

# **Building Operational Public Private Partnerships**

A Community Reference Guide for Emergency Management Agencies and Private Sector Partners

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**Version 1.0 Prepared By:** 

NEMA Private Sector Committee Information Sharing Task Force

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# **Foreword**

The NEMA Private Sector Committee's Information Sharing Task Force has developed a truly collaborative document intended to assist state emergency management and homeland security organizations to improve their overall posture to coordinate with the private sector, to ensure that economic viability is assured before, during, and after a disaster.

When FEMA Administrator Brock Long served as the previous NEMA Private Sector Committee Chair between 2013 to 2015, he commissioned the Task Force with two primary objectives: develop a common operating process for public and private organizations to more effectively work together; and provide a resource to the community that helps organizations begin to implement that process. This document represents the answer to that call. While FEMA participated in the development of the document it's not a FEMA document and in some cases may include "non-doctrinal" elements. While several companies participated, it is not corporately owned, or a document that is specific to a critical sector – although Energy is used an example in the planning integration template. This is a NEMA document coming from a committee that has struggled over the years. This struggle reflects the profession of emergency management as a whole, and this document reflects an actionable effort to overcome that struggle.

The American marketplace is increasingly diverse, digitally enabled, and interdependent. We have learned through 9/11, Hurricane Katrina and other events that the objectives and priorities of business and government do not always inherently align. Therefore, forging mutual understanding through operationally oriented partnerships before disaster helps pave the way for innovation and efficiency in planning, mitigation, response, recovery, and long-term resilience. The next steps on this path are up to today's leaders in business and government, and we hope that the effort of the Task Force effectively serves to advance the whole of community dialogue. To that end, the Task Force is committed to working with those who contributed to this document and those who have yet to be engaged. While there have been many conferences, committees, and conversations about building public private partnerships, translating those ideas into action is pragmatically the next step. Thus, this document is a relevant contribution to the evolution of national doctrine and common understanding between public and private sector partners that is designed to help improve decision making before, during, and after a disruption with a common view of risk.

Our sincere gratitude must be extended to the members of this esteemed Task Force, who voluntarily spent the last 18 months deliberating and crafting this document, which only represents Version 1.0 of our thinking. We are also grateful to the input provided from the FEMA Regional Private Sector Liaisons. Your point of view is also welcome. You are invited to read the document in its entirety and provide us feedback. We hope you take us up on the offer to engage.

All the best,

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# 1. Executive Summary

Currently, a lack of unified guidance exists pertaining to developing and maintaining public private partnerships (PPP) across the homeland security enterprise. While many states have their own public private partnership programs, there is no standardization that exists to help guide other states to create and formalize their own public private partnership programs. Businesses want to ensure sustainable and continuous operations and limit their risk and serve their customers and support communities. Government wants to ensure a safe, reliable economically viable community exists for citizens in all-hazards. Both need a familiar mechanism that can address mutual operational priorities, engage in problem-solving dialogue, and identify capabilities that can efficiently be employed, benefiting the whole community, and scalable from a local crisis to a national catastrophic incident.

The purpose of the "Building Operational Public Private Partnerships" is to provide a guide for state, local, tribal, territorial governments and private sector businesses attempting to build public private partnerships to serve the interdependent needs of the community. Specifically, the guide is designed for those organizations that intend to collaborate before a disaster (e.g., preparedness, planning, training, exercises), coordinate operationally during an event (e.g., incident (crisis, disaster, emergency, Stafford/Non-Stafford, response), and collaborate post-event (e.g., incident (recovery, mitigation and resilience activities) consistent with Grant Guidance and prevailing doctrine through the National Preparedness System and Post-Katrina Emergency Management Reform Act (PKEMRA). This is not a comprehensive or prescriptive guideline, but a guide that provides helpful resources, useful tips, and established models to aid jurisdictions in building or maturing their private sector programs.

In the end - integrated government and business coordination, communications and planning will reduce risk and increase readiness – reducing cost burden on citizens, customers and communities nationally.

# 2. Background

Since Hurricane Katrina, the rapid growth of global security operations centers in companies, corporate emergency operations centers, and other private sector coordinating capabilities and resource support roles during disasters has created an increasing demand for private sector coordination and communications with the public sector. This evolving reality represents an unreported capacity gap that will grow as businesses continue to expand their emergency management and resilience functions, and will inevitably require government to modernize how it interacts with private sector partners.

While Business Emergency Operations Centers (BEOC) have existed in some form since the immediate time following Hurricane Katrina, they, or similar constructs enabling public private partnerships have languished largely because no guidance has been developed to facilitate development in at the least all 50 states, territories, and major metropolitan areas. For the purposes of this document, the use of BEOC does not refer to EOCs that businesses operate themselves, but integrated EOCs at local, state or federal levels. In 2012, only 23 states identified



public private partnership programs that strengthen coordination between private sector entities and government to contribute to both business and community resiliency<sup>1</sup>. In 2017, 24 states still have no BEOC or Public Private Partnership (PPP) capability, in part to resources and funding, and there is disconnected or unavailable guidance on how to accomplish an effective BEOC/PPP program or coordination model. As such, those programs that exist have different levels of maturity and functionality, similar to the establishment of fusion centers that required standard guidance for capability, function, and focus.

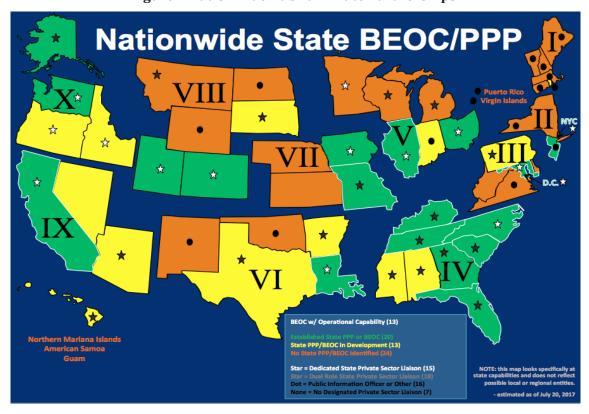


Figure 1 Nationwide Public Private Partnerships<sup>2</sup>

# 2.1. The Task Force

The National Emergency Management Association (NEMA) Private Sector Committee, Information Sharing Task Force, drafted this document to begin to address the stated need for uniform guidance. NEMA members continue to express their desire to improve private sector and public sector coordination and shared capabilities throughout the emergency management lifecycle. Based upon review of existing models of public private partnerships throughout the country, it is clear that there are various knowledge and performance gaps that need closure. One critical gap is the lack of a *common operational process* for private sector and government to coordinate mission

<sup>&</sup>lt;sup>2</sup> Graphic produced by the NEMA Task Force with best available information. Continued efforts are underway to set objective criteria to ensure all self-reported data include standard definitions of BEOCs/PPPs.



<sup>&</sup>lt;sup>1</sup> NEMA survey results are available upon request.

priorities, cross-sector operations, and share information.

The mission of the NEMA Private Sector Committee's Information Sharing Task Force is to facilitate development and documentation of a common operating process for information sharing between public and private sector stakeholders in emergency management communities. The vision of the Task Force is to provide NEMA members

One critical gap is the lack of a *common* operational process for industry and government to coordinate mission priorities and share information.

and partners practical guidance about how to achieve their respective public private partnership missions through development of a community reference guide. This document reflects 18 months of deliberate monthly discussions amongst Task Force members. It incorporates the work products developed by the Task Force members, which aim to bridge the gap between the National Response Framework (NRF), the National Disaster Recovery Framework (NDRF), the National Infrastructure Protection Plan (NIPP), and actual operational experiences of those private and public sector organizations that work together throughout the emergency management lifecycle.

# 2.1.1. Defining the Problem

The following list of foundational problem statements developed by the Task Force represents inputs from private and public sector organizations throughout the United States.

- ✓ Regardless of type or size of the organization, business and government both need basic, factual information about the current situation in a timely manner.
- ✓ Gaps exist in integrated planning between private-public entities.
- ✓ There is no standard/clear channel for the private sector to gather official information and communicate during a disaster. Companies often get multiple competing requests for information from Federal, State, and Local entities causing duplicative efforts.
- ✓ An operational coordination framework is needed to align the timeline of disaster, key decision thresholds, information requirements, data sources, and resource allocation determinations.
- ✓ Neither government nor private sector enterprises effectively respond to disruptions, crises, or disasters without sharing information among and between partners for resumption of normal operations.
- ✓ Divergent information sharing linkages exist between government and the private sector.
- ✓ Information sharing is crisis-oriented, at times creating false assumptions and/or out of date information during a crisis (i.e., Capabilities not fully known).
- ✓ No coherent jurisdictional / scale of operations standards exist for linking government and private sector information sharing.
- ✓ Federal, State, Local, Territorial, and Tribal processes information sharing with the private sector need further advancement.
- ✓ Government and private sector partners need to coordinate logistical aspects of supply chain and operational management.
- ✓ Private sector needs clarification on key operational public sector programs (e.g., access and credentialing) and how their companies can better leverage these programs.
- ✓ Government and private sector partners need a framework for information privacy that helps navigate issues related to information security and public disclosure laws.



# 2.1.2. Desired Outcomes

# **Strategic Outcome:**

Develop clarity for establishing and maintaining operational public private partnerships with each state taking steps to integrate the private sector into planning, training, exercises and operations.

### **Desired Outcomes:**

The following list of desired outcomes developed by the Task Force represents inputs from private and public sector organizations throughout the United States.

- ✓ Improving access to information and data at all levels that provide a sound decision-making landscape between the government and the private sector.
- ✓ Increasing efficiency in response and recovery operations planning for public and private sectors.
- ✓ Enhancing operational coordination and communications between the private sector and public sector.
- ✓ Understanding of processes and capabilities across government and private sector, where they intersect, and how to work together more effectively.
- ✓ Identifying shared priorities in operational time periods in order to have a shared operational vision between the public and private sector and incorporating into the incident action plan. (e.g. helping private-public determine what is the most important mission priority (by agency/by company).
- ✓ Creating a shared understanding of both the public and private sector's have a shared understanding of the most essential operational functions to maintain/recover the organization.
- ✓ Developing a clear understanding of what information needs to be shared between the public and private sector and how the information is shared and disseminated.
- ✓ Defining a measurable positive return on investment for both sectors due to the partnership.
- ✓ Clarifying virtual and physical constructs to share information between the sectors are both needed before, during, and after a disaster.
- ✓ Allowing private-private partnerships to enhance the capability of businesses helping businesses get back into business.
- ✓ Developing a clear on-boarding process for new private sector companies into local/regional/national coordination activities.
- ✓ Developing clear guidance to build a program or improve an existing public private program.
- ✓ Defining process first, and then providing technology configuration requirements to support the mission.

# 2.2. The Guide

The intent of this document is to define emerging operational concepts, to provide a roadmap for state emergency management agencies and their private sector partners, and to spur robust community dialogue.

This guide is designed to serve as a roadmap for:

- Jurisdictions trying to build a program or those seeking to improve existing programs;
- Private sector partners trying to understand interdependencies that enable them to approach public sector partners to start a dialogue; and
- Fostering or enhancing direct public private communications channels.



# **Document Approach:**

- The document defines a repeatable process for industry and government to better coordinate and share information.
- The document offers operational integration approaches for various market segments (e.g., power, water, transportation, communications).
- The document references guidance for building a localized public private partnership program, and a BEOC (physical or virtual).

The intended audience for this guide primarily includes NEMA members and community leaders<sup>3</sup> with a vested interest in developing, improving, or sustaining public private partnerships for operational excellence. The intended focus of this document is to outline an approach to facilitating efficient operational coordination for all hazards, enabled by a premeditated approach to information sharing. The premise is that improving public private coordination will result in a stronger posture of preparedness, and the more prepared we are, the more resilient we will become.

# Specifically, the guide will enable users to:

- Promote understanding of shared interests of private sector and government.
- Jumpstart development of a locally customized framework that builds trust and resilience.
- Apply a common process for private sector engagement with government.
- Provide clarity for linkages across already established governance structures to ensure known points of coordination and processes.
- Define key operational thresholds for decision-making, and related priority information requirements for each market segment.
- Improve information access, share strategic situational knowledge, and facilitate access to specialized resources that may benefit community members in the time of need.
- Contribute to the building and development of this guide, and work to influence the evolution of official and de facto national policy and operational practices.

# **Disclaimers:**

- This guide is not intended to supersede the NIPP or U.S. Department of Homeland Security's (DHS) Office of Intelligence and Analysis (I&A) Information Requirements for Fusion Centers. This guide is intended to provide clarity for those dynamics most typically focused on threat and terrorism and identifies how to approach differences between intelligence (e.g., fusion), vulnerability (e.g., infrastructure), and remaining operational elements (e.g., emergency management).
- This guide is not intended to supersede existing BEOC models, but serve as a starting point for new BEOC/PPPs and a reference guide that may offer ideas for enhancing existing models.
- This guide intentionally does not include many references to federal language that you may find in the NRF, NIPP, NDRF, etc. The Task Force believes the information provided in this document is complementary to those models, but distinct in its operational orientation and intended application for states and private sector program partners.

<sup>&</sup>lt;sup>3</sup> Including but not limited to the membership of National Business Emergency Operations Center (NBEOC), International Association of Emergency Managers (IAEM), and Big Cities Emergency Managers.



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# 3. Defining the Common Operating Process

Many stakeholders are ready and willing to engage, but they simply do not know where to start, who to coordinate with, or how to achieve the ideals of joint prioritization of efforts to establish an effective "common operational process". In addition, many efforts are emerging at every level of government, often duplicating interactions with private sector stakeholders, and at times with competing interests. Therefore, the NEMA Private Sector Information Sharing Task Force identified the need for a common operational process that will serve industry and government efforts to coordinate and effectively share information that supports clearly identified operational outcomes for various market segments. The initial stages of development of the common operational process will focus on the planning elements of the process.

# 3.1. Approach

The approach recommended by the Task Force recognizes different approaches to industry engagement, such as operationally oriented engagement via Emergency Support Functions and non-operational oriented engagement with critical sectors.

From a private sector point of view, these efforts at times appear to be competing mechanisms to achieve what is for their organizations a very similar task of mitigating risk within their organization, within their market segment, and across interdependent market segments. This approach represents an initial effort to rethink how to create an operational framework for public private partnerships that addresses the risks of the future. *The goal is to accomplish the task in such a way that it is driven by the planned strategic mission priorities of each market segment* and does not incur an undue burden on companies.

At the most basic level, the result of the operational framework for improved crisis information management should help organizations be postured to access and share information that will quickly help determine the answers to five foundational questions in the event of a disaster:

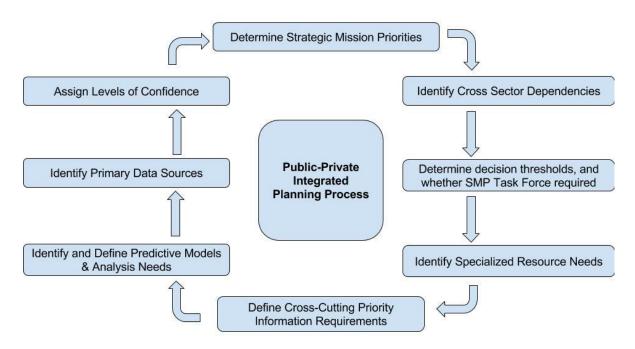
- 1. What types of information is being shared pre-disaster? (baseline posture)
- 2. What happened, and how is it affecting the community? (impact assessment)
- 3. Who is taking what action and what is their desired outcome? (stakeholder specific actions)
- 4. What is it that they still need? (resource requirements)
- 5. What needs to be documented and institutionally established?

# 3.1.1. Joint Planning Process

The model below was designed by the Task Force for use by emergency management communities to assist the process of public and private sector stakeholders to define how they will integrate, and what information and data is required to support operations. The model represents a vision for public private operational coordination to be shaped "left of boom", in other words pre-incident.



**Figure 2: PPP Joint Planning Process** 



**Note:** This process is intended to include joint participation of public and private sector stakeholders, and should be used to plan for each phase of operations pre/post-boom. **Phases of operations include:** Normal Operations, Elevated Threat, Credible Threat, Boom, Immediate Response, Deployment, Sustained Response, Recovery



**Step 1: Identify Primary Industry Stakeholders:** Identify organizations, associations and companies with the expertise, resources and willingness to engage in all phases of the partnership. This is a continuous step that should occur throughout the process that will begin prior to determination of strategic mission priorities. Consider what industry-government interactions or working groups already exist to leverage their experience, integrate their activities, and to minimize duplication of effort.

# Determine Strategic Mission Priorities

**Step 2: Determine Strategic Mission Priorities (SMPs).** SMPs are defined as those tasks that support the essential functions of a market segment. The task involves prioritizing the most

<sup>&</sup>lt;sup>4</sup> This graphic is derived from the Federal Interagency Operational Plans.



important internal and external mission priorities. The SMPs should be defined based upon what organizations want people to report on internally. All future steps of this process should orient around achieving clearly defined SMPs that interact with other market segments.

# Identify Cross Sector Dependencies

**Step 3: Identify Cross Sector Dependencies (CSDs).** Identification of CSDs requires consideration of the question, "what market segments does my organization or community implicitly rely upon to function?" Identification of CSDs should include explicit definition of the primary government and private sector stakeholders, and the role they play. In addition, CSDs of your external partners should be considered to understand supply chain risks and individual facility dependencies outside of your direct jurisdictional control or authority, and consider what intergovernmental entities can be leveraged to mitigate risks to entities (e.g. waivers or regulatory relief).

Determine decision thresholds, and whether SMP Task Force required

**Step 4: Establish SMP Task Force (if needed).** A SMP Task Force is needed if there is a SMP that requires multiple market segments or jurisdictions to execute the task. The Task Force should function to jointly make priority decisions related to the allocation of resources (e.g. emergency generator allocation, USAR allocation, fuel allocation). The Task Force will leverage priority information requirements and analytics to inform decision-making. Each Task Force will require established governance structure with predetermined points of engagement, and will require codified information delivery in the IT environment.

# Identify Specialized Resource Needs

**Step 5: Identify Specialized Resource Needs.** Specialized resources include those critical assets required to achieve SMPs that exist in limited quantities due to unique equipment, training, and cost. Each community must prioritize and allocate resources, and determine what logistical/transportation/communication support is needed to deploy the assets. This task includes identification of critical commodity consumables; those items needed in significant quantities to maintain operations and that are likely to be needed by others, and must be rationed or prioritized.

# Define Cross-Cutting Priority Information Requirements

**Step 6: Define Crosscutting Priority Information Requirements (PIRs).** PIRs are those that directly support SMPs at each phase of operations, decisions related to resource allocation, and coordination needs with other market segments. PIRs should communicate the status of operations, help assess comparative impacts, and inform operational decision-making. PIRs should be driven by operational requirements of internal and external stakeholders, and will be supported by downstream data requirements.

Identify and Define Predictive Models & Analysis Needs

**Step 7: Identify and Define Predictive Models and Analysis Needs.** After communities fully define their PIRs, they can begin the process of identifying and defining scientific models and



analytical needs to support the PIRs. Models and analytics should support refined decision making related to primary and secondary impact assessments (e.g. surge predictions, economic impacts).

# Identify Primary Data Sources

**Step 8: Identify Primary Data Sources.** To support operational and information requirements, communities should identify and describe the custodial owner of the data, from where it is sourced, and how it is collected during normal operations and emergency operations. Communities should also determine the form that the data will take, including units of measurement, if relevant.

# Assign Levels of Confidence

**Step 9: Assign Levels of Confidence.** A clear and systematic method for assigning levels of confidence in the data, models, analysis, and information should be determined. This may include consideration for source, frequency, margin of error, etc.

# 3.1.2. Operational Integration Models

The Task Force tested the joint planning process and developed a series of operational integration templates for various market segments that represent sample outputs of the planning process. The purpose of the operational integration models is to provide clarity for the integration of private sector planning, exercise, response and recovery activities within public sector execution of the National Response Framework. Additionally, each example establishes thresholds for scale of operations and decision-making, and delineates responsibility for information sharing, resource support and allocation, and joint operational execution of tasks. The final purpose of these examples was to facilitate dialogue and establish commonalities amongst the NEMA membership related to identification of critical capability requirements and sector interdependencies, and the forming of operational mechanisms to coordinate cross-sector resources and critical commodities.

# 3.1.2.1. Market Segment Model (Power)

The Task Force initially developed and tested four models: power, water, communications, and transportation. The model for the power market segment is provided in the report (See Figures 3-10), and the others are provided in the NEMA member web portal. Each model includes a list of key organizations, definition of responsibilities based upon scale of operations, definition of strategic mission priorities, identification of interdependencies, identification of SMP Task Forces, definition of specialized resource needs, priority information requirements and data sources. In addition, each FEMA Region has developed/is developing a Power Outage Incident Annex, a planning process that may provide states with an opportunity to plan with regional and private sector partners from a state perspective.

Figure 3: Key Stakeholder Organizations (Power Market)

Federal	State	Private Sector
FEMA – Federal Interagency     Consequence Management;     Regional Offices     DOE – Sector-specific agency     for ESF 12	<ul> <li>State EM – State interagency consequence management</li> <li>State BEOC – Information conduit for private companies</li> </ul>	<ul> <li>Asset owners in power generation, transmission and distribution</li> <li>Electric Reliability Organization</li> </ul>



- NBEOC Information conduit for private companies; regional private sector representatives
- State Utility Commission Compliance and regulatory authority for power
- Power trade associations (EEI, APPA, NRECA)

Figure 4: Defining Scale of Operation (Power Market)

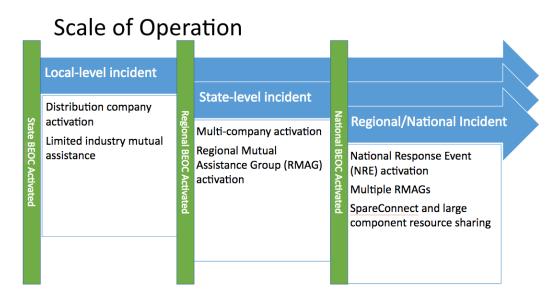


Figure 5: Strategic Mission Priorities (Power Market)

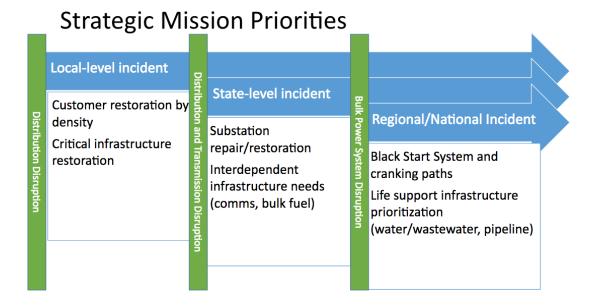




Figure 6a: Cross-Sector Dependencies (Power Sector)

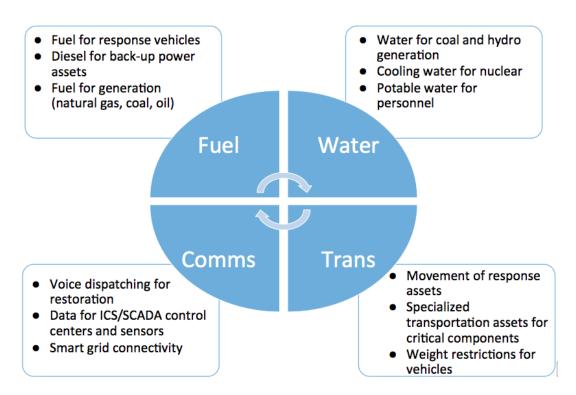
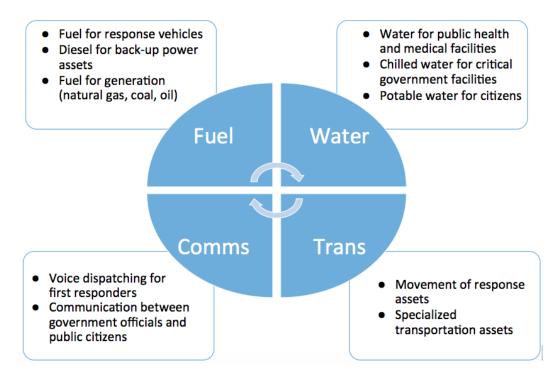


Figure 6b: Cross-Sector Dependencies (Local Level)



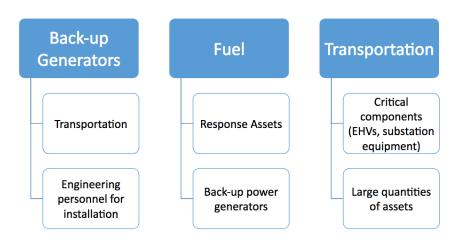


Based upon the SMPs and CSDs identified, Task Forces may need to be created (See Figure 7).

- A SMP Task Force is needed if there is a SMP that requires multiple market segments or jurisdictions to execute the task.
- The Task Force should function to jointly make priority decisions related to the allocation of resources (e.g. emergency generator allocation, USAR allocation, fuel allocation).
- The Task Force will leverage priority information requirements and analytics to inform decision-making.
- Each Task Force will require established governance structure with predetermined points of engagement, and will require codified information delivery in the IT environment.

Figure 7: SMP Task Forces (Power)

# Task Force Development

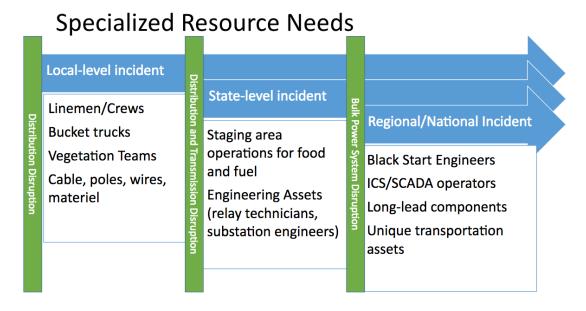


The Task Force(s) will identify specialized resources needs (See Figure 8).

- Specialized resources include those critical assets required to achieve SMPs that exist in limited quantities due to unique equipment, training, and cost.
- Each community must prioritize and allocate resources, and determine what logistical/transportation/communications support is needed to deploy the assets.
- This task includes identification of critical commodity consumables; those items needed in significant quantities to maintain operations and that are likely to be needed by others, and must be rationed or prioritized.



Figure 8: Specialized Resource Needs (Power)

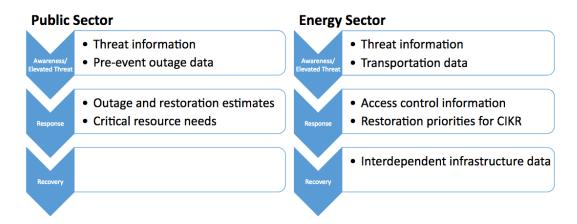


When operational requirements are defined, cross cutting PIRs must then be determined (See Figure 9).

- PIRs are those that directly support SMPs at each phase of operations, decisions related to resource allocation, and coordination needs with other market segments.
- PIRs should communicate the status of operations, help assess comparative impacts, and inform operational decision-making.
- PIRs should be driven by operational requirements of internal and external stakeholders, and will be supported by downstream data requirements.

Figure 9: Priority Information Requirements (Power)

# **Priority Information Requirements**





After PIRs are developed and understood, modeling and analysis requirements and data requirements should be developed (See Figure 10).

- After communities fully define their PIRs, they can begin the process of identifying and defining scientific models and analytical needs to support the PIRs.
- Models and analytics should support refined decision making related to primary and secondary impact assessments (e.g. surge predictions, economic impacts).
- To support operational and information requirements, communities should identify and describe the custodial owner of the data, from where it is sourced, and how it is collected during normal operations and emergency operations.
- Communities should also determine the form that the data will take, including units of measurement, if relevant.

Figure 10: Primary Data Sources (Power)

# Transmission Generation On-site linkage Control center ISO/RSO **Transmission** Monitoring monitoring **Control Center** Customer-level Distribution and Substation connection level aggregated through sensors

Primary Data Sources

Notably, this market segment model for power was tested and validated by the U.S. Department of Energy (DOE) in a June 2017 Resource Allocation Workshop in South Carolina. Workshop participants noted that the process developed by the Task Force enabled more effective implementation of various steps in the Joint Incident Action Planning process. The DOE slide deck is available in the NEMA Member portal.

### 3.2. **Getting Started**

# 3.2.1. Initiate, Embrace and Sustain Public Private Partnerships

The most important first step emergency managers can take is to embrace the role of the private sector and initiate a partnership<sup>5</sup>. Partnerships serve to establish a common purpose, build trust

<sup>&</sup>lt;sup>5</sup> Emergency Management Institute offers two courses, IS-660 Introduction to Public-Private Partnerships, and IS-662 Improving Preparedness and Resilience through Public-Private Partnerships.



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and consensus, establish lines of communication, provide common understanding of roles and responsibilities, and improve appreciation for partner contributions.

For public private partnerships to be successful, they must focus on collaborations to achieve results. Emergency managers must consider barriers to an effective partnership from the outset and conceive of an approach to enable successful partnership. Part of the solution is selecting partners relevant to the overarching purpose of emergency management, which is why the Task Force elected to focus on power, water, communications, transportation, and voluntary organizations active in disaster (VOADs).

The Bay Area Partnership Framework<sup>6</sup> identified eight key benefits of public private partnerships, including the following:

- Enhance situational awareness
- Improve decision-making; access more resources
- Expand reach and access for communication efforts
- Better coordination with other efforts by segments of the private sector
- Increase effectiveness of emergency management efforts
- Maintain strong relationships built on mutual understanding
- Create more resilient communities
- Increase jurisdictional capacity to prevent, protect against, respond to and recover from major incidents

Partnerships may take several forms including, but not limited to:

ESF-centric

Cross-Sector

Sector-specific

• Discipline-specific

Task-specific

• Community-specific

Fusions

Hybrids

The important task of every emergency manager is to identify and reach out to partners that exist within the geographic or virtual footprint of their threats, hazards and vulnerabilities. Then, emergency managers should apply a systematic approach to develop and maintain those partnerships.

In the report "Building Community Disaster Resilience through Private-Public Collaboration", the National Research Council of the National Academies recommends the following developmental steps and guidelines to build effective collaboration:

- Identify Leadership
- Create an Advisory or Leadership Team
- Invite Key Stakeholders to the Table
- Institutionalize Collaboration by Developing an Organizational and Operational Framework
- Identify Collective Resources and Capabilities that Mitigate Disaster Impact
- Focus on Disaster Resilience and Explore Community Resilience

<sup>&</sup>lt;sup>7</sup> http://www.nap.edu/catalog.php?record\_id=13028



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<sup>&</sup>lt;sup>6</sup> Background and resources from the Bay Area Partnership Framework are referenced in Section 4 and both publicly available and included in the NEMA member portal.

- Develop Feasible and Measurable Objectives
- Build Capacity

# 3.2.2. Establishing a Business Emergency Operations Center

The notion of the BEOC has evolved over time and may take shape as a physical or virtual apparatus – typically there is an element of both as the concept has matured from "getting everyone in a room" in 2007 to "getting the right people connected" in 2017. The creation of the BEOC concept represents community efforts to integrate private sector into existing emergency management frameworks. To begin, public and private sector partners have a shared interest in identifying, prioritizing, and resolving private sector-oriented challenges through the following capabilities:

- Planning
- Operational Coordination
- Intelligence and Information Sharing
- Access Control and Identity Verification
- Physical Protection Measures
- Risk Management for Protection
- Supply Chain Integrity and Security

- Community Resilience
- Risk and Disaster Resilience Assessment
- Critical Transportation
- Operational Communications
- Situational Assessment
- Infrastructure Systems
- Economic Recovery

There are advantages to integrating private sector partners into state emergency management planning, response, and recovery efforts vis-à-vis the BEOC. However, as previously noted in this guide, it might be necessary to re-imagine the entire relationship between public and private sector partners, specifically from the point of view of the private sector. Nevertheless, now, this guide offers an initial approach to engage in a joint planning process as described in section 3.1, and through comment from the NEMA membership, will hopefully evolve into a useful tool for communities around the nation to jumpstart a localized capability.

The Task Force has developed a model organizational chart and communications structure for consideration by State Emergency Management Agencies. The diagram defines a team approach to managing private sector programs that will support the evolution of public private partnerships as they mature toward operational integration. It is recommended that the leadership team be comprised of the Governor's Office, State Emergency Management Director and State Homeland Security Advisory. It is also recommended that the private sector program management team include a Private Sector Coordinator, EOC Manager, Plans Chief, Logistics Chief, Volunteer Coordinator, Economic Development representative, Utilities Commission Representative, Fusion Center Director, and External Affairs representative.

Figure 11a: An Organizational Approach to Private Section Program Management





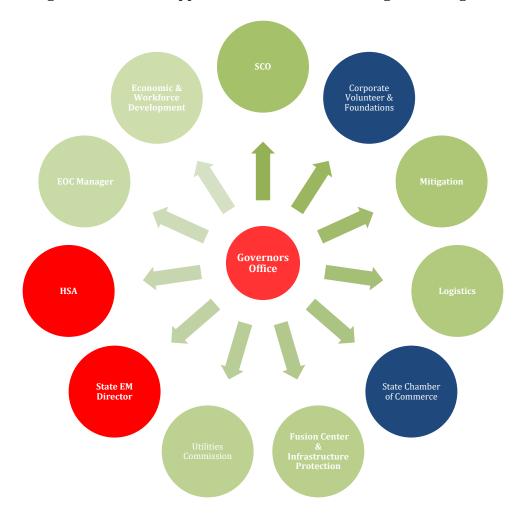


Figure 11b: A Team Approach to Private Section Program Management

In addition, the Task Force would like to note that according to the National Response Framework, ESF-15 – External Affairs includes the Private Sector. Yet, the document as currently written does not acknowledge fully the growth of operational public private partnerships including Business Emergency Operations Centers. The following table (Figure 12) is intended to reconcile this and provide a level of clarity for developing cohesion at the state level given different dynamics across regions and states and how these structures.



Figure 12: Clarifying Players and Interests

State Office	Interest Area
Governor's Offices	Economic security and future viability.
ESF – 15 External Affairs	Strategic Communications and messaging coordination with corporate interests.
State EOC	Overall disaster coordination including integration of private sector across ESFs if used and plans.
State Fusion Center	Focused on preventative and protection operations including infrastructure.
Business Emergency Operations Center	Provides information sharing, operational coordination, and resource coordination point for the broad marketplace in disasters or specific events including recovery.
ESF – Business & Industry	A planning construct that exists in concert with External Affairs and BEOC that incorporates economic-driven priorities such as pre-disaster unemployment

Last, there are several successful models of BEOCs around the country. The State of Illinois contributed the "BEOC Quick Start Guide" (see Figure 13) as a starting point for future discussions and to assist states with rapid development of their own public private programs. The quick start guide provides a checklist of activities to be completed, and additional "how-to" resources are available on the NEMA member portal.



**Figure 13: BEOC Quick Start Guide** 



Revision Date:	OCT2016	State of Illinois Emergency Management Agency	Function:	BEOC OPS
Revised By: OPS/SPC R.1		BEOC QUICK START GUIDE	Use By:	STATE EOC/Private Sector
PH	ASE I OBJECTIVES	PHASE II OBJECTIVES	PI	HASE III OBJECTIVES
Evaluate enab sector coordii Determine sta Public Private Non-g Volunt Stablish Initia (IPM&B) Sched Locati Agend Vision Goals Compi Analyz Disser Determine BE Type P V Struct P	biling authorities for public/private nation/integration alkeholders and participants Sector	Establish BEOC Working Group policies   Roberts Rules, National Standards, etc.     Establish BEOC Working Group   Schedule   Location   Agenda   Planning Effort   Charter   Concept of Operations   EOP Annex (Private Sector Integration. BEOC OPS, etc.)   Appendix to an EOP Annex   SOPs/SOGs   Job Aids, Checklists, etc.     Draft planning and supportive documentation   Organizational Structure   Staffing Chart   Seating Chart   Seating Chart   Seating Chart   Incident Management System   Supportive Requirements   Equipment/materiel   Systems /Hardware   Information Technology   Credentialing   Information Sharing   Intelligence   Access and Security   Develop draft final documentation   Disseminate draft final documentation for comment to stakeholders and participants   ≤ 30 calendar days	Develop train Train Train Train Train Schee Locat Agen Partie Conduct and Develop Tab Schee Conduct and Develop Tab Schee Conduct and Conduct and Conduct and Develop Tab Schee Conduct and Conduct and Conduct and Conduct and Revise BEOC Process	ning packet ing type (in-person, virtual, etc.) ing objectives ing content louts, templates, aids ining cycle dule cion da cipants evaluate training le Top Exercise packet development staff dule cion frame s and objectives ational Scenario lation tools roller and Evaluators cipants ercise cycle evaluate exercise t-incident analysis disseminate After-action Report (AA ment Plan (IP) to participants and

□ Compile and disseminate final BEOC documentation

□ Establish training and exercise criteria based on

BEOC Working Group needs assessment



□ Hybrid Coordination

Stakeholders and participants

□ ≤ 12 voting members
 □ Subject Matter Experts (SME)

☐ Establish BEOC Working Group

### **BEOC Structures**

### Physical

The physical location at which public and private sector integration and coordination supports response and recovery through the sharing of information and collaboration of resource capabilities. The physical BEOC may be a temporary facility or permanently established facility, and coordinates directly with the jurisdiction's overall coordination and management system.

### Virtual

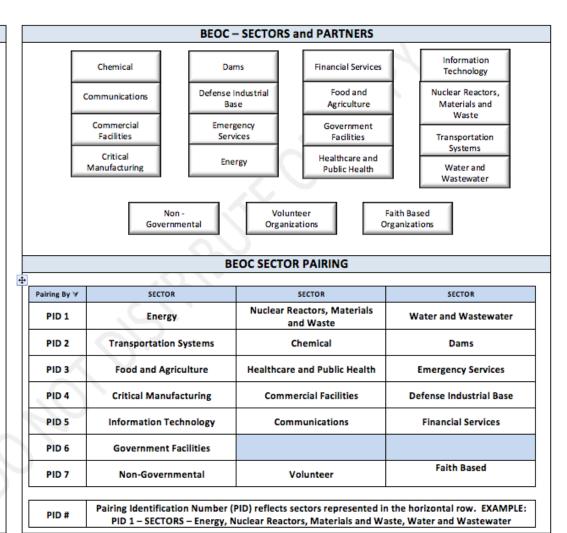
A system, platform or communications network established when a physical BEOC is not feasible to enable public and private sector integration and coordination to support response and recovery through the sharing of information and collaboration of resource capabilities.

### Mobile (BUIC)

The physical location established in support of Incident/Unified/Unified Area Command at which public and private sector integration and coordination supports response and recovery through the sharing of information and collaboration of resource capabilities. The Mobile (BUIC) has no direct authority for incident operations and is required to coordinate with the jurisdiction's coordination and management system at higher, lateral and subordinate levels.

## Hybrid

A combination of physical and virtual capabilities and technologies to enable public and private sector integration and coordination to support response and recovery through the sharing of information and collaboration of resource capabilities. The Hybrid BEOC coordinates directly with the jurisdictions overall coordination and management system.



### SAFETY CONSIDERATIONS AND WARNINGS

- Staff will maintain a safe working environment throughout operations.
- Due to the potential for extended work periods, staff will be cognizant of stress, fatigue, and the need for adequate rest periods.
- All staff should be cognizant of potential lift, trip, fall, pinch, electrical, puncture, chemical and environmental hazards associated with operations.
- Any and all situations warranting law enforcement intervention will be immediately directed to the appropriate authorities.
- Injuries or medical concerns/conditions will be reported to the medical staff on-site immediately and/or 911 as appropriate.



### **BEOC Critical Process Summary** PGA/SPC: Project Summary Jurisdiction Name: Jurisdiction of Anytown Agency Name: Anytown EMA Mission - Critical Process Name Business Emergency Operations Center (BEOC) Operations Mission - Critical Process Description Establish a BEOC for integration of public and private sector capabilities and capacity for prevention. protection, response, recovery and mitigation to/for disasters. Conduct comprehensive whole community efforts to establish and implement BEOC operations and develop supportive doctrine for alignment with federal guidance, national standards and Anytown was and authorities. Failure to implement an all hazards BEOC framework for use before, during and after disaster strikes will result in the continuation of inaccurate capability descriptions and decrease operational coordination increasing the loss of life. injuries, costs and length of response and recovery Name Contact Number E-mail Group Primary Support / P2 Working Groups BEOC Support Support Support Mandated Anytown Laws ☑ Executive Order ☐ Agency Policy ☐ Grant Guidance/Deliverable ☑ Federal Law Federal Guidance 🗵 Other National Standards/Federal CPG Funded: Federal State : Local Non-funded Grant Name(s): EMPG Performance Period: December 2015 - December 2016 Mission - Critical Process Priority: Critical Process Frequency: ☑ B-Monthly High Medium Low Daily Semi-Annually Bi-Weekly Monthly Annually Weekly Quarterly As Needed $\boxtimes$ Milestone Measurement Milestone Date Evaluate enabling authorities Phase Determine stakeholders and participants Dec 2015 Phase I Establish Initial Planning Meeting/Briefing (IPM&B) Phase I Conduct IPM&B Jan 2016 Establish BEOC Working Group policies Establish BEOC Working Group (Planning Effort) Phase I Feb 2016 Phase II Feb-Jul 2016 Draft planning and supportive documentation Develop (DRAFT) final documentation Aug 2016 Phase I Develop training packet Aug-Sep 2016 Sep-Oct 2016 Aug-Oct 2016 Phase III Establish training cycle Develop TTE - BEOC OPS 1 | Page STATUS UPDATE Milestone Measurement Milestone Date Progress Update valuate enabling authorities Determine stakeholders and participants Dec 2015 Phase Establish Initial Planning Meeting/Briefing (IPM&B) Phase I Conduct IPM&B Jan 2016 Establish BEOC Working Group policies Phase II Establish BEOC Working Group (Planning Effort) Draft planning and supportive documentation Develop (DRAFT) final documentation Phase II Develop training packet Establish training cycle Aug-Sep 2016 Sep-Oct 2016 Phase III New 2016 (set.) Conduct and evaluate training

### BEOC CRITICAL PROCESS SUMMARY HIGHLIGHTS

The BEOC Critical Process Summary (CPS) provides a strategic summary of key components used to inform senior staff, key officials and stakeholders. Information contained in the BEOC CPS is intended to establish a strategy for project achievement, continual review and reporting.

Mission – Critical Process Description: Three sentence description of the critical process, (i.e., BEOC Operations), that defines (1) What the process is, (2) What the process provides, does or obtains and (3) What the result of action or inaction will cause.

Assignment: Identification of the primary and supportive personnel responsible for completing the project.

Mandated: Identification of the enabling authorities providing for implementation of the project.

Funding: Identification of the funding source for project implementation and sustainment.

Mission – Critical Process Priority: Determination of the priority placed on the project based on operational requirements and the direct and indirect effect on prevention, protection, response, recovery and mitigation.

Critical Process Frequency: Determination of the frequency in which BEOC efforts will occur upon implementation.

Milestones: Identification of the project descriptor (Phase), Milestone Measurement (Objective or Task) and Milestone Date to outline the strategic plan for project achievement.

- Phase(s): Obtained from page 1 of the BEOC Quick Start Guide
- Milestone Measurement: Obtained from page 1 of the BEOC Quick Start Guide
- Milestone Date: Determined by the jurisdiction based on operating parameters, funding, staffing, etc.

Status Update: Provided as a method for tracking progress and development of executive briefings.

# Senior Stafe Secrors Federal Govarment State EOC Incident Command Organizations

# BEOC Special Event Awareness Log (SEAL)

- Current Events
- Public Sector Command/Management
  - Locations
- Injuries/Fatalities
- Transportation/Roadway Status
  - Closures/Limitations
  - Waivers/Exemptions
- Critical Infrastructure Status
  - By Sector
- Weather Outlook
- Volunteer/Donations Management
- Shelter Locations
- Other Information
- Reference Links/Websites
- Contact Information



# 3.2.3. Developing Crisis Information Management Capabilities

Maintaining the public private partnership is largely dependent upon the perceived and actual value of the relationship by all parties. Value creation can be achieved in numerous ways, most notably by jointly developing and following through on collaborative efforts to plan, train, exercise, share information, and coordinate operations. At a foundational level, there must be methods established to share risk, vulnerability or other threat information, as well as actual operational status information. This requires methods to enable information sharing, shared situational awareness and decision-support. The assumption of the Task Force is that information sharing will be ultimately be managed by the custodial owners of data, who will share what they want, with whom they want, and through whatever means appropriate given consideration for either open or proprietary data and information. This assumption accounts for the fact that many information owners will not share information unless the recipients are trusted and the data is secure. As such, these methods must be developed, tested and evaluated through a repeatable process and evidence based improvements over a period of time.

Improving crisis information management capabilities in communities is an effective way to develop and maintain public private partnerships, and improve regional disaster resiliency. This has been demonstrated in numerous regional initiatives such as the Central U.S. Earthquake Consortium's regional programs to facilitate preparedness for an earthquake along the New Madrid Seismic Zone. Communities need a common process framework and toolkit to assist efforts to assess, train and measurably improve crisis information management capabilities of public and private sector partners. A foundation for assessment can be found in the modified DHS SAFECOM Interoperability Continuum<sup>8</sup>, which describes five core elements of human and technical interoperability in terms of Governance, Standard Operating Procedures (SOPs), Technology, Training & Exercises and Usage.

The continuum is provided in Figure 14.

<sup>&</sup>lt;sup>8</sup> This was first modified in "Crisis Information Management Framework for Regional Disaster Resiliency".



Figure 14: DHS SAFECOM INTEROPERABILITY CONTINUUM (MODIFIED)<sup>9</sup>

Governance	Elements	Organiza	ndividual ations Working ependently	Informal Coord Between Organizatio	1	Staff C	ulti-Discipline ollaboration egular Basis	Regional Committee Working within an Evolving Regional Disaster Resiliency Framework
Standard Operating Procedure	n Among Core of Regional Eco		Individual Agency SOPs	Joint SOPs for Planned Events		nt SOPs nergencies	Regional Crisis Information Management SO	International
Technology	g and Collaboration the Sustainability o	DATA ELEMENTS VOICE ELEMENTS	Swap Files Swap Radios	Common Applications Gateway	Арр	n-Interfaced lications d Channels	One-Way Standards-Based Sharing Proprietary Share System	Sharing
rainings & Exercises	imited Leader <mark>ship, Pla</mark> nning with Minimal <mark>Investme</mark> nt in t	Equ	General ientation on uipment and pplications	Single Agency Tabletop Exercises for Key Field and Support Staff	for Ke	ti-Agency op Exercises y Field and oort Staff	Multi-Agency Fu Functional Exercises Involvir All Staff	Regular Comprehensive
Usage	Limited Lead with Minima	FREQUENCY OF USE USABILITY & WORKLOAD	Routine Sys	ed Events tem Usage and ance Surveys	System Workload N	ed Emergency ncidents Usability and Measured During and Exercises	Regional Cri Manageme System Usability Workload Evaluate Real-World Eve	and Regional Evaluation of d After Licability and Workland

<sup>&</sup>lt;sup>9</sup> SAFECOM Interoperability Continuum first available at <u>www.dhs.gov</u>/safecom, and was modified in the "Crisis Information Management Framework for Regional Disaster Resiliency".



To assist communities, DHS created the "Incident Management Information Sharing (IMIS) Capability Maturity Model (CMM)" which enables communities of organizations to self-assess their information sharing capability maturity as defined by five core elements of the Continuum. The CMM includes several dozen maturity attributes for each of the five core elements of the Continuum that communities can use to benchmark and self-assess progress. The benefit of this model is that it offers a common framework for emergency managers to think about, develop and measure crisis management information sharing capabilities between public and private sector partners. Figure 15 defines the IMIS CMM concept.

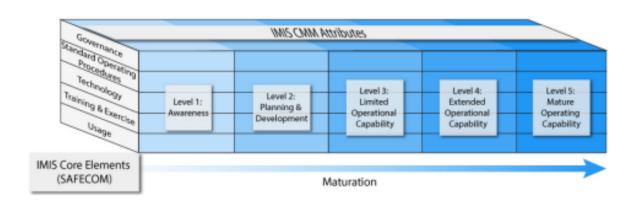


Figure 15: IMIS CMM Concept<sup>11</sup>

**Core Elements** – Adopted from DHS SAFECOM Interoperability Continuum, the core elements divide the overall IMIS mission into five manageable topics (i.e. governance, standard operating procedures, technology, training & exercise, and usage).

**Maturity Levels** – The IMIS CMM Maturity Levels provide a simplistic tool for measuring maturity through the details presented within the attributes. The maturity levels include Level 1 Assessment, Level 2 Planning and Development, Level 3 Limited Operational Capability, Level 4 Extended Operational Capability, and Level 5 Mature Operating Capability.

Attributes – The CMM includes 179 attributes, which are statements that describe aspects of capability maturity. Each attribute is designed to expand upon the core elements within each of the five maturity levels to convey a means to measure current status and progress within the context of the IMIS CMM. Each attribute is weighted based upon level of difficulty.

The CMM includes a self-assessment tool that is available to NEMA members. Furthermore, upon completion of the assessment, the tool offers a stepwise process to advance crisis information sharing capabilities through training and implementation process. The details of this process are

<sup>&</sup>lt;sup>11</sup> As presented, Figures 15-17 were first introduced in the "Crisis Information Management Framework for Regional Disaster Resiliency.



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<sup>&</sup>lt;sup>10</sup> The CMM has been applied at local, state, regional, national and multinational levels, including but not limited to: Marshalltown, lowa; New Orleans, Louisiana; City & County of Denver; King County, Washington; Commonwealth of Virginia; California Office of Emergency Services; and 23 organizations throughout Bosnia & Herzegovina, Croatia, Macedonia and Montenegro.

available in the document titled "Crisis Information Management Framework for Regional Disaster Resiliency", which is available on the NEMA member web portal. The framework offers a repeatable process to measurably improve crisis information management capabilities for communities.<sup>12</sup>

**Figure 16: CMM Stepwise Process** 

# Stepwise Process to Advance Capability Maturity

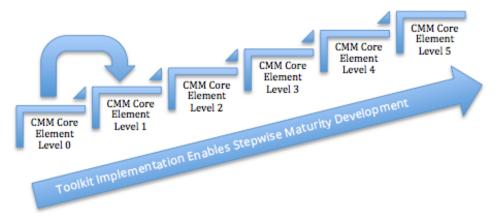


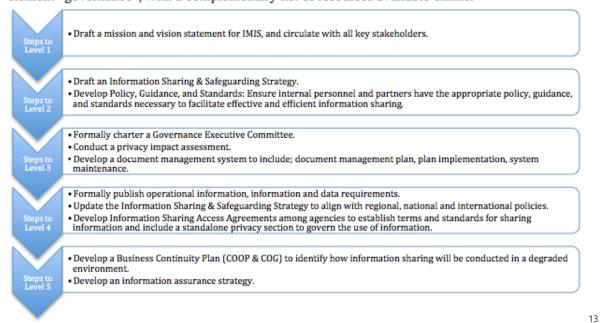
Figure 17: Stepwise Model to Improve Governance

<sup>&</sup>lt;sup>12</sup> This stepwise process to advance capability maturity is currently being implemented in partnership with NATO and 23 organizations located in Bosnia & Herzegovina, Croatia, Macedonia and Montenegro.



-

The following diagram illustrates a stepwise model to improve the maturity of the CMM core element "governance", with a complementary list of resources available online.



State emergency managers interested in developing and measuring crisis information management capabilities, particularly in partnership with private sector partners, will benefit from these freely available resources.

# 3.3. Conclusion

In conclusion, the Task Force developed an initial set of planning elements of a common operational process provided in this guide. NEMA members and community stakeholders throughout the public and private sector are invited to comment and contribute additional ideas, resources, and tools to help communities around the nation improve public private partnerships. **Please provide written comments and resources that you would like to share with the community to Karen Cobuluis at kcobuluis@csg.org.** 

<sup>&</sup>lt;sup>13</sup> This diagram represents only a subset of the stepwise model.



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# 4. Downloadable Resources

The following resources are downloadable from the NEMA member portal at <a href="www.nemaweb.org">www.nemaweb.org</a>.

- A. National Points of Contact List (Provided by NEMA)
- B. List of Relevant After Action Reports
- C. BEOC Quick Start Guide (Provided by Illinois EMA)
- D. Operational Integration Models (Provided by the Task Force)
- E. Private Sector Representative Toolkit (Provided by the Bay Area UASI)
  - a. Position Descriptions
  - b. Private Sector Representative Roles & Responsibilities
  - c. Private Sector Position Checklist
  - d. ICS 214 Form
  - e. ICS 209 Form
  - f. Activity Prioritization Matrix
  - g. Activity Plan Template
  - h. Sample State-Private Company MOUs
  - i. VOAD Cooperative Agreements
  - j. Local Emergency Action Plan MOU
- F. List of Relevant Sources of Disaster Information (Public/FOUO)
- G. List of Relevant Training Resources
- H. DHS SAFECOM Interoperability Continuum
- I. Incident Management Information Sharing (IMIS) Capability Maturity Model (CMM)
- J. "Crisis Information Management Framework for Regional Disaster Resiliency"
- K. General: How-To Guides to implement various elements of the BEOC
- L. U.S. Department of Energy Resource Allocation Workshop Slide Deck



# 5. Key Acronyms

BEOC	Business Emergency Operations Center
CSD	Cross Sector Dependencies
DHS	Department of Homeland Security
FEMA	Federal Emergency Management Agency
NBEOC	National Business Emergency Operations Center
NDRF	National Disaster Recovery Framework
NEMA	National Emergency Management Agency
NRF	National Response Framework
NIPP	National Infrastructure Protection Plan
PIR	Priority Information Requirements
PKEMERA	Post-Katrina Emergency Management Reform Act
PPP	Public Private Partnership
SMP	Strategic Mission Priorities
VOAD	Voluntary Organizations Active in Disaster





# **Produced By:**

National Emergency Management Association Private Sector Committee Information Sharing Task Force <a href="https://www.nemaweb.org">www.nemaweb.org</a>

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