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Emergency

Getting Started with Emergency Management:

Best practices and principles to overcome common emergency management challenges

Emergency management matters more than ever

Catastrophic events aren't exactly new. In recent times, though, their pace has clearly accelerated. Just take the case of weather and climate-related disasters: those have more than quadrupled since the 1970s. What discipline is responsible for handling these emergencies? That would be emergency management.

Emergency management is the organisation and management of resources and responsibilities needed to deal with emergencies. Sounds simple enough, but it's not.

That's because in practice the emergency management competency has to cover all stages of the emergency management lifecycle. And that lifecycle comprises mitigation, preparedness, response, and recovery. Here's a good break down of the emergency management lifecycle, courtesy of the Federal Emergency Management Agency:

Emergency management phase	What it means	Activities it includes and when they take place
Mitigation	Preventing future emergencies or minimising their effects	• Includes any activities that prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies. • Mitigation activities take place before and after emergencies.
Preparedness	Preparing to handle an emergency	• Includes plans or preparations made to save lives and to help response and rescue operations. • Preparedness activities take place before an emergency occurs.
Response	Responding safely to an emergency	• Includes actions taken to save lives and prevent further property damage in an emergency situation, by putting your preparedness plans into action. • Response activities take place during an emergency.
Recovery	Recovering from an emergency	• Includes actions taken to return to a normal or an even safer situation following an emergency. • Recovery activities take place after an emergency.

Challenges to achieving emergency management goals

The emergency management lifecycle covers a lot of ground. But what's its larger purpose?

Well, the main goal of emergency management is to reduce the harmful effects of hazards and disasters. You can't simply achieve that goal by prioritising emergency response alone.

Indeed, it's a goal that requires the efficient marshalling of numerous resources and responsibilities during a fairly long time horizon – resources and responsibilities that are also likely to be spread across multiple agencies and entities.

After all, few things are more challenging for individual response agencies than procuring and deploying the right resources to the right people and places during complex disasters covering wide areas and causing mass casualty and damage. The imperatives of catastrophic incident response will routinely overwhelm the resources and capabilities of individual agencies acting alone.

Meeting the life and property-saving objectives of the disaster response requires an influx of personnel, skills, technologies, facilities, equipment, and/or funding from other organisations. That's a major fault-line in emergency management, though: how to get separate entities working together productively throughout the emergency management lifecycle, so as to close the emergency response performance gap.

The gap has been studied carefully in the emergency management literature. And the consensus seems to be that emergency responses undertaken by clusters of public safety agencies incur a higher likelihood of:

- Extended response times
- Higher potential for loss of property and life
- Lack of shared situational awareness on the ground
- Disputes and competition as to who is in charge, when, and where
- Difficulties in filtering and validating the flood of information generated during the disaster
- Difficulties in coordination among response agencies due to incompatible infrastructure

Best practices for achieving efficient coordination and cooperation in emergency management

What can be done, instead? A full list of best practices to mitigate the challenges of inter-agency cooperation or interoperability would be too extensive for this piece. But we'll lay out one key innovation of best-practice emergency management system standards like ISO 22320 that should help agencies work more efficiently towards a common mission.

That innovation comes in the form of minimum requirements for command-and-control systems deployed during emergencies that require multiple emergency management agencies. In that emergency context, the primary objective of the emergency management system itself is to enable the organisation to respond efficiently, both as an independent entity as well as jointly with other parties.

Various elements go into achieving that objective, including structures, processes, and resources. For instance, the command-and-control system itself must be able to perform a number of documented actions, including the following:


Establishing and updating goals and objectives for the incident response


Determining roles, responsibilities, and relationships


Establishing rules, constraints, and schedules


Ensuring legal compliance and liability protection


Monitoring, assessing, and reporting on the situation and progress


Recording key decisions

Managing resources


Disseminating information

That system would be run by a functional emergency management hierarchy whose goal it will be to make comprehensive and effective decisions in a timely manner. Subordinating roles and responsibilities within that hierarchy should also contribute to making comprehensive and effective decisions quickly.

In most emergency management structures, including the Incident Command System and Australasian Inter-Service Incident Management System, the Incident Commander will sit at the top of this hierarchy. The Incident Commander is the role given final decision-making authority over command and control. The purview of the role also extends to setting up the incident response organisation, as well as activating, escalating, and terminating processes.

Other roles should figure in the command-and-control structure, as well. To be effective, the structure ought to be set up so that that Incident Commander can efficiently delegate authority as dictated by the pace and scale of the incident. Those subordinating roles and responsibilities are likely to cover the following functions (See a diagram below):


Personnel, administration, and finance


Situation awareness and planning


Decision making and implementation (i.e., operations)


Logistics

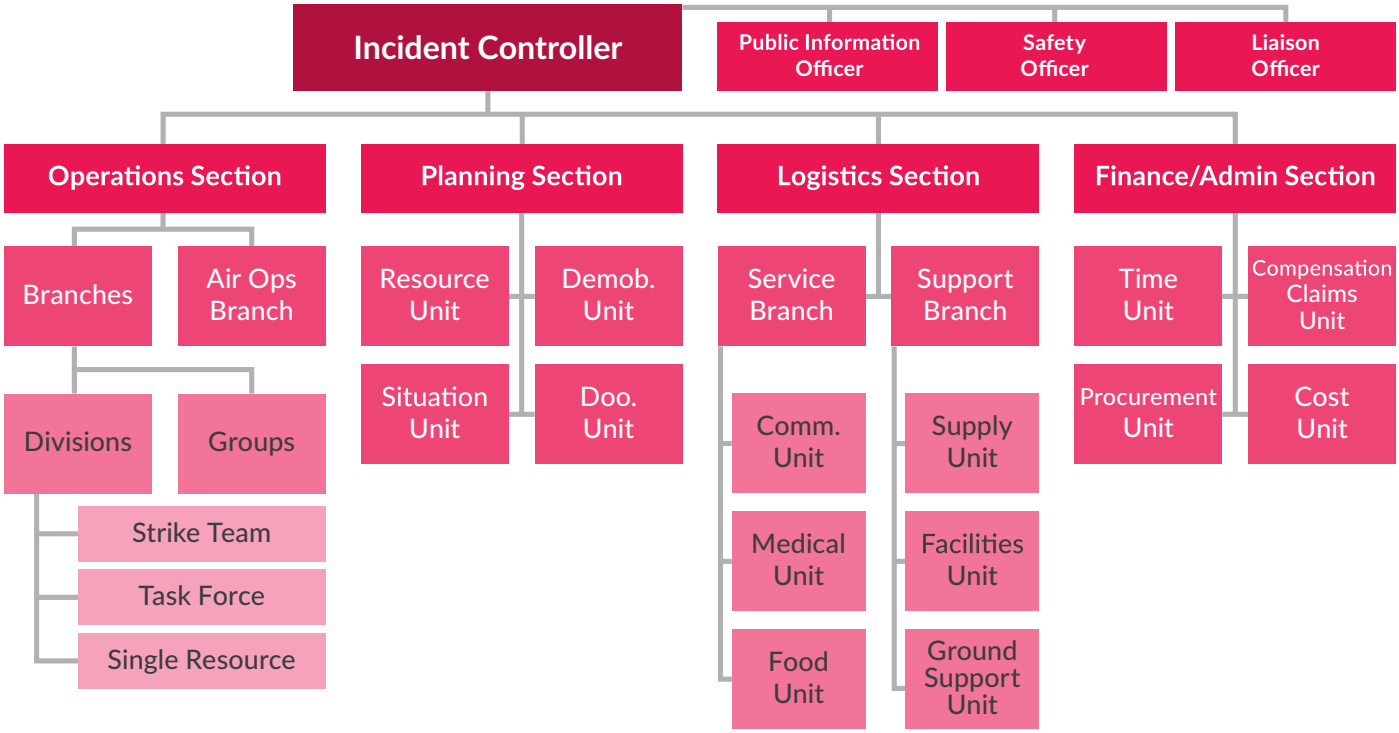

Media and press


Communications and transmission


Liaising


Public information

An example of an emergency management hierarchy: the Incident Command System organisational structure



Command and control processes themselves should be dynamic, given the inherent fluidity and complexity of an emergency. In particular, flexible processes must be provided for so as to ensure that resources remain available and functional throughout the response.

The value of emergency management technology

That's where emergency management technology should come in. But despite enormous strides in the field, volunteer disaster and emergency management organisations still say the stark challenges they face haven't been sufficiently mitigated by many of the advanced, emergency management platforms they've procured.

How's that? Well, it's not uncommon that emergency management technology can require more, dedicated IT expertise (to implement) than agencies have to provide. The IT function is notoriously overburdened in emergency response organisations – doubly so in the age of COVID-19 – while some system implementations and configurations are inordinately cumbersome and time-consuming.

Another complaint is that once configured, those solutions only provide value for emergency response, not the entirety of the emergency management lifecycle. And it's in those other phases that teams often fall short.

If software doesn't help the problem, emergency management and business continuity planning and recovery will continue to get short shrift, much to the detriment of larger emergency management goals.

The consequences are grave. Without the right emergency management software platform, teams might proceed with noticeably divergent understandings of emergency risk and less ability to communicate, react, respond to, recover, and learn from incidents.

Fortunately, the right advanced emergency management technologies can help organisations overcome these challenges and start tackling every aspect of emergency management, throughout the entirety of the emergency management life cycle.

Still agencies need to know which software capabilities they need to look out for. Not sure which capabilities matter? Our guide, Five Reasons to Upgrade Your Emergency Management Platform, walks you through the capabilities you need to achieve your emergency management goals.

Sources:

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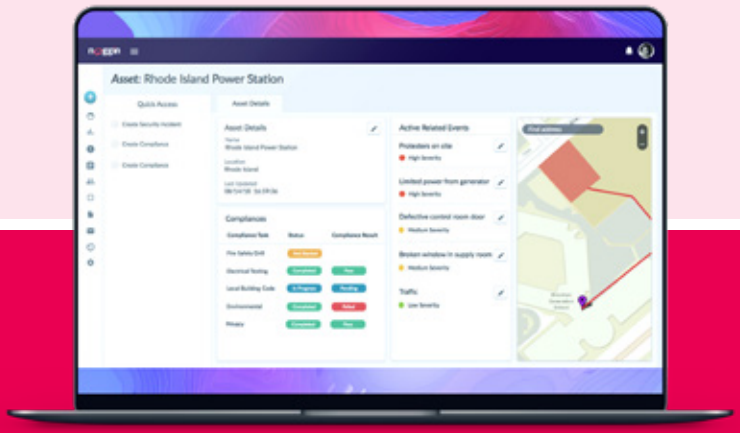

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for Emergency

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