
Synchronization Matrix Planning Process Supports the National Incident Management System (NIMS)

A Systems Approach to National Preparedness and Response

Argonne National Laboratory's Synchronization Matrix (Sync Matrix) Planning Process supports the National Incident Management System's (NIMS's) comprehensive, flexible and all-hazards approach to emergency preparedness and response. Sync Matrix helps unify incident management capabilities at all jurisdictional levels and across functional disciplines by using a systems-based approach to create, evaluate and revise incident plans involving multiple jurisdictions and emergency functions.

NIMS and the Sync Matrix Planning Process view emergency preparedness and response as more than the separate actions of each responder, agency or jurisdiction. Rather, both systems promote relationship building and information sharing as a means to develop and execute better incident management plans and operations. Specifically, NIMS requires Federal, State and local governments "to work together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity." Similarly, the Sync Matrix process is relationship-driven and emphasizes how interactions among response organizations can "make or break" a response. This systems-based approach gives participating jurisdictions a better understanding of how their strategic intent and tactical operations will impact their partners' actions and the overall response strategy.

Supporting Software

Argonne specially designed a software tool to support the Sync Matrix Planning Process. This planning tool presents a picture of the interactions that occur as a response unfolds over time and helps emergency planners better organize, visualize, and analyze the flow of activities within and across response jurisdictions. The software

allows emergency planning professionals to integrate their plans within a collaborative workspace and produce a preparedness document that can be used to orient new staff, inform elected leaders, guide a response, or complete after-action analyses. Other examples of how the software can benefit a multi-jurisdictional preparedness approach include:

- Planners can pre-identify jurisdictions, departments and positions involved in the response before an emergency or disaster occurs.
- Each Sync Matrix jurisdiction is automatically combined into an integrated "Master Matrix."
- The Master Matrix provides a multi-jurisdictional view of the entire response, making it easier to identify gaps, missed relationships and unassigned responsibilities.
- Jurisdictions can adjust the strategic and tactical Sync Matrices and write/rewrite emergency plans.

Concepts and Principles

NIMS concepts and principles promote incident management flexibility and standardization, so jurisdictions can manage any type of disaster. The Sync Matrix software is designed to help multiple jurisdictions achieve flexibility and standardization as they work together to plan for a variety of disaster scenarios. Using Sync Matrix's flexible architecture, jurisdictions can depict the flow of response activities using any management structure (e.g., Incident Command System [ICS], National Response Plan, other locally determined system) or operational structure (e.g., National Planning Scenario Mission Areas, Target Capabilities) they choose. Operationally, Sync Matrix provides all participating jurisdictions with a visualization of the response, so that responding organizations can know their roles and understand how those roles fit together to achieve desired response outcomes.

Components

The major components supporting NIMS (Command and Management, Preparedness, Resource Management, Communication and Information Management, Supporting Technologies and Ongoing Management and Maintenance) provide a structure jurisdictions can follow to prepare for, respond to and recover from any domestic incident. Further, Sync Matrix can most readily assist jurisdictions with emergency response planning by graphically depicting and documenting the following Command and Management and Preparedness elements:

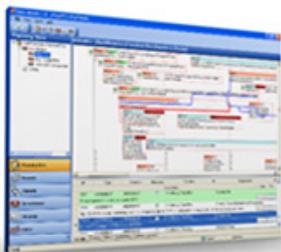
Command and Management

- Graphically display ICS positions and responsibilities for any type of hazard (chemical, biological, radiological, nuclear, explosive or natural event).
- Visualize how the hazard's force and the timing of response actions will affect strategic and tactical decision-making for multiple jurisdictions.
- Document how direction, control and coordination decisions made at the Emergency Operations Center (EOC) or the Regional Response Coordination Center influence tactical operations.
- Show how EOC resource-allocation decisions impact the Incident Commander's Incident Action Plan objectives for several operational periods.
- Depict the management structure for the incident by depicting how local, State, field, regional and Federal agencies will share information, resources and decision-making authority.

Preparedness

- Verify and document that preparedness organizations are using a unified approach to integrate response activities of multiple jurisdictions into one collaborative plan.
- Determine if a jurisdiction's plan can support incident management requirements by depicting personnel assignments and equipment allocations to evaluate the plan's resource assumptions.
- Display mission integration and interoperability across functional and jurisdictional lines.
- Compare a jurisdiction's plan with its mutual-aid agreement commitments for a hazard scenario spanning several cities and counties.
- Integrate lessons learned from corrective action plans into new Sync Matrix planning scenarios.

Sync Matrix



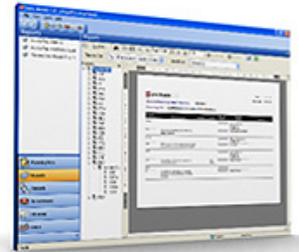
Activity Chart



Mission Area & Function Library Builder



Jurisdiction & Department Builder



Report Viewer

Learn more about SYNC MATRIX at:

<http://www.dis.anl.gov/ciep/programs/emtools/index.html>

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