test many facets of emergency management response and recovery.

A full-scale exercise focuses on:

>   Implementing and analyzing policies, plans, procedures, and resources that have been...
>   Developed in discussion-based exercises and...
>   Refined in previous, smaller, operations-based exercises.

The events for a full-scale exercise are projected through a scripted exercise scenario.

Full-scale exercises are conducted in a real-time, stressful environment that should closely mirror a real event. First responders and resources are mobilized and deployed to the scene as if a real incident has occurred. EOCs (or other MAC System elements) should actively participate in full-scale exercises.

Comprehensive Exercise Program (1 of 2)

Jurisdictions that do not have comprehensive exercise programs should develop one. A comprehensive exercise program:

- Incorporates all types of exercises.
- Includes all important players in response and coordination.
- Increases in complexity, until all response and coordination capabilities are tested.

Comprehensive Exercise Program (2 of 2)

A comprehensive exercise program provides several important benefits:

- It fosters communication and cooperation among agencies and departments that do not work together on a day-to-day basis.
- It enables jurisdictions to test their response and coordination capabilities before they are put to the test in an actual incident.
- It helps keep personnel current in their emergency or disaster jobs, making them use skills that they may not use on a daily basis.

Activating Multiagency Coordination

There is no single policy for activating MAC System elements, such as an EOC. Some possibilities include:

- When a Unified Command is established at the incident scene.
- When more than one jurisdiction becomes involved in the incident response.
- When the circumstances at the scene indicate that the incident could expand rapidly and involve cascading events.
- When similar past events have required multiagency coordination.
- When the chief executive (e.g., Mayor, Governor, Agency Administrator, etc.) requests that MAC System elements be activated.

Activating MAC System Elements

The process for activating MAC System elements will vary depending on the jurisdiction.

For example, in some jurisdictions the Emergency Manager may have the authority to activate the Emergency Operations Center. In others, the senior elected official must make the decision.

The important point to remember is that the decisionmaking process for activating the EOC or other MAC System elements should be included in policy, and all key personnel must know activation procedures such as:

- Who makes the decision (based on State and/or local ordinance and policy).
- The circumstances for activation.
- The timeframes for activation.

EOC Activation: Example (1 of 2)

The following is an example of a policy statement from Jefferson County, Alabama.

> **EMERGENCY FUNCTION (EF) 1**
> **MANAGING EMERGENCY OPERATIONS**
> **(Jefferson County's Community Emergency Management System)**
>
> The Emergency Management Agency (EMA) is XXX County's 24-hour "crisis monitor." *As emergency situations threaten or occur*, the *XXX County Emergency Management Agency Coordinator* may convene a "Crisis Action Team (CAT)" or *activate the Emergency Operations Center (EOC)* to facilitate evaluation and

incident planning, and possible activation and implementation of emergency functions and resources. Certain near-instantaneous events may trigger immediate full EOC activation. The EOC is the key to successful response and recovery operations. With decision makers and policymakers located together, personnel and resources can be used efficiently. Coordination of activities will ensure that all tasks are accomplished and minimize duplication of efforts.

As emergency situations threaten or occur = Under these circumstances...
XXX County EMA Coordinator = This person...
activate the Emergency Operations Center (EOC) = May activate the EOC.

EOC Activation: Example (2 of 2)

Jefferson County's policy statement clearly states:

- Who has authority to activate the EOC, and
- Under what circumstances.

Under this policy, the Emergency Management Agency Coordinator also has the authority to convene the Crisis Action Team to advise on the situation before making an activation decision.

Determining the Level of Activation

There are multiple ways to determine level of activation. In all cases, the basic concept should be included in the Emergency Operations Plan (EOP).

- Levels of activation should be linked to the jurisdiction's or agency's hazard analysis. Linking activation to the hazard analysis will provide activation "triggers" based on actual or anticipated levels of damage.
- The decision about the level of EOC/MAC Group activation should be made based on established triggers and communication with the Incident Commander or Unified Command.

Situation Assessment

All multiagency coordination begins with assessment of the situation including:

- Collecting, processing, and displaying of all information needed.
- Consolidating situation reports, obtaining supplemental information, and preparing maps and status boards.

Determining Incident Priority

Establishing the priorities among ongoing incidents within the defined area of responsibility is another function of MAC Systems. Typically, a process or procedure is established to coordinate with Area or Incident Commands to prioritize the incident demands for critical resources. Additional considerations for determining priorities include the following:

- Life-threatening situations.
- Threat to property.
- High damage potential.
- Incident complexity.
- Environmental impact.
- Economic impact.
- Other criteria established by the Multiagency Coordination System.

Determining the Need for Mutual Aid and Assistance

Communication with the Incident Commander is critical to determining if and when external assistance is, or will be, required.

The Incident Commander is aware of the assets that are:

- Committed at the scene.
- Available in staging.
- Available within the jurisdiction.
- Required to address the needs of the incident and meet incident objectives.

Working with the Incident Commander is the **only** way to make a good decision about additional external resource needs.

When To Request Assistance

Mutual aid and assistance should be requested when:

- Resources on incident and in staging are nearing depletion.
- The jurisdiction's public safety coverage is jeopardized because of the need to assign resources to the incident.

Jurisdictions should use mutual aid agreements, assistance agreements, and private-sector contracts to facilitate making resources available for a response.

There will be a time lag between the time assistance is requested and the time it arrives on-scene. You should work closely with the Incident Commander and request assistance **sooner, rather than later**.

How To Request Assistance

The process for requesting assistance should be incorporated into mutual aid agreements, the Emergency Management Assistance Compact (EMAC), and other agreements developed during the planning process.

There are several ways to request assistance that are acceptable as long as they work for the jurisdiction(s) involved and the State. Depending on the State and the kind of emergency, resource orders to the next higher level of government may need to be preceded or accompanied by a formal request for assistance. All requests for Federal assistance of any type must be processed through the State.

Request for Assistance: Information

The information below should be included in any request, especially if the request is being made to the next higher level of government.

- The type of incident
- The time that the incident occurred or is expected to occur
- The actions already taken
- The areas and number of people involved
- Estimates of loss of life, injuries, and extent of damage
- The type and amount of assistance required
- A contact for followup questions

A formal request for assistance may be followed up with or accompanied by the actual resource order, which provides detailed information on the kind and type of resource that is needed, desired delivery points and times, etc.

Asking for Help (1 of 2)

The Incident Commander will identify initial resource requirements as part of the Incident Action Planning process. Then the Incident Commander will process and submit the resource order according to the jurisdiction's protocols. The Incident Commander may make the request by describing the:

- Kind and type of resource.
- Need or task(s) to be accomplished.

If the Logistics Section Chief and/or Supply Unit Leader positions are staffed, the Incident Commander may delegate the responsibility for placing the resource order to them.

Asking for Help (2 of 2)

If the Incident Commander requests resources by kind and type, the EOC/MAC Group can forward the request directly according to the EOP.

The EOC/MAC Group staff may consult with other experts to determine the specific resource required. Then they will determine whether to:

- Fill the request locally.
- Request mutual aid or assistance.
- Pass the request to the next level as a mission request.

This topic is explored in much greater detail in the IS-703 - NIMS Resource Management course.

Resource Ordering

Although different formats may exist, every resource order should contain the **essential elements of information**:

- Incident name
- Order and/or request number (if known or assigned)
- Date and time of order
- Quantity, kind, and type or detailed mission description (Resources should be ordered by Task Forces or Strike Teams when appropriate.) Include any special support needs.
- Reporting location (specific)
- Requested time of delivery (specific, immediate vs. planned, not ASAP)
- Radio frequency to be used
- Person/title placing request
- Callback phone number or radio designation for clarifications or additional information

A good mnemonic is SALTT: Size, Amount, Location, Type, Time.

Requesting Assistance—Summary

When requesting external assistance remember the following three points:

- **Make the request sooner, rather than later.** There will be some delay between the time that a resource is requested and the time that the resource arrives and can be assigned.
- **Focus on the mission, task, or objectives.** Unless you are certain of the kind and type of resource you need, request resources based on the mission, task, or incident objectives. Let the EOC staff and experts determine the specific resource that fits the need.
- **Follow established procedures** for requesting external resources to ensure that resource assignments can be made and tracked accurately.

Long-Term Issues (1 of 2)

Some common long-term issues deal with:

- **Documentation.** Long-term operations usually equate to more—or more widespread—damage. Plans need to include strategies for ensuring proper documentation of damage, resources used, equipment maintenance performed, overtime hours, etc.
- **Resources.** Long-term operations take their toll on incident resources. Human resources will need to rotate out of service to eat and rest. Mechanical resources may require refueling or maintenance. There must be enough resources on scene and in staging to ensure uninterrupted response operation. This will require careful coordination between the Incident Command and all MAC System elements

Long-Term Issues (2 of 2)

Other common long-term issues include:

- **MAC System Staffing.** MAC System staff will need to eat, rest, and decompress from the stress of the operation. Staffing patterns should include sufficient personnel to ensure 24-hour coverage for extended operations.
- **Cost.** Long-term operations also equate to higher costs. Jurisdictions often expend their entire year's overtime budgets in a single long-term response. Intergovernmental agreements may include payment provisions for incidents that extend past an agreed-upon threshold. Response costs, when combined with damage costs, can create a "financial disaster" for the jurisdiction.

Resolving Long-Term Issues

When resolving issues related to long-term operations:

- Be specific in describing agency staffing requirements in the EOP and verifying that all agencies have fulfilled the requirements.
- Conduct exercises to verify that the resources, staffing, and documentation are adequate.
- Develop methods to track and record all costs—damage, staff, and equipment use—at the scene and throughout the entire MAC System.

Resolving Issues

One of the best ways to resolve multiagency coordination issues that arise during an incident is to ensure that officials with decision making authority are present physically or virtually. Having all key personnel working together facilitates discussion and rapid problem solving as issues arise.

To ensure that decision makers stay engaged at the multiagency coordination level rather than go to the incident scene, it is critical to ensure that they have access to all of the information.

Senior personnel from the jurisdiction(s) need to be involved at the MAC System, and have the authority to commit agency/jurisdiction resources.

Deactivating MAC System Resources (1 of 2)

The MAC System resources should be deactivated when:

- Incident resources are being deactivated, and resource coordination among agencies or jurisdictions is no longer necessary.
- The situation at the incident scene is clearly under control.
- Incident support can be provided without impacting the dispatch system.

Deactivating MAC System Resources (2 of 2)

When multiple layers of a MAC System are involved, they usually deactivate in reverse order from activation (i.e., Federal deactivates first, then State, and finally, local).

Some multiagency coordination activities may continue after other activities are deactivated. These activities may take place at department operations centers or at the jurisdiction's offices. Financial activities are typically the last to be resolved.

MAC System Assessment Steps (1 of 2)

While there are many possible post-incident assessment approaches available, there are several key steps that every jurisdiction should take:

- **Review documentation from the incident.** Important decisions made during the incident, issues that arose and their resolution, and other critical information should have been documented at the time. This documentation can provide a starting point for developing a summary of operations and an agenda for a meeting with key players.
- **Convene a post-incident meeting** with all key personnel, including:
  - The Incident Commander
  - Mutual aid and assistance partners who supported the incident
  - Public/private partners
  - EOC personnel who played a key role in response coordination
  - Public officials
  - Affected members of the public, as appropriate

MAC System Assessment Steps (2 of 2)

Other key assessment steps include:

- **Be open and honest in gathering information** about what worked well and what didn't. Try to determine why problems occurred.

- Make sure to **establish a nonthreatening environment for the discussion**. The purpose of the meeting is to gather and analyze information, not to assess blame.
- **Develop an action plan** for improving areas in need of improvement.

Follow through on the action plan!

Post-Incident Meeting

The purpose of the post-incident meeting is to capture an accurate picture of what happened on the incident to improve future operations. Include all key players at the meeting:

- The Incident Commander
- Mutual aid and assistance partners who supported the incident
- Public/private partners
- EOC/MAC Group personnel who played a key role in response coordination
- Public officials
- Affected members of the public, as appropriate

Solicit specific issues and, when identifying areas for improvement, try to determine the specific cause of the problem. Remember that the purpose of the meeting is **to improve future operations, not to assign blame**.

Maintaining MAC System Readiness

Five steps that you must take after an incident to prepare for the next incident include:

- Replenish resources;
- Update rosters, media lists, and other contact information;
- Conduct tests, training, and exercises;
- Maintain/update equipment; and
- Follow up and implement recommendations from exercises.

The jurisdiction's Emergency Operations Plan should identify who is responsible for carrying out these five steps.