NIMS and the Incident Command System

The way this nation prepares for and responds to domestic incidents is about to change. It won't be an abrupt change; best practices that have been developed over the years are part of this new comprehensive national approach to incident management known as the National Incident Management System (NIMS). But it will change – and for the better. Developed by the Department of Homeland Security and issued in March 2004, the NIMS will enable responders at all jurisdictional levels and across all disciplines to work together more effectively and efficiently. Beginning in FY 2006, federal funding for state, local and tribal preparedness grants will be tied to compliance with the NIMS.

One of the most important 'best practices' that has been incorporated into the NIMS is the Incident Command System (ICS), a standard, on-scene, all-hazards incident management system already in use by firefighters, hazardous materials teams, rescuers and emergency medical teams. The ICS has been established by the NIMS as the standardized incident organizational structure for the management of all incidents.

Although many agencies now use various forms of ICS, there is considerable uncertainty about NIMS ICS and the impact it will have on systems and processes currently in place. These are important questions because one of the FY 2005 requirements for implementing NIMS is "institutionalizing the use of ICS, across the entire response system."

This paper is intended to provide an historical perspective on the development of ICS, explain how NIMS ICS works, describe how it is different from previous systems, and discuss the future of NIMS ICS training.

Background

In Homeland Security Presidential Directive-5 (HSPD-5), President Bush called on the Secretary of Homeland Security to develop a national incident management system to provide a consistent nationwide approach for federal, state, tribal and local governments to work together to prepare for, prevent, respond to and recover from domestic incidents, regardless of cause, size or complexity.

On March 1, 2004, after close collaboration with state and local government officials and representatives from a wide range of public safety organizations, Homeland Security issued the NIMS . It incorporates many existing best practices into a comprehensive national approach to domestic incident management, applicable at all jurisdictional levels and across all functional disciplines.

The NIMS represents a core set of doctrine, principles, terminology, and organizational processes to enable effective, efficient and collaborative incident management at all levels. To provide the framework for interoperability and compatibility, the NIMS is based on a balance between flexibility and standardization. The recommendations of the National Commission on Terrorist Attacks Upon the United States (the "9/11 Commission") further highlight the importance of ICS. The Commission's recent report recommends national adoption of the ICS to enhance command, control and communications capabilities.

The History of Incident Command System

The concept of ICS was developed more than thirty years ago, in the aftermath of a devastating wildfire in California. During 13 days in 1970, 16 lives were lost, 700 structures were destroyed and over one-half million acres burned. The overall cost and loss associated with these fires totaled $18 million per day. Although all of the responding agencies cooperated to the best of their ability, numerous problems with communication and coordination hampered their effectiveness. As a result, the Congress mandated that the U.S. Forest Service design a system that would "make a quantum jump in the capabilities of Southern California wildland fire protection agencies to effectively coordinate interagency action and to allocate suppression resources in dynamic, multiple-fire situations."

The California Department of Forestry and Fire Protection, the Governor's Office of Emergency Services; the Los Angeles, Ventura and Santa Barbara County Fire Departments; and the Los Angeles City Fire Department joined with the U.S. Forest Service to develop the system. This system became known as FIRESCOPE (FIrefighting RESources of California Organized for Potential Emergencies).

In 1973, the first "FIRESCOPE Technical Team" was established to guide the research and development design. Two major components came out of this work, the ICS and the Multi-Agency Coordination System (MACS). The FIRESCOPE ICS is primarily a command and control system delineating job responsibilities and organizational structure for the purpose of managing day-to-day operations for all types of emergency incidents.

By the mid-seventies, the FIRESCOPE agencies had formally agreed upon on ICS common terminology and procedures and conducted limited field-testing of ICS. By 1980, parts of ICS had been used successfully on several major wildland and urban fire incidents. It was formally adopted by the Los Angeles Fire Department, the California Department of Forestry and Fire Protection (CDF), the Governor's Office of Emergency Services (OES), and endorsed by the State Board of Fire Services.

Also during the 1970s, the National Wildfire Coordinating Group (NWCG) was chartered to coordinate fire management programs of the various participating federal and state agencies. By 1980, FIRESCOPE ICS training was under development. Recognizing that in addition to the local users for which it was designed, the FIRESCOPE training could satisfy the needs of other state and federal agencies, the NWCG conducted an analysis of FIRESCOPE ICS for possible national application.

By 1981, ICS was widely used throughout Southern California by the major fire agencies. In addition, the use of ICS in response to non-fire incidents was increasing. Although FIRESCOPE ICS was originally developed to assist in the response to wildland fires, it was quickly recognized as a system that could help public safety responders provide effective and coordinated incident management for a wide range of situations, including floods, hazardous materials accidents, earthquakes and aircraft crashes. It was flexible enough to manage catastrophic incidents involving thousands of emergency response and management personnel. By introducing relatively minor terminology, organizational and procedural modifications to FIRESCOPE ICS, the NIIMS ICS became adaptable to an all-hazards environment.

While tactically each type of incident may be handled somewhat differently, the overall incident management approach still utilizes the major functions of the Incident Command System. The FIRESCOPE board of directors and the NWCG recommended national application of ICS. In 1982, all FIRESCOPE ICS documentation was revised and adopted as the National Interagency Incident Management System (NIIMS). In the years since FIRESCOPE and the NIIMS were blended, the FIRESCOPE agencies and the NWCG have worked together to update and maintain the Incident Command System Operational System Description (ICS 120-1). This document would later serve as the basis for the NIMS ICS.

Variations on the Theme

In the early 1970s, the Phoenix Fire Department developed the Fire Ground Command System (FGC). The concepts of FGC were similar to FIRESCOPE ICS but there were differences in terminology and in organizational structure. The FGC system was developed for structural firefighting and was designed for operations of 25 or fewer companies.

There were several efforts to "blend" the various incident command systems. One early effort was in 1987 when the National Fire Protection Association (NFPA) undertook the development of NFPA 1561, then called Standard on Fire Department Incident Management System. The NFPA committee quickly recognized that the majority of the incident command systems in existence at the time were similar. The differences among the systems were mostly due to variations in terminology for similar components. That NFPA standard, later revised to its present title: Standard on Emergency Services Incident Management, provides for organizations to adopt or modify existing systems to suit local requirements or preferences as long as they meet specific performance measurements.

Recognizing the continuing challenges occurring in the fire service in applying a common approach to incident command, the National Fire Service Incident Management System (IMS) Consortium was created in 1990. Its purpose was to evaluate an approach to developing a single command system. The consortium consisted of many individual fire service leaders, representatives of most major fire service organizations and representatives of federal, state and local agencies, including FIRESCOPE and the Phoenix Fire Department. One of the significant outcomes of the consortium's work was an agreement on the need to develop operational protocols within ICS, so that fire and rescue personnel would be able to apply the ICS as one common system.

In 1993, the IMS consortium completed its first document: Model Procedures Guide for Structural Firefighting. As a result, FIRESCOPE incorporated the model procedures, thereby enhancing its organizational structure with operational protocols.   These changes enabled the nation's fire and rescue personnel to apply the ICS effectively regardless of what region of the country they were assigned to work. The National Fire Academy (NFA), having already adopted the FIRESCOPE ICS in 1980, incorporated this material into its training curriculum as well.

National Incident Management System

The NIMS provides a consistent, flexible and adjustable national framework within which government and private entities at all levels can work together to manage domestic incidents, regardless of their cause, size, location or complexity. This flexibility applies across all phases of incident management: prevention, preparedness, response, recovery and mitigation.

The NIMS provides a set of standardized organizational structures – including the ICS, Multi-Agency Coordination Systems and public information systems – as well as requirements for processes, procedures and systems to improve interoperability among jurisdictions and disciplines in various areas.

Homeland Security recognizes that the overwhelming majority of emergency incidents are handled on a daily basis by a single jurisdiction at the local level. However, the challenges we face as a nation are far greater than the capabilities of any one community or state, but no greater than the sum of all of us working together.

There will be instances in which successful domestic incident management operations depend on the involvement of emergency responders from multiple jurisdictions, as well as personnel and equipment from other states and the federal government. These instances require effective and efficient coordination across a broad spectrum of organizations and activities.

The success of the operations will depend on the ability to mobilize and effectively utilize multiple outside resources. These resources must come together in an organizational framework that is understood by everyone and must utilize a common plan, as specified through a process of incident action planning. This will only be possible if we unite, plan, exercise and respond using a common National Incident Management System.

When Homeland Security released the NIMS on March 1, 2004, Secretary Tom Ridge and Under Secretary Brown specifically highlighted compliance with the ICS as being possible fairly quickly. They recognized that in some cities, the fire and police departments have worked together using ICS for years. In other places, only the fire department used ICS. Although law enforcement, public works and public health were aware of the concept, they regarded ICS as a fire service system. The NIMS ends this discrepancy because HSPD-5 requires state and local adoption of NIMS as a condition for receiving federal preparedness funding.   While ICS was first pioneered by the fire service, it is, at its core, a management system designed to integrate resources to effectively attack a common problem. This system is not exclusive to one discipline or one set of circumstances; its hallmark is its flexibility to accommodate all circumstances. Some purists may claim that a particular application of ICS is not consistent with the NIMS. Yet, we need not approach ICS with the same mathematical precision used by an engineer. We are changing the culture of organizations and first responders at all levels of government. As long as implementation of ICS is consistent with the basic principles expressed in the NIMS, we will have made significant progress. Further refinements can be achieved over time based on experience with its use.

What is NIMS ICS?

With the exception of the way the intelligence function is handled, the principles and concepts of NIMS ICS are the same as the FIRESCOPE and NIIMS ICS.

ICS Management Characteristics
ICS is based on proven management tools that contribute to the strength and efficiency of the overall system. The following ICS management characteristics are taught by DHS in its ICS training programs:
      Common Terminology
      Modular Organization
      Management by Objectives
      Reliance on an Incident Action Plan
      Manageable Span of Control
      Pre-designated Incident Mobilization Center Locations & Facilities
      Comprehensive Resource Management
      Integrated Communications
      Establishment and Transfer of Command
      Chain of Command and Unity of Command
      Unified Command
      Accountability of Resources and Personnel
      Deployment
      Information and Intelligence Management.

ICS Command Staff
Command comprises the Incident Commander (IC) and Command Staff. Command staff positions are established to assign responsibility for key activities not specifically identified in the General Staff functional elements. These positions may include the Public Information Officer (PIO), Safety Officer (SO), and the Liaison Officer (LNO), in additional to various others, as required and assigned by the IC.

Unified Command (UC)
Unified Command (UC) is an important element in multi-jurisdictional or multi-agency domestic incident management. It provides guidelines to enable agencies with different legal, geographic, and functional responsibilities to coordinate, plan, and interact effectively. As a team, the Unified Command overcomes much of the inefficiency and duplication of effort that can occur when agencies from different functional and geographic jurisdictions, or agencies at different levels of government, operate without a common system or organizational framework. The primary difference between the single command structure and the UC structure is that in a single command structure, the IC is solely responsible for establishing incident management objectives and strategies. In a UC structure, the individuals designated by their jurisdictional authorities jointly determine objectives, plans, and priorities and work together to execute them.

General Staff
The General Staff includes incident management personnel who represent the major functional elements of the ICS, including the Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief. Command Staff and General Staff must continually interact and share vital information and estimates of the current and future situation and develop recommended courses of action for consideration by the IC.

Incident Action Plan (IAP)
The IAP includes the overall incident objectives and strategies established
by the IC or UC. The Planning Section is responsible for developing and
documenting the IAP. In the case of UC, the IAP must adequately address the
overall incident objectives, mission, operational assignments, and policy
needs of each jurisdictional agency. This planning process is accomplished
with productive interaction between jurisdictions, functional agencies, and
private organizations. The IAP also addresses tactical objectives and
support activities for one operational period, generally 12 to 24 hours. The
IAP also contains provisions for continuous incorporation of "lessons
learned" as identified by the Incident Safety Officer or incident management
personnel as activities progress.

Area Command
Area Command is activated only if necessary, depending on the complexity of
the incident and span-of- control considerations. An area command is
established either to oversee the management of multiple incidents that are
being handled by separate ICS organizations or to oversee the management of a
very large incident that involves multiple ICS organizations. It is
important to note that Area Command does not have operational
responsibilities. For incidents under its authority, the Area Command:

Sets overall agency incident-related priorities;
Allocates critical resources according to established priorities;
Ensures that incidents are managed properly;
Ensures effective communications;
Ensures that incident management objectives are met and do not conflict
     with each other or with agency policies;
Identifies critical resource needs and reports them to the Emergency
     Operations Center(s);
Ensures that short-term emergency recovery is coordinated to assist in
     the transition to full recovery operations; and
Provides for personnel accountability and a safe operating environment.

The Difference between NIMS ICS and FIRESCOPE/NIIMS ICS

The ICS organization has five major functions, including command, operations,
planning, logistics, and finance and administration. In the NIMS ICS, a
potential sixth functional area to cover the intelligence function can be
established for gathering and sharing incident related information and
intelligence.

The Information and Intelligence function provides analysis and sharing of
information and intelligence during an incident. Intelligence can include
national security or classified information but also can include operational
information such as risk assessments, medical intelligence, weather
information, structural designs of buildings and toxic contaminant levels.
Traditionally, information and intelligence functions are located in the
Planning Section. In exceptional situations, however, the IC may need to
assign this role to other parts of the ICS organization. Under the NIMS ICS,
the intelligence and information function may be assigned in
one of the following ways:

Within the Command Staff;
As a unit within the Planning Section;
As a branch within the Operations Section; or
As a separate General Staff Section.

ICS as taught by Homeland Security

One of the first steps for becoming compliant with the NIMS requires states
and local governments to institutionalize the use of ICS (as taught by
Homeland Security) across the entire response system. This means that ICS
training must be consistent with the concepts, principles and characteristics
of the ICS training offered by the various DHS training entities. ICS
training courses need not be taught by a DHS employee or at a DHS facility,
although they can be. Organizations that are developing ICS training courses
should be sure to review their materials and revise them if they are not
consistent with DHS concepts and principles.

Available NIMS ICS Training

DHS, through its many training bodies, makes ICS training available. ICS
training developed by
the Federal Emergency Management Agency (FEMA) includes:

ICS-100, Introduction to ICS
ICS-200, Basic ICS
ICS-300, Intermediate ICS
ICS-400, Advanced ICS

To participate in FEMA's ICS training, contact the state emergency management
training office. The Emergency Management Institute (EMI) and the National
Fire Academy (NFA) also offer ICS Train-the-Trainer classes at their
Emmitsburg, Md., facility. A variety of other ICS training programs are
available. The NIMS Integration Center is working with federal and state
training providers to ensure that their ICS course offerings are consistent
with the NIMS.

Responders who have already been trained in ICS do not need retraining if
their previous training is consistent with DHS standards. Since NIMS ICS is
based on FIRESCOPE and NIIMS, any training developed or provided by FIRESCOPE
and NIIMS is consistent with NIMS ICS.

The Future of NIMS ICS Training

Over time, the NIMS Integration Center will continues to define the critical
components of NIMS ICS, and training providers should update their courses
accordingly. With so many training bodies and companies offering ICS
training, it will be impossible in the near term for the Center to certify
each training program as "NIMS ICS compliant." But, the Center will provide
NIMS ICS training and make the training materials available to others who
offer ICS training.

More specific ICS modules, such as those developed by FIRESCOPE to facilitate
the use of ICS in situations other than wildland fires, should be reviewed
and updated to become additional components of NIMS ICS training. The

FIRESCOPE ICS modules include Multi-Casualty, Hazardous Materials, High-rise, Wildland/Urban Interface, and Urban Search and Rescue applications. As groups like the NWCG and FIRESCOPE update their ICS training modules, the NIMS Integration Center will be an active participant. Those ICS modules can form the basis for a suite of ICS training materials in which responders from all disciplines and at all levels of government can learn how to fit into the ICS structure and how to work with other responders.

Updates and revisions to existing ICS training modules should include the modifications necessary to allow for multiple methods of delivery. To ensure that all responders adopt and use ICS, we must provide ICS training in numerous ways. Classroom instruction, field training, independent study and distance learning are all valuable training methods. The more materials and options that the Center and its partners, the training providers, can provide, the more responders will be trained to use ICS. ICS training also should encourage and support integrated training opportunities, where law enforcement, fire, public health, emergency medical, emergency management, and public works personnel from a jurisdiction are trained together on using ICS. While the response disciplines may need specific tools and training to understand how they fit into the ICS structure, everyone should learn the same incident command system.

Conclusions

Throughout the transition to the National Incident Management System, it is important to remember why we have the NIMS and why ICS is a critical piece of the incident management system. Most incidents are local, but when we're faced with the worst-case scenario, such as Sept.11, 2001, all responding agencies must be able to interface and work together. The NIMS, and in particular, the ICS component, allow that to happen, but only if the foundation has been laid at the local level. If local jurisdictions adopt a variation of ICS that cannot grow or is not applicable to other disciplines, the critical interface between responding agencies and jurisdictions cannot occur when the response expands.

It is important that everyone understand that with the establishment of the NIMS, there is only one ICS. As agencies adopt the principles and concepts of ICS as established in the NIMS, the incident command system can expand to meet the needs of the response, regardless of the size or number of responders. The key to both NIMS and ICS is a balance between standardization and flexibility.

The NIMS Integration Center (NIC) is working towards a common understanding and application of the ICS. As the office established to manage and oversee the entire NIMS, the Center will continue its collaboration with stakeholders at all levels of government and across all response disciplines. The initial staff is detailed from other parts of DHS, including FEMA, the Office for Domestic Preparedness (ODP) and the Science and Technology (S&T) Directorate. As the NIMS Integration Center continues to grow it will evolve into robust, fully integrated center that will incorporate additional DHS employees, interagency detailees and liaisons, as well as state, tribal and local government representatives.

The NIMS document is available on www.fema.gov/nims.
HSPD-5 states that: "Beginning in Fiscal Year 2005, Federal departments and agencies shall make adoption of the NIMS a requirement, to the extent permitted by law, for providing Federal preparedness assistance through grants, contracts, or other activities. The Secretary shall develop standards and guidelines for determining whether a State or local entity has adopted the NIMS."

The NIC has developed a NIMS web page to provide updated information and resources to assist with NIMS implementation. The web page can be found at: www.fema.gov/nims. From this page, you can also email your NIMS related questions to the NIMS Integration Center (NIMS-Integration-Center@dhs.gov). A NIMS Awareness Course is also available through the NIMS web page.
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