Streamlined Collaboration & Efficiency in Incident Management

A safer, more informed response through a consistent planning approach

Rhodium
Incident Management
Powered by IRT

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Executive Summary

Every day, media outlets report events and disasters that impact our communities, ranging from homes burned down in a fire to entire communities whose ways of life have been transformed by hurricanes, wildfires, or mass casualty events. Effectively responding to these events requires the preparation and coordination of agencies and information, a process that is dynamic and complex.

Every part of society must be involved in preparing for, protecting against, responding to, recovering from, and mitigating any and all incidents.

The Incident Command System (ICS) is a standardized approach to incident management that is used to manage any type of incident, including a planned event, regardless of their size or cause.

As a system, ICS is extremely useful. Not only does it provide an organizational structure for incident management, but it also guides the process for planning, building, and adapting that structure.

Unfortunately, many agencies don't have a consistent planning flow for special events or incidents. Outdated incident command tools are neither equipped nor designed to meet the needs of today's increasingly complex situations. This can put commanders at a disadvantage.

Many agencies—and law enforcement in particular—do not have adequate methods in place to document and share information. Instead, they continue to leverage white boards, pen and paper, or nothing at all to track, manage, and record the actions taken by incident command staff.

Furthering these issues are administrative burdens like the FEMA-required ICS forms, which can consume considerable resources. Since the whiteboard is a non-electronic document, any handwritten documentation and scene information must be separately transferred to forms and reports, a time and logistics burden for agencies.

This paper discusses the effective planning flow, documentation, and forms requirements of the incident command system. Traditional solutions lack the capabilities to implement best practices of ICS processes. Modern technology presents an effective alternative to these historical solutions.

A Closer Operational Look

ICS enables a coordinated response among various jurisdictions and agencies and establishes common processes for incident-level planning and resource management. It also allows for the integration of resources (such as facilities, equipment, and personnel) within a common organizational structure.

ICS was created to provide a management structure as well as a system of best practices for conducting onsite operations. It is applicable to small-scale daily operational activities as well as major mobilizations. ICS is a useful and flexible management system that is particularly adaptable to incidents requiring multi-jurisdictional or multidisciplinary responses. ICS provides the flexibility needed to rapidly activate and establish an organizational format around the functions that need to be performed during an incident.[1]

Incident Action Planning

Effective incident management relies on a common organizational structure for managing resources, making decisions, and assigning tasks. The Incident Command System uses a standardized management approach to ensure that incidents are properly managed and communications are effectively coordinated during an incident.

Over many years of managing all types and sizes of incidents, ICS practitioners have developed and refined the incident action planning process as a way to plan and execute operations on any incident. This means that incident action planning is more than producing an incident action plan (IAP). It is a set of activities, repeated during each operational period, that provides a consistent rhythm and structure to incident management.[2]

Effective incident management is guided by incident action planning activities with a concise, coherent means of capturing and communicating overall incident priorities, objectives, strategies, tactics, and assignments in the context of both operational and support activities.

Accountability and Tracking

A consistent planning flow should include preparing and documenting incident action plans, managing and maintaining situational awareness for the incident, tracking resources assigned to the incident, maintaining incident documentation, and developing plans for demobilization.

Command & Coordination activities ensure that the onsite Incident Command System (ICS) organization receives the information, resources, and support needed to achieve those incident objectives. Coordination takes place in a number of entities and at all levels of government.

Coordination activities may include:

• Establishing policy based on interactions with agency executives, other agencies, and stakeholders.
• Collecting, analyzing, and disseminating information to support the establishment of shared situational awareness.
• Establishing priorities among incidents.
• Resolving critical resource issues.
• Facilitating logistics support and resource tracking.
• Synchronizing public information messages to ensure that everyone is speaking with one voice.

Incident management requires consistent documentation and tracking of resources, organizational structure, and task assignments. Effective accountability during incident operations is essential.[1]

Forms

ICS and the FEMA Forms have been industry standard for years. The forms represent an all-hazards approach and are intended for use as tools to assist in the creation of Incident Action Plans (IAPs) and in support and documentation of ICS activities.

Incident action planning is an operational activity and must either direct or support operations. The completion of these forms assists the integrated and rational planning process.

Traditional Solutions

Public safety agencies are consistently presented with new unique challenges in process planning, accountability and tracking an incident, and form completion. Yet, many agencies are still using incident command tools that haven't adapted to meet today's needs.[3]

Methods must be in place to document and share pre-plan information for occupancies, call types, and special events. Many agencies continue to leverage white boards, pen and paper, or nothing to track, manage, assign resources to positions, create tactical plans, mark hazards, designate points of interest, and record the actions taken by incident command staff.

Historical Planning Flow and Processes

Large-scale catastrophes underscore the need for processes that enable on-the spot decision-making, interagency coordination, and the ability to rapidly adapt to changing circumstances.[4] Commanders map out their strategy on a whiteboard and then orally communicate instructions to staff via radio or verbally during a short huddle around the command center.[3]

This is where challenges arise. The incident command whiteboard is not equipped and designed to meet the needs of today's increasingly complex situations. When a large-scale incident occurs, commanders using whiteboards are at a distinctive disadvantage due to limited capabilities to effectively manage modern emergencies.

For complex and growing incidents, the sharing of critical information in real-time can be extremely useful in that it allows for a common operating picture and improves collaboration among multiple jurisdictions or agencies. When using a notepad or whiteboard, it can be difficult to communicate mission-critical information efficiently. The problem is that traditional ICS whiteboards cannot automatically update as new information comes in.[3]

Inefficiency of Command Documentation

Use of a whiteboard makes it difficult to track changes and plan for new forward strategies. Even if commanders have an erasable whiteboard on which they can make edits, that inevitably means writing over previous resource assignments or annotations, which equals the loss of crucial and historical information.[3] Once the incident is complete and one begins to create the incident report, it can be very difficult to keep track of what happened when and who did what and why.

The whiteboard truly displays only a limited picture of what actually occurred on scene and may not even show which strategies the commander implemented. Sections might be crossed out, erased, or otherwise unreadable.

After-incident reporting may be inaccurate, which makes it difficult or impossible to correctly evaluate how tactics worked and plan for future incidents and scenarios. Should legal issues arise, commanders may be unable to validate their command strategy since they lack clear historical information on the chain of events and why they chose to make certain decisions.[3]

Historical Forms

ICS forms tend to be available in multiple formats—MS Word, Excel, PDF, etc. Most are poorly designed and dysfunctional, and are still accomplished in an outdated and inefficient paper format.

Since the whiteboard is a non-electronic document, any handwritten documentation and scene information must be separately transferred to an ICS form.

When command data is not automatically recorded, it can lead to hours of unnecessary time spent filling in, researching, and copying the correct information.

Incident leaders must ensure that the plan being developed meets the needs of the incident. Such leaders must also ensure that the forms—while valuable for moving along the path—do not become the primary focus of the planning process. With dozens of forms in the FEMA toolbox, the prospect of getting them all completed can be overwhelming. The FEMA-required ICS forms become a time and logistics burden for agencies, which can consume considerable resources.

Incident Management Software

Unique informational requirements will arise from an incident site. This includes additional information from multiple agency and emergency operations center databases, and the need to share information about the incident with key federal, state, and local government agencies.

This presents a complex technology challenge. The technology needs to be able to provide real-time communications, data transfer, database access, and interoperability for voice and data communications.[5]

While some departments prefer a traditional whiteboard because of its familiarity, there are multiple key areas in which a whiteboard/notepad falls short in comparison to new and available technologies.

Over the years, significant investments have been made to implement systems to manage the complexities. Today's incident management software may include:

- Consistent processes to plan all types and sizes of incidents and events.

- Collaboration amongst staff during planning processes.

- Supports rapid development of incident/event action plans (ICS forms).

- Provides collaboration during emergency response.

- Creates situational awareness amongst responders.

- Provides easy and rapid shared map markup capabilities.

- Allows for integration of existing GIS layers, including ESRI layers.

- Integrates multiple data feeds into a common situational awareness view (i.e., GPS, Social, CAD, etc.)

Choosing the right incident management solution should not be complicated. When looking for the right system, features that you should be looking for include flexibility, ease of use, customer service, interoperability, and interface readiness.

DEVICE FLEXABILITY	Solutions that are locked into iOS only, Windows only, or Android cause significant limitations for interoperability since end users can't always control the type of hardware their neighboring agencies adopt.
EASE OF USE	Can the system be used successfully with limited training? Can "on the job" training be performed for new users during an emergency event if needed?
CUSTOMER SERVICE	Find a company with top notch customer service and that welcomes client feedback into the product roadmap.
INTEROPERABILITY	Can data shared between different agencies/accounts to promote regional response and cooperation?
INTERFACE READY	Can additional data sources be connected to the incident management platform to create a single source of truth or a common operating picture?

Rhodium™ Incident Management Suite

Over time, many incident management systems have come and gone. Many are too complex, causing responders to revert back to static tools like pen and paper, whiteboards, pushpins and spreadsheets. Most systems are designed only to manage large scale incidents rather than day-to-day or routine events.

That's where Incident Response Technologies comes in. The Rhodium™ Incident Management Suite provides a complete command and control solution, allowing you to quickly consolidate information, coordinate assets, and act. From day-to-day incidents to large-scale, multi-agency responses, Rhodium is intuitive and scalable to any situation. This solution is now deployed by hundreds of public safety organizations including police, fire, EMS, emergency management, and campus security.

"Rhodium has allowed us to manage events with only a fraction of the people we normally use without missing a beat. We didn't require much training upfront. Rhodium is rather self-explanatory. The product is excellent and the Rhodium team is always looking for feedback and suggestions on how to make their product better. We looked at several options but no one came close to what Rhodium was offering."

Detective Fred Garcia, Plano Police Department

> *"We've never been able to track and record what's happening at events in a variety of jurisdictions as easily as we did with Rhodium. We needed the ability to funnel information to a Multi-Agency Coordination Center and then disseminate intelligence to other groups on the periphery. Rhodium was absolutely instrumental in doing that with efficacy and efficiency."*
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> *Kurtis Bramer, Deputy Chief of Operations and Emergency Manager, Hennepin EMS*

Rhodium is a simple and affordable suite of cloud-based tools that help agencies looking for a better way to plan for and respond to all hazards, incidents and events. Rhodium is easily implemented throughout an organization without the need for complex IT configuration and setup. Users can access the system from any device with a web connection and without the need to download and preconfigure software.

Capabilities include real-time situational awareness, incident and event preplanning, NIMS incident action planning and IAP distribution, multi-agency coordination, map centric command management, and detailed historical record keeping.

Through a network of partnerships, Rhodium integrates with computer-aided-dispatch, global positioning systems, sensor and diagnostic devices, mobile phone applications, and other technologies that streamline information flow and improve response time.

> *"We set up my tablet on the fly to show mapping of the area and capture critical information related to the fire ground such as plotting where fire activity was, and the location of dozer and hand lines. We also began tracking where our unit assets were located so that they could be easily found and tracked on the tablet. Seeing how data could be captured and shared quickly provide the absolute worth of Rhodium Suite."*
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> *Chief Vinny Burns, Donald Wescott Fire Protection District*

Conclusion

Today, our society faces challenges like never before. With incident management becoming more necessary and frequent, and being applied to most any event, many agencies still find themselves using a burdensome and unnecessarily complex system for planning flow, documentation, and form completion. But modern technology has advanced our capabilities far beyond traditional ICS whiteboards or pen and paper.

The Rhodium™ Incident Management Suite provides a complete command and control system that gives incident commanders the leverage they need to effectively manage any incident.

[1]U.S. Department of Homeland Security. (2017). FEMA National Incident Management System: Third Edition. Washington, D.C. [2]U.S. Department of Homeland Security. (2012). FEMA Incident Action Planning Guide. Washington, D.C. [3]Reineke, B. (2018, Feb 19). 21st Century Fire Incident Command: It's Time to Move Beyond the ICS Board. Retrieved from: http://www.adashi.com/incident-command/21st-century-fire-incident-command-time-to-move-beyond-ics-board/. [4]Gyorfi, Julius & R Buhrke, Eric & A Tarlton, Mark & M Lopez, Juan & T Valliath, George. (2018). VICC: Virtual Incident Command Center. [5]U.S. Department of Justice. (2005). Why Can't We Talk? Working Together To Bridge the Coimmunications Gap to Save Lives. Washington, D.C.

Incident Response Technologies

Powered by IRT

Incident Management Reimagined

Incident Response Technologies (IRT) formed in 2005 with the vision of providing public safety organizations with intuitive, cloud-based solutions to assist with incident response. Founded and staffed by incident response professionals with dozens of years of front line experience, IRT developed its flagship product, the Rhodium™ Incident Management Suite. This solution is now deployed by hundreds of public safety organizations including police, fire, EMS, emergency management, and campus security

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