Lesson 1: What is the National Incident Management System?

Lesson Overview

On February 28, 2003, President Bush issued Homeland Security Presidential Directive–5. HSPD–5 directed the Secretary of Homeland Security to develop and administer a National Incident Management System. NIMS provides a consistent nationwide template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents.

This lesson will describe the key concepts and principles of NIMS, and the benefits of using the system for domestic incident response. At the end of this lesson, you should be able to describe these key concepts, principles, and benefits.

What is that National Incident Management System?

NIMS is a comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines. The intent of NIMS is to:

- Be applicable across a full spectrum of potential incidents and hazard scenarios, regardless of size or complexity.
- Improve coordination and cooperation between public and private entities in a variety of domestic incident management activities.

NIMS Compliance

HSPD-5 requires Federal departments and agencies to make the adoption of NIMS by State and local organizations a condition for Federal preparedness assistance (grants, contracts, and other activities) by FY 2005.

Jurisdictions can comply in the short term by adopting the Incident Command System. Other aspects of NIMS require additional development and refinement to enable compliance at a future date.

Why Do We Need a National Incident System

Emergencies occur every day somewhere in the United States. These emergencies are large and small and range from fires to hazardous materials incidents to natural and technological disasters.

Each incident requires a response. Whether from different departments within the same jurisdiction, from mutual aid partners, or from State and Federal agencies, responders need to be able to work together, communicate with each other, and depend on each other.

Until now, there have been no standards for domestic incident response that reach across all levels of government and all emergency response agencies.

The events of September 11 have underscored the need for and importance of national standards for incident operations, incident communications, personnel qualifications, resource management, and information management and supporting technology.

To provide standards for domestic incident response, President Bush signed Homeland Security Presidential Directive–5. HSPD-5 authorized the Secretary of Homeland

Security to develop the National Incident Management System, or NIMS. NIMS provides for interoperability and compatability among all responders.

NIMS Concepts and Principles

NIMS provides a framework for interoperability and compatibility by balancing flexibility and standardization.

- NIMS provides a **flexible** framework that facilitates government and private entities at all levels working together to manage domestic incidents. This flexibility applies to all phases of incident management, regardless of cause, size, location, or complexity.
- NIMS provides a set of **standardized** organizational structures, as well as requirements for processes, procedures, and systems designed to improve interoperability.

NIMS Components

NIMS is comprised of several components that work together as a system to provide a national framework for preparing for, preventing, responding to, and recovering from domestic incidents. These components include:

- Command and management.
- Preparedness.
- Resource management.
- Communications and information management.
- Supporting technologies.
- Ongoing management and maintenance.

Although these systems are evolving, much is in place now.

Command and Management

NIMS standard incident management structures are based on three key organizational systems:

- The **Incident Command System (ICS),** which defines the operating characteristics, management components, and structure of incident management organizations throughout the life cycle of an incident
- **Multiagency Coordination Systems,** which define the operating characteristics, management components, and organizational structure of supporting entities
- **Public Information Systems,** which include the processes, procedures, and systems for communicating timely and accurate information to the public during emergency situations

Preparedness

Effective incident management begins with a host of preparedness activities. These activities are conducted on a "steady-state" basis, well in advance of any potential incident. Preparedness involves a combination of:

- Planning, training, and exercises.
- Personnel qualification and certification standards.
- Equipment acquisition and certification standards.

- Publication management processes and activities.
- Mutual aid agreements and Emergency Management Assistance Compacts.

Resource Management

When fully implemented, NIMS will define standardized mechanisms and establish requirements for describing, inventorying, mobilizing, dispatching, tracking, and recovering resources over the life cycle of an incident.

Communications and Information Management

NIMS identifies the requirements for a standardized framework for communications, information management, and information-sharing support at all levels of incident management.

- Incident management organizations must ensure that effective, interoperable communications processes, procedures, and systems exist across all agencies and jurisdictions.
- Information management systems help ensure that information flows efficiently through a commonly accepted architecture. Effective information management enhances incident management and response by helping to ensure that decisionmaking is better informed.

Supporting Technologies

Technology and technological systems provide supporting capabilities essential to implementing and refining NIMS. Examples include:

- Voice and data communication systems.
- Information management systems, such as recordkeeping and resource tracking.
- Data display systems.

Supporting technologies also include specialized technologies that facilitate ongoing operations and incident management activities in situations that call for unique technology-based capabilities.

Ongoing Management and Maintenance

DHS established the NIMS Integration Center to provide strategic direction and oversight in support of routine review and continual refinement of both the system and its components over the long term.

Lesson 2: Command and Management Under NIMS—Part I

Lesson Overview

Analysis of past responses indicates that the most common cause of response failure is poor management. Confusion about who's in charge of what and when, together with unclear lines of authority, have been the greatest contributors to poor response.

The Command and Management Under NIMS—Part 1 lesson introduces you to identify the benefits of using ICS as the model incident management system.

Incident Command and Management

NIMS employs two levels of incident management structures, depending on the nature of the incident.

- The **Incident Command System (ICS)** is a standard, on-scene, all-hazard incident management system. ICS allows users to adopt an integrated organizational structure to match the needs of single or multiple incidents.
- **Multiagency Coordination Systems** are a combination of facilities, equipment, personnel, procedures, and communications integrated into a common framework for coordinating and supporting incident management.

NIMS requires that responses to all domestic incidents utilize a common management structure.

The Incident Command System—or ICS—is a standard, on-scene, all-hazard incident management concept. ICS is a proven system that is used widely for incident management by firefighters, rescuers, emergency medical teams, and hazardous materials teams.

ICS represents organizational "best practices" and has become the standard for incident management across the country.

ICS is interdisciplinary and organizationally flexible to meet the needs of incidents of any kind, size, or level of complexity. Using ICS, personnel from a variety of agencies can meld rapidly into a common management structure.

ICS has been tested for more than 30 years and used for:

- Planned events.
- Fires, hazardous materials spills, and multicasualty incidents.
- Multijurisdictional and multiagency disasters, such as earthquakes and winter storms.
- Search and Rescue missions.
- Biological outbreaks and disease containment.
- Acts of terrorism.

ICS helps all responders communicate and get what they need when they need it. ICS provides a safe, efficient, and cost-effective recovery strategy.

ICS Features

ICS has several features that make it well suited to managing incidents. These features include:

- Common terminology.
- Organizational resources.
- Manageable span of control.
- Organizational facilities.
- Use of position titles.
- Reliance on an Incident Action Plan.
- Integrated communications.
- Accountability.

Common Terminology

The ability to communicate within ICS is absolutely critical. Using standard or common terminology is essential to ensuring efficient, clear communications. ICS requires the use of common terminology, including standard titles for facilities and positions within the organization.

Common terminology also includes the use of "clear text"—that is, communication without the use of agency-specific codes or jargon. **In other words, use plain English.**

Uncommon Terminology: "Response Branch, this is HazMat 1. We are 10-24."

Common Terminology: "Response Branch, this is HazMat 1. We have completed our assignment."

Organizational Resources

Resources, including all personnel, facilities, and major equipment and supply items used to support incident management activities, are assigned common designations. Resources are "typed" with respect to capability to help avoid confusion and enhance interoperability.

Manageable Span of Control

Maintaining adequate span of control throughout the ICS organization is critical. Effective span of control may vary from three to seven, and a ratio of one supervisor to five reporting elements is recommended.

If the number of reporting elements falls outside of this range, expansion or consolidation of the organization may be necessary. There may be exceptions, usually in lower-risk assignments or where resources work in close proximity to each other.

Organizational Facilities

Common terminology is also used to define incident facilities, help clarify the activities that take place at a specific facility, and identify what members of the organization can be found there. For example, you find the Incident Commander at the Incident Command Post. Incident facilities include:

- The Incident Command Post.
- One or more staging areas.
- A base.
- One or more camps (when needed).
- A helibase.

- One or more helispots.

Incident facilities will be established depending on the kind and complexity of the incident. Only those facilities needed for any given incident may be activated. Some incidents may require facilities not included on the standard list.

Use of Position Titles

ICS positions have distinct titles.

- Only the Incident Commander is called Commander—and there is only one Incident Commander per incident.
- Only the heads of Sections are called Chiefs.

Learning and using standard terminology helps reduce confusion between the day-to-day position occupied by an individual and his or her position at the incident.

The titles for all supervisory levels of the organization are shown in the table below.

Organizational Level	Title
Incident Command	Incident Commander
Command Staff	Officer
General Staff (Section)	Chief
Branch	Director
Division/Group	Supervisor
Unit	Leader
Strike Team/Task Force	Leader

Reliance on an Incident Action Plan

Incident Action Plans (IAPs) provide a coherent means to communicate the overall incident objectives in the context of both operational and support activities. IAPs are developed for operational periods that are usually 12 hours long.

IAPs depend on management by objectives to accomplish response tactics. These objectives are communicated throughout the organization and are used to:

- Develop and issue assignments, plans, procedures, and protocols.
- Direct efforts to attain the objectives in support of defined strategic objectives.

Results are always documented and fed back into planning for the next operational period.

Integrated Communications

Integrated communications include:

- The “hardware” systems that transfer information.
- Planning for the use of all available communications frequencies and resources.
- The procedures and processes for transferring information internally and externally.

Communications needs for large incidents may exceed available radio frequencies. Some incidents may be conducted entirely without radio support. In such situations, other communications resources (e.g., cell phones or secure phone lines) may be the only communications methods used to coordinate communications and to transfer large amounts of data effectively.

Accountability

Effective accountability at all jurisdictional levels and within individual functional areas during an incident is essential. To that end, ICS requires:

- An orderly chain of command—the line of authority within the ranks of the incident organization.
- Check-in for all responders, regardless of agency affiliation.
- Each individual involved in incident operations to be assigned only one supervisor (also called “unity of command”).

Lesson 3: Command and Management Under NIMS—Part 2

Lesson Overview

While ICS has proven itself to be effective for all types of incidents, other levels of coordination may be required to facilitate management of:

- Multiple concurrent incidents.
- Incidents that are nonsite specific, such as biological terrorist incidents.
- Incidents that are geographically dispersed.
- Incidents that evolve over time.

Unified and Area Command

In some situations, NIMS recommends variations in incident management. The two most common variations involve the use of Unified Command and Area Command.

What Is Unified Command

Unified Command is an application of ICS used when:

- There is more than one responding agency with responsibility for the incident.
- Incidents cross political jurisdictions.

For example, a Unified Command may be used for:

- A hazardous materials spill that contaminates a nearby reservoir. In this incident, the fire department, the water authority, and the local environmental authority may each participate in a Unified Command.
- A flood that devastates multiple communities. In this incident, incident management personnel from key response agencies from each community may participate in a Unified Command.

How Does Unified Command Work?

Under a Unified Command, agencies work together through the designated members of the Unified Command to:

- Analyze intelligence information.
- Establish a common set of objectives and strategies for a single Incident Action Plan.

Unified Command does not change any of the other features of ICS. It merely allows all agencies with responsibility for the incident to participate in the decisionmaking process.

What Is an Area Command?

An Area Command is an organization established to:

- Oversee the management of multiple incidents that are each being managed by an ICS organization.
- Oversee the management of large incidents that cross jurisdictional boundaries.

Area Commands are particularly relevant to public health emergencies because these incidents are typically:

- Not site specific.
- Not immediately identifiable.
- Geographically dispersed and evolve over time.

These types of incidents call for a coordinated response, with large-scale coordination typically found at a higher jurisdictional level.

What Does an Area Command Do?

The Area Command has the responsibility for:

- Setting overall strategy and priorities.
- Allocating critical resources according to the priorities.
- Ensuring that incidents are properly managed.
- Ensuring that objectives are met.
- Ensuring that strategies are followed.

An Area Command may become a Unified Area Command when incidents are multijurisdictional or involve multiple agencies.

How Is a Area Command Organized?

An Area Command is organized similarly to an ICS structure but, because operations are conducted on-scene, there is no Operations Section in an Area Command. Other Sections and functions are represented in an Area Command structure.

Mutiagency Coordination Systems

On large or wide-scale emergencies that require higher-level resource management or information management, a Multiagency Coordination System may be required.

What Are Multiagency Coordination Systems?

Multiagency Coordination Systems are a combination of resources that are integrated into a common framework for coordinating and supporting domestic incident management activities. These resources may include:

- Facilities.
- Equipment.
- Personnel.
- Procedures.
- Communications.

What Do Multiagency Coordination Systems Do?

The primary functions of Multiagency Coordination Systems are to:

- Support incident management policies and priorities.
- Facilitate logistics support and resource tracking.
- Make resource allocation decisions based on incident management priorities.
- Coordinate incident-related information.
- Coordinate interagency and intergovernmental issues regarding incident management policies, priorities, and strategies.

Direct tactical and operational responsibility for the conduct of incident management activities rests with the on-scene Incident Commander.

Multiagency Coordination System Elements

Multiagency Coordination Systems include Emergency Operations Centers (EOCs) and, in certain multijurisdictional or complex incidents, Multiagency Coordination Entities.

- **EOCs** are the locations from which the coordination of information and resources to support incident activities takes place. EOCs are typically established by the emergency management agency at the local and State levels.
- **Multiagency Coordination Entities** typically consist of principals from organizations with direct incident management responsibilities or with significant incident management support or resource responsibilities. These entities may be used to facilitate incident management and policy coordination.

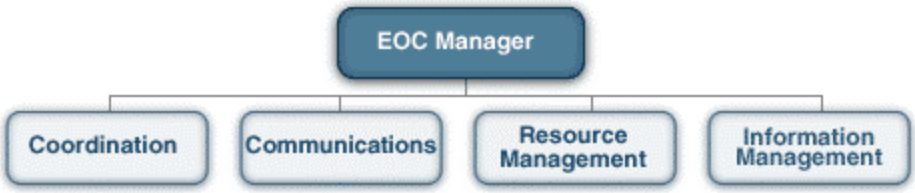
Emergency Operations Centers

EOC organization and staffing is flexible, but should include:

- Coordination.
- Communications.
- Resource dispatching and tracking.
- Information collection, analysis, and dissemination.

EOCs may also support multiagency coordination and joint information activities.

EOCs may be staffed by personnel representing multiple jurisdictions and functional disciplines. The size, staffing, and equipment at an EOC will depend on the size of the jurisdiction, the resources available, and the anticipated incident needs.



Multiagency Coordination Entity Incident Responsibilities

Regardless of their form or structure, Multiagency Coordination Entities are responsible for:

- Ensuring that each involved agency is providing situation and resource status information.
- Establishing priorities between incidents and/or Area Commands in concert with the Incident Command or Unified Command.
- Acquiring and allocating resources required by incident management personnel.
- Coordinating and identifying future resource requirements.
- Coordinating and resolving policy issues.
- Providing strategic coordination.

Multiagency Coordination Entity Postincident Responsibilities

Following incidents, Multiagency Coordination Entities are typically responsible for ensuring that revisions are acted upon. Revisions may be made to:

- Plans.
- Procedures.
- Communications.
- Staffing.
- Other capabilities necessary for improved incident management.

These revisions are based on lessons learned from the incident. They should be coordinated with the emergency planning team in the jurisdiction and with mutual aid partners.

Lesson 4: Public Information

Lesson Overview

Because public information is critical to domestic incident management, it is imperative to establish Public Information Systems and protocols for communicating timely and accurate information to the public during emergency situations. This lesson describes the principles needed to support effective emergency Public Information Systems.

The Public Information lesson introduces you to the Public Information Systems required by NIMS.

Public Information During Domestic Incidents

Under ICS, the PIO is a key member of the command staff. The PIO advises the Incident Command on all public information matters related to the management of the incident, including media and public inquiries, emergency public information and warnings, rumor monitoring and control, media monitoring, and other functions required to coordinate, clear with proper authorities, and disseminate accurate and timely information related to the incident.

The PIO establishes and operates within the parameters established for the Joint Information System—or JIS.

The JIS provides an organized, integrated, and coordinated mechanism for providing information to the public during an emergency.

The JIS includes plans, protocols, and structures used to provide information to the public. It encompasses all public information related to the incident.

Key elements of a JIS include interagency coordination and integration, developing and delivering coordinated messages, and support for decisionmakers.

The PIO, using the JIS, ensures that decisionmakers—and the public—are fully informed throughout a domestic incident response.

Coordination of Public Information

During emergencies, the public may receive information from a variety of sources. Part of the PIO's job is ensuring that the information that the public receives is accurate, coordinated, timely, and easy to understand.

One way to ensure the coordination of public information is by establishing a Joint Information Center (JIC). Using the JIC as a central location, information can be coordinated and integrated across jurisdictions and agencies, and among all government partners, the private sector, and nongovernmental agencies.

The JIC

A JIC is the physical location where public information staff involved in incident management activities can collocate to perform critical emergency information, crisis communications, and public affairs functions.

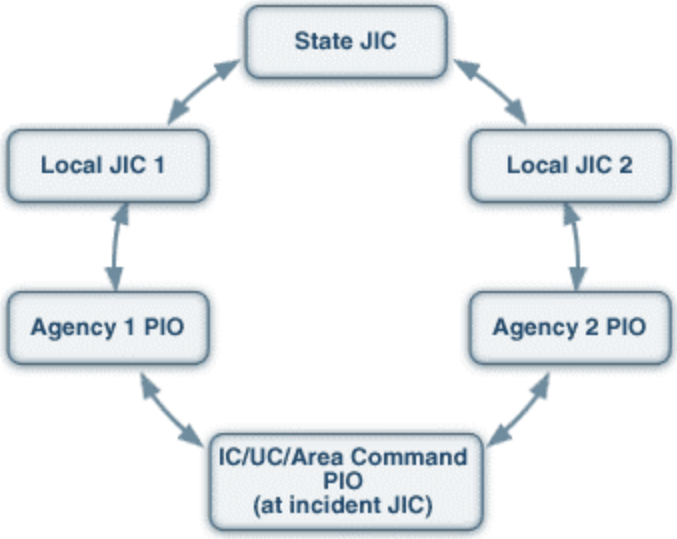
JICs provide the organizational structure for coordinating and disseminating official information.

Organizations Retain Their Independence

Incident Commanders and Multiagency Coordination Entities are responsible for establishing and overseeing JICs, including processes for coordinating and clearing public communications. In the case of a Unified Command, those contributing to joint public information management do not lose their individual identities or responsibilities. Rather, each entity contributes to the overall unified message.

Levels of JICs

JICs may be established at various levels of government. All JICs must communicate and coordinate with each other on an ongoing basis using established JIS protocols. When multiple JICs are established, information must be coordinated among them to ensure that a consistent message is disseminated to the public.



JIC Characteristics

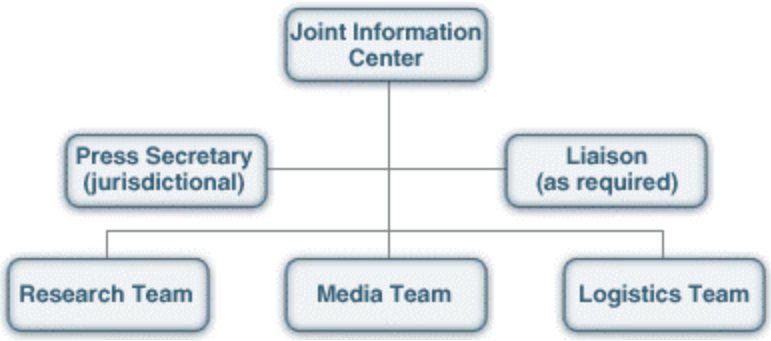
JICs have several characteristics in common:

- The JIC includes representatives of all players in managing the response. This may include jurisdictions, agencies, private entities, and nongovernmental organizations.
- Each JIC must have procedures and protocols for communicating and coordinating effectively with other JICs, and with the appropriate components of the ICS organization.

A single JIC location is preferable, but the JIS should be flexible enough to accommodate multiple JICs when the circumstances of the incident require.

JIC Organization

A typical JIC organization is shown below.



Additional functions may be added as necessary to meet the public information needs of the incident.

Lesson 5: Preparedness

Lesson Overview

Preparedness is a key phase of the emergency management cycle. Through preparedness, jurisdictions take actions to prevent, mitigate, respond to, and recover from emergencies.

This lesson covers preparedness measures that are required under NIMS. At the end of this lesson, you should be able to identify the ways in which NIMS affects how your jurisdiction prepares for incidents and events.

What Is Preparedness?

Preparedness is critical to emergency management. Preparedness involves all of the actions required to establish and sustain the level of capability necessary to execute a wide range of incident management operations.

Preparedness is implemented through a continual cycle of planning, training and equipping, exercising, and evaluating and taking action to correct and mitigate.

A major objective of preparedness is to ensure mission integration and interoperability in response to emergent crises across functional and jurisdictional lines.

Preparedness also includes efforts to coordinate between public and private organizations. Preparedness is the responsibility of individual jurisdictions, which coordinate their activities among all preparedness stakeholders. Each level of government is responsible for its preparedness.

NIMS provides tools to help ensure and enhance preparedness. These tools include:

- Preparedness organizations and programs that provide or establish processes for planning, training, and exercising
- Personnel qualification and certification
- Equipment certification
- Mutual aid
- Publication management

National-level preparedness standards related to NIMS will be maintained and managed through a multijurisdictional, multidiscipline center, using a collaborative process at the NIMS Integration Center.

Using NIMS as a basis, all preparedness stakeholders will be able to attain and sustain the level of readiness necessary to respond to the range of domestic incidents facing America today.

Preparedness Organizations

Preparedness organizations represent a wide variety of committees, planning groups, and other organizations. These organizations meet regularly to coordinate and focus preparedness activities. The needs of the jurisdiction will dictate how frequently the organizations must meet and how they are structured.

Responsibilities of Preparedness Organizations

Preparedness organizations at all levels should follow NIMS standards and undertake the following tasks:

- Establishing and coordinating emergency plans and protocols
- Integrating and coordinating the activities and jurisdictions within their purview
- Establishing guidelines and protocols to promote interoperability among jurisdictions and agencies
- Adopting guidelines and protocols for resource management
- Establishing priorities for resources and other response requirements
- Establishing and maintaining multiagency coordination mechanisms

Preparedness Planning

Preparedness plans describe how personnel, equipment, and other governmental and nongovernmental resources will be used to support incident management requirements. These plans represent the operational core of preparedness and provide mechanisms for:

- Setting priorities.
- Integrating multiple entities and functions.
- Establishing collaborative relationships.
- Ensuring that communications and other systems support the complete spectrum of incident management activities.

Types of Plans

Jurisdictions must develop several types of plans, including:

- **Emergency Operations Plans (EOPs)**, which describe how the jurisdiction will respond to emergencies.
- **Procedures**, which may include overviews, standard operating procedures, field operations guides, job aids, or other critical information needed for a response.
- **Preparedness Plans**, which describe how training needs will be identified and met, how resources will be obtained through mutual aid agreements, and the facilities and equipment required for the hazards faced by the jurisdiction.
- **Corrective Action or Mitigation Plans**, which include activities required to implement procedures based on lessons learned from actual incidents or training and exercises.
- **Recovery Plans**, which describe the actions to be taken to facilitate long-term recovery.

Training and Exercises

Organizations and personnel at all governmental levels and in the private sector must be trained to improve all-hazard incident management capability. These organizations and personnel must also participate in realistic exercises to improve integration and interoperability.

Training and Exercises and the NIMS Integration Center

To assist jurisdictions in meeting these training and exercise needs, the NIMS Integration Center will:

- Facilitate the development of and dissemination of national standards, guidelines, and protocols for incident management training.
- Facilitate the use of modeling and simulation in training and exercise programs.
- Define general training requirements and approved training courses for all NIMS users, including instructor qualifications and course completion documentation.
- Review and approve, with the assistance of key stakeholders, discipline-specific training requirements and courses.

Personnel Qualification and Certification

Under NIMS, preparedness is based on national standards for qualification and certification of emergency response personnel. Managed by the NIMS Integration Center, standards will help ensure that the participating agencies' and organizations' field personnel possess the minimum knowledge, skills, and experience necessary to perform activities safely and effectively.

Standards will include training, experience, credentialing, currency, and physical and medical fitness. Personnel who are certified to support interstate incidents will be required to meet national qualification and certification standards.

Equipment Certification

Incident managers and emergency responders rely on various types of equipment to perform mission-essential tasks. A critical component of operational preparedness is that equipment performs to certain standards, including the capability to be interoperable with equipment used by other jurisdictions.

To facilitate national equipment certification, the NIMS Integration Center will:

- Facilitate the development and/or publication of national equipment standards, guidelines, and protocols.
- Review and approve lists of emergency responder equipment that meet national requirements.

Mutual Aid Agreements and Emergency Management Assistance Compacts

Mutual aid agreements and Emergency Management Assistance Compacts (EMACs) provide the means for one jurisdiction to provide resources or other support to another jurisdiction during an incident. To facilitate the timely delivery of assistance during incidents, jurisdictions (including States) are encouraged to enter into agreements with:

- Other jurisdictions.
- Private-sector and nongovernmental organizations.
- Private organizations, such as the American Red Cross.

Publication Management

The NIMS Integration Center will manage publications dealing with domestic incident management and response. Publication management will include:

- The development of naming and numbering conventions.

- Review and certification of publications.
- Methods for publications control.
- Identification of sources and suppliers for publications and related services.
- Management of publication distribution.

The NIMS Integration Center will manage a wide range of publications—from qualification information and training courses to computer programs and best practices.

Lesson 6: Resource Management

Lesson Overview

Resource management involves the coordination and oversight of personnel, tools, processes, and systems that provide incident managers with timely and appropriate resources during an incident. Historically, resource management has been an issue at incidents, both large and small. Resource management is an area of special attention under NIMS.

This lesson will cover requirements for resource management under NIMS. At the end of this lesson, you should be able to describe how NIMS affects the way resources are managed before, during, and after an incident.

What Is Resource Management?

Resource management involves four primary tasks:

- Establishing systems for describing, inventorying, requesting, and tracking resources
- Activating those systems prior to, during, and after an incident
- Dispatching resources prior to, during, and after an incident
- Deactivating or recalling resources during or after an incident

The basic concepts and principles that guide resource management and allow these tasks to be conducted effectively are addressed by NIMS. These concepts and principles are described on the following screens.

Resource Management Concepts

Resource management under NIMS is based on:

- Providing a uniform method of identifying, acquiring, allocating, and tracking resources.
- Classifying kinds and types of resources required to support incident management.
- Using a credentialing system tied to uniform training and certification standards.
- Incorporating resources contributed by private sector and nongovernmental organizations.

Resource Management Principles

Five key principles underlie effective resource management:

1. **Advance planning:** Preparedness organizations working together before an incident to develop plans for managing and using resources
2. **Resource identification and ordering:** Using standard processes and methods to identify, order, mobilize, dispatch, and track resources
3. **Resource categorization:** Categorizing by size, capacity, capability, skill, or other characteristics to make resource ordering and dispatch more efficient
4. **Use of agreements:** Developing preincident agreements for providing or requesting resources
5. **Effective management:** Using validated practices to perform key resource management tasks

Managing Resources

Resource management involves the coordination and oversight of tools, processes, and systems that provide Incident Commanders with the resources that they need during an incident.

To assist local managers, NIMS includes standard procedures, methods, and functions in its resource management processes.

By following the standards established by NIMS, resource managers are able to identify, order, mobilize, dispatch, and track resources more efficiently.

Resource "typing" involves categorizing resources by capability based on measurable standards of capability and performance—for example, a 500-kilowatt generator.

Resource typing defines more precisely the resource capabilities needed to meet specific requirements—and is designed to be as simple as possible to facilitate frequent use and accuracy in obtaining resources.

Certification and credentialing help ensure that all personnel possess a minimum level of training, experience, physical and medical fitness, or capability for the position they are tasked to fill. NIMS also ensures that training material is current.

Resource managers use various resource inventory systems to assess the availability of assets provided by public, private, and volunteer organizations.

And resource managers identify, refine, and validate resource requirements throughout the incident using a process to identify:

- What and how much are needed.
- Where and when it is needed.
- Who will be receiving it.

Because resource requirements and availability will change as the incident evolves, all entities must coordinate closely beginning at the earliest possible point in the incident.

Requests for items that the Incident Commander cannot obtain locally must be submitted through the EOC or Multiagency Coordination Entity using standardized resource-ordering procedures.

Resource managers use established procedures to track resources continuously from mobilization through demobilization.

Resource tracking and mobilization are directly linked. When resources arrive on-scene, they must check in to start on-scene in-processing and validate the order requirements.

Managers should plan for demobilization at the same time that they begin the mobilization process. Early planning for demobilization facilitates accountability and makes transportation of resources as efficient as possible.

Recovery involves the final disposition of all resources. During recovery, resources are rehabilitated, replenished, disposed of, or retrograded.

Reimbursement provides a mechanism for funding critical needs that arise from incident-specific activities. Processes and procedures must be in place to ensure that resource providers are reimbursed in a timely manner.

Together, each of these resource management processes create an integrated, efficient resource management system.

Lesson 7: Communications, Information Management, and Supporting Technology

Lesson Overview

Effective communications, information management, and supporting technology are critical aspects of domestic incident management. This lesson will cover the ways in which NIMS supports these areas. At the end of this lesson, you should be able to:

- Describe the advantages of common communication and information management standards.
- Explain how NIMS will influence technology and technological systems required for emergency response.
- Describe the purpose of the NIMS Integration Center.

Concepts and Principles

NIMS standards for communications, information management, and supporting technology are based on several concepts and principles. These concepts and principles are described on the following screens.

Communications and Information Management Principles

Communications and information management under NIMS are based on the following concepts and principles:

- **A common operating picture that is accessible across jurisdictions and agencies is necessary.** A common operating picture helps to ensure consistency at all levels, among all who respond to or manage incident response.
- **Common communications and data standards are fundamental.** Effective communications, both within and outside the incident response structure, are enhanced by adherence to standards.

Principles of Supporting Technologies

NIMS will leverage science and technology to improve capabilities at a lower cost. To accomplish this, NIMS will base its supporting technology standards on five key principles:

1. **Interoperability and compatibility.** Systems must be able to work together.
2. **Technology support.** All organizations using NIMS will be able to enhance all aspects of incident management and emergency response.
3. **Technology standards.** National standards will facilitate interoperability and compatibility of major systems.
4. **Broad-based requirements.** NIMS provides a mechanism for aggregating and prioritizing new technologies, procedures, protocols, and standards.
5. **Strategic planning and R&D.** The NIMS Integration Center will coordinate with DHS to create a national R&D agenda.

Managing Communications and Information

NIMS communications and information systems enable the essential functions needed to provide a common operating picture and interoperability for:

- Incident management communications.
- Information management.
- Interoperability standards.

The NIMS Integration Center will also develop a national database for incident reports.