

## HOMELAND SECURITY REGIONAL UNITY OF EFFORT

BY

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USAWC STRATEGY RESEARCH PROJECT

**HOMELAND SECURITY REGIONAL UNITY OF EFFORT**

by

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## **ABSTRACT**

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A significant multi-state/regional unity of effort capability gap exists between the Department of Homeland Security (DHS) and the fifty states' independent emergency operations systems. Homeland Security Presidential Directives 5 and 8 directed the creation of the National Response Plan (NRP) and the supporting National Incident Management System (NIMS) which focus response to terrorist attack, natural disaster, or other major emergency. They mandated the creation, coordination, and rehearsal of plans at the national, state, and local levels and associated collective training events. Each level of government is required to maintain base capabilities to provide oversight of the creation, coordination, and review of their plans and to control execution during rehearsals or response to an actual event. The DHS is tasked with collecting and cross-leveling lessons learned and best practices. These steps meet the most basic threat scenarios and requirements, but they fall short by limiting immediate federal response to support of individual states. There is no standing capability to immediately synchronize federal and state support should a catastrophic event simultaneously influence multiple states. This paper studies the requirements for and utility of maintaining a regionally-based HLS/HLD collaboration and coordination capability.



## HOMELAND SECURITY REGIONAL UNITY OF EFFORT

The final structural flaw in our current system for national preparedness is the weakness of our regional planning and coordination structures.

—The Federal Response to Hurricane Katrina Lessons Learned<sup>1</sup>

A primary responsibility of the federal government is to provide security. This core interest mirrors our Constitutional interests: "...to ensure domestic tranquility, provide for the common defense, promote the general welfare, and secure the Blessings of Liberty to ourselves and our posterity..."<sup>2</sup> In fact, President Obama declared in his first Presidential Study Directive (PSD) that his highest priority is to keep the American people safe, combining a focus on Homeland Security (HLS) and national security to create an integrated, effective, and efficient approach to enhance the United States national security.<sup>3</sup>

The United States Government, in concert with state and local governments, has performed well in providing for the security of our people over the course of our nation's history. Following the surprise attacks of 11 September 2001 (9/11), the government reassessed threats and reframed problem sets; identified solutions; created and modified departments, agencies, techniques, and procedures; and significantly increased the effectiveness of those involved with security and defense of the homeland. As governmental organizations have adjusted to the post-9/11 world, interagency and departmental coordination has become more common – especially in the area of HLS. Due to the catastrophic nature of some potential terrorist attacks and natural disasters, multiple agencies and departments are now involved with HLS, along multiple tiers of government. The potential threats necessitate a "whole of community"

approach, requiring collaboration and coordination in prevention, protection, response, mitigation, and recovery. The whole of community includes federal, state, local, and tribal governments; the private sector; and national emergency management, public health, security, law enforcement, critical infrastructure, and medical communities.<sup>4</sup>

To the credit of those involved, many improvements have occurred since 9/11, but unresolved issues remain. One significant challenge is the government's ability to provide security and conduct incident management should the United States suffer a regional/multi-state natural or man-made disaster. There are many possible regional incidents which would require immediate response from federal and multiple state governments. In April of 2005, the federal government published fifteen (15) planning scenarios for local, state, and federal governments to use. The threats included terror threats in the form of explosive, nuclear, biological, chemical and radiological attacks as well as non-terror threats including cyber attacks, foreign animal diseases, pandemics, earthquakes, and hurricanes, any of which can take on catastrophic proportions.<sup>5</sup> "An incident of catastrophic proportions has the potential to imperil millions of people, devastate multiple communities, and have far-reaching economic and social effects."<sup>6</sup> In each case, a delay of 72-96 hours in providing immediate life-saving measures would be far too long. Clearly, there is a requirement for an immediate regional incident response capability.

A common goal among those involved in disaster response is to achieve unity of effort, described as "coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization – the product of successful unified action."<sup>7</sup> Unified action is defined as "the synchronization,

coordination, and/or integration of the activities of governmental and nongovernmental entities ... to achieve unified effort.”<sup>8</sup> Homeland Security Presidential Directives (HSPDs) provided initial systems and processes designed to enable unity of effort in disaster response.

HSPDs 5 and 8 directed the creation of the National Response Plan (NRP) and the supporting National Incident Management System (NIMS) to focus response to terrorist attack, natural disaster, or other major emergencies. They mandated the creation, coordination, and rehearsal of plans at the national, state, and local levels and associated collective training events. Each level of government is required to maintain the capability to provide oversight of the creation, coordination, and review of their plans, to control execution during rehearsals, and to manage response to an actual event. The Department of Homeland Security (DHS) is tasked with collecting and sharing lessons learned and best practices. In January of 2008, President Bush approved the National Response Framework (NRF) which replaced the NRP.<sup>9</sup> These systems meet the most basic threat scenarios and requirements, but they fall short in that they do not provide for a standing capability to immediately synchronize federal and state support should a catastrophic event simultaneously influence multiple states.

Hurricane Katrina exposed significant regional capability gaps between DHS and the fifty states’ independent emergency operations systems. Although there have been some improvements since Katrina, the lack of a regional capability to immediately synchronize efforts remains. This paper studies the requirements for developing a regionally-based HLS collaboration and coordination capability – specifically, one that

facilitates unity of effort in managing incidents at the multi-state/regional level. This paper first assesses foundational policies and strategies.

### Homeland Security Policy and Strategy

It wasn't until after the 9/11 terrorist attacks that policies specific to the homeland and its security were published. On 29 October 2001, President Bush issued the first HLS Presidential Directive (HSPD), designed to communicate United States HLS presidential policy decisions. By November 2008, 24 HSPDs had been issued.<sup>10</sup> There are now a total of 25 HLS policy directives, all published by the last Administration. It is under the G.W. Bush Administration HSPDs that the Obama Administration continues to operate. The current Administration has published only one unclassified Presidential Policy Directive (PPD) which pertains to HLS, outlining the composition of the National Security Council without significantly altering national HLS policy.

Two influential homeland security directives were published in 2003, HSPDs 5 and 8.<sup>11</sup> HSPD 5, published on 28 February 2003, was designed to enhance U.S. capability to “manage domestic incidents by establishing a single, comprehensive National Incident Management System [NIMS].”<sup>12</sup> It identified the authorities and responsibilities of multiple federal agencies and departments and tasked the DHS Secretary to develop and administer the NIMS and to establish the National Response Plan (NRP).<sup>13</sup> Prior to the directive, comprehensive national incident response was planned and coordinated by the Federal Emergency Management Agency (FEMA) through the Federal Response Plan (FRP).<sup>14</sup> HSPD 5 also specified authorities and responsibilities for the Secretaries of State and Defense, the Attorney General, and others associated with homeland security and defense.<sup>15</sup> It specified that the DHS Secretary would coordinate efforts when one or more of four criteria are met:

- Another federal entity requests DHS assistance
- State and local authorities are overwhelmed and request federal assistance
- More than one federal entity is involved, and/or
- The DHS Secretary is directed by the President<sup>16</sup>

To guarantee the continued balance of state and federal power as envisioned in the US Constitution, HSPD 5 specifically states “[The] Initial responsibility for managing domestic incidents generally falls on state and local authorities.”<sup>17</sup> HSPD 5 mirrors US federal law concerning federal assistance to states during a natural disaster, specifically, the Stafford Act. The Stafford Act outlines the hierarchy of efforts, request procedures, and control of federal assistance. It requires a State Governor to determine a disaster is beyond local and state capabilities and requires Federal assistance and it requires the Governor to request that the President declare a given incident a “major disaster.” Alternatively, the President, if required by the scope and obvious extent of the damage, can unilaterally declare an emergency.<sup>18</sup>

The NRP and NIMS support the collective and coordinated response to disaster or emergency. The NRP describes the structure for HLS policy and federal authority and responsibility. It also provides the operational protocols for different threat levels; incorporates existing response plans; standardizes reporting requirements, assessments, and recommendations; and directs continuous improvement through testing, exercising, and new technology. The NRP is specifically designed to become operational through the NIMS.<sup>19</sup>

The NIMS provides for “prevention, preparation, response and recovery from terrorist attack, major disasters, and other emergencies.”<sup>20</sup> It is supposed to facilitate a

collective approach to incident management in which all levels of government work together – federal, state, local, and tribal. The NIMS was designed to include NIMS core concepts, principles, terminology, and technologies; multi-agency coordination systems; training; resource management; qualifications and certifications; and the reporting and tracking of incident information.<sup>21</sup> The NIMS is the system that provides for collaboration, communication, coordination, and control during the preparation and execution of the NRP. However, though solid as a base system, the NIMS does not provide for immediate response at the regional/multi-state level.

On 17 December 2003, the Bush Administration published HSPD 8 as a “companion directive” to HSPD 5. This directive focused on strengthening and improving the overall coordination, preparedness, and capabilities of federal, state, and local entities. It defined “all hazards preparedness” as including terrorist attacks, major disasters, and other emergencies as referenced in the Stafford Act.

To facilitate preparedness, HSPD 8 directed the DHS Secretary to lead a federal, state and local effort to develop a national preparedness goal with measurable readiness targets, priorities, and assessment metrics. It further directed the initiation of standardization for nation-wide interoperability of first responder equipment standards; the creation and execution of a collaborative, interagency master training and exercise calendar; and the collection and dissemination of lessons learned. HSPD 8 outlines how the federal government awards preparedness assistance in the forms of planning; training; exercises; interoperability; equipment acquisitions; and information gathering, detection, and deterrence based on federally-reviewed, comprehensive preparedness strategies among the states.<sup>22</sup>

To summarize, President Bush directed in HSPDs 5 and 8 the creation of a consolidated NRP and the NIMS through which the NRP would be coordinated and controlled. He also directed the standardization of goals, priorities, training, equipment, information sharing, assessments, and federal assistance. HSPDs 5 and 8 provided a clear strategic vision of a system which unifies the capabilities of all federal, state, and local authorities in one synergized effort to provide for the common security, safety and general welfare. Both directives provided direction to achieve the strategic vision without creating a specific strategy, technique or procedure. These two policies empowered subordinate departments to develop strategies and programs which brought most of the original vision to fruition. Even though the contributions of these directives to domestic security are significant, Hurricane Katrina demonstrated significant shortfalls in the ability to synchronize the capabilities of the United States during a major regional incident.<sup>23</sup>

### Katrina Lessons

The attacks of 9/11 and Hurricane Katrina were, respectively, the most destructive terrorist and natural disasters in our nation's history and highlighted gaps in the nation's readiness to respond effectively to large scale catastrophes.<sup>24</sup>

Hurricane Katrina showed that the existing NIMS and NRP, emphasizing the primacy of state and local governments, "did not address the conditions of a catastrophic event with large-scale competing needs, insufficient resources, and the absence of functioning local governments."<sup>25</sup> These conditions significantly degraded the response to Katrina and highlighted the shortcomings with regional preparedness.

In the aftermath of Katrina, the federal government conducted an in-depth review and identified more than 100 recommendations for corrective action grouped within 17

major lessons. Three of the lessons provide for broad preparedness, including: Training, Exercises, and Lessons Learned; HLS Professional Development and Education; and Citizen and Community Preparedness.<sup>26</sup>

According to the lessons learned, national preparedness was a major challenge in that federal command centers had overlapping and unclear responsibilities, plans to replace destroyed local and state operations centers were not in place, support apparatus were overly bureaucratic, and the Joint Field Office (JFO) was not established until after the peak of the crisis.<sup>27</sup> “Our response to Hurricane Katrina demonstrated the imperative to integrate and synchronize our policies, strategies, and plans – among all Federal, State, local, private sector and community efforts and across all partners in the profession...”<sup>28</sup> Although incident response is a primarily a state and local responsibility, the federal government must be prepared to support or fill in for their efforts during a catastrophic event.<sup>29</sup>

After the Congressional inquiries and investigations into what went wrong with the response to hurricane Katrina...the majority opinion at the federal level is that [FEMA] needs to be strengthened with many parties advocating a broader role for the federal government and the military in regional disaster response.<sup>30</sup>

The system, based on the precepts of federalism, required the federal government to wait for state and local governments to reach their limits, exhaust their resources, and then request federal assistance. This approach may be sufficient for most disasters, but did not meet the requirements of a catastrophic event. Current HLS threats demand that the federal government actively prepare and encourage the nation as a whole to do the same.<sup>31</sup>

Our federalist form of government is driven by the Constitution and Bill of Rights and they do not provide any federal authority or responsibility to direct or control a

regional disaster response. “The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to States respectively, or to the people.”<sup>32</sup> We operate by a state-centered philosophy, even if it is not the most effective way to respond to a major regional disaster or emergency.

The U.S. has grown and conditions have changed since the Bill of Rights was ratified 220 years ago. Our Union has faced many challenges and has managed to maintain, and even strengthen, our constitutional republic. As federal, state, and local governments have become more interconnected and capabilities have grown, the public’s expectations of the federal government have grown exponentially. The federal government’s size, responsibilities, and reputation are certainly greater today than they were following our Revolution. Although not specified in our Constitution, the States and the American people have frequently come to expect federal response to major disasters.

Federal post-Katrina studies concluded that we must build up the regional structures, integrate state and local strategies and capabilities on a regional basis, and that regional offices should be the means to foster state, local, and private sector integration. They also found that regional offices were well suited to pre-identify, organize, train, and exercise JFO staffs and should be capable of rapidly establishing an interim JFO anywhere in their region.<sup>33</sup> These steps would enable the levels of government to obtain the capability to effectively respond to a catastrophic regional event like Katrina. All of these findings eventually resulted in the shift of responsibility from the newly-formed DHS back to its subordinate organization, FEMA, and its regional offices.

The Bush administration recognized the lack of regional unity of effort and began making corrective actions. In January of 2008, the Bush Administration “overhauled the nation’s emergency response blueprint...streamlining a chain of command that failed after Hurricane Katrina in 2005.”<sup>34</sup> The new 90-page National Response Framework replaced a 427-page 2004 plan, restored FEMA’s power to coordinate federal disaster response, and clearly delineated who is in charge and what responsibilities lie with the different tiers of government.<sup>35</sup>

Early on, the Obama Administration also recognized the seam between state and federal response for a regional/multi-state disaster and initiated a study of the issues in February of 2009 through Presidential Study Directive (PSD-1). In PSD-1, President Obama directed the review include how to

...strengthen interagency coordination...of the full range of HLS and Counter-Terrorism policies...; ensure seamless integration between international and domestic efforts; ensure a seamless capability within the White House to coordinate planning for the federal government’s response to domestic incidents of all kinds; and retain, within the White House the capacity to coordinate federal, state, local, and tribal efforts to respond to natural disasters, including as a result of hurricanes, floods, fire, and other incidents, if necessary.<sup>36</sup>

Current policy lacks a specific vision or guidance on the desired interoperability between the federal government and multiple state governments when a major disaster or emergency spans multiple states/a region simultaneously. Policy must be updated to address the state and federal responsibilities and the requirements to respond to a regional catastrophic event in a timely and unified manner. This is an issue of effectiveness and efficiency.

Since Hurricane Katrina, challenges to unity of effort have drawn the attention of state and local governments and multiple federal departments. In February of 2009,

DHS along with United States Northern Command (USNORTHCOM), announced a new program “designed to make states devote more fulltime personnel to drawing up emergency response plans.”<sup>37</sup> Teams of two to three fulltime employees were hired to develop plans for catastrophic events including earthquakes and hurricanes in coordination with USNORTHCOM and FEMA. Funding was provided through DHS preparedness technical assistance grants.<sup>38</sup>

In October of 2009, the FEMA Response, Recovery, and Logistics Management Directorates were combined under the office of Response and Recovery. The reorganization enhanced FEMA's ability to provide a more immediate federal disaster response. Within the new office, FEMA has a Planning Division focused on developing, integrating, and coordinating state and FEMA regional catastrophic response plans for earthquakes, hurricanes, nuclear attacks, and other threats.<sup>39</sup>

On 11 January 2010, President Obama signed Executive Order 13528 which established the Council of Governors as required by the 2008 National Defense Authorization Act. The council was created to advise and to collaborate with the federal government on issues related to national security, homeland defense, the National Guard, military support to civil authorities, and synchronization of state and federal military activities. The council consists of two Co-Chairs of different political parties and eight other State Governors. All are presidentially appointed for two years and no more than five members may be part of the same political party. Federal participants include the Secretaries of Defense and Homeland Security, various assistants to the President and Assistant Secretaries, the USNORTHCOM Commander, the Commandant of the Coast Guard, and the Chief of the National Guard Bureau.<sup>40</sup>

One friction area between state and federal governments originates in HSPD 5 where the Secretary of Homeland Security is tasked to ensure the compatibility of local, state, and federal response plans. In addition to the challenges of interests, budgets, manpower, and priorities, there are more than 87,000 jurisdictions within the United States which complicate requirements.<sup>41</sup> Despite the improvements since 2003, our system has yet to develop standardized readiness metrics, reports, and assessments.

On 29 October 2010, the United States Government Accountability Office (GAO) issued a FEMA capabilities assessment titled “FEMA Has Made Limited Progress in Efforts to Develop and Implement a System to Assess National Preparedness Capabilities.”<sup>42</sup> This assessment was a follow-up on FEMA’s performance in establishing a national preparedness system, a responsibility assigned in October of 2006 as part of the Post-Katrina Emergency Management Reform Act.<sup>43</sup> FEMA reported that one of its evaluation efforts, the State Preparedness Report, has helped gather data but the data was subjective and open to interpretation. The GAO assessed that since April of 2009, FEMA had not developed capability requirements or an assessment framework and had made limited progress in assessing preparedness capabilities.<sup>44</sup> Without a system to uniformly assess capabilities and issues, obtaining common readiness or the ability to react across multiple organizations in a unified manner will be problematic at best.

Additionally, in October 2010, Representative Bennie Thompson (D-MS), then-HLS Committee Chairman, released a statement in response to a DHS IG report on disaster preparedness planning. His statement, validating a continuing shortfall in

catastrophic disaster response and in coordination among the tiers of government, follows:

The report found that FEMA has made progress in responding to catastrophic disasters, especially with regards to emergency communication. Nevertheless, there still is substantive work to be done in terms of overreliance on contractors, staffing levels, contractor oversight, and coordination with state, local, and tribal leaders.<sup>45</sup>

Threats and conditions have changed since the founding fathers drafted the Constitution and Bill of Rights and since 9/11. The challenge is to mitigate current threats through enhanced capability without infringing on our Constitution. HSPDs 5 and 8 partially met the challenge and enabled substantial growth in the interoperability of federal, state, and local governments while empowering and strengthening subordinate organizations. More refinement is required. A study of the current systems and threat scenarios is warranted to completely understand the requirements for regional/ multi-state unity of effort disaster or incident response.

### Current Systems

The 2010 National Security Strategy (NSS) states the federal government is integrating domestic all-hazards planning and preparation at all levels of government and “encouraging domestic regional planning and integrated preparedness programs...”<sup>46</sup> That planning and preparation is conducted under the NIMS Framework as depicted in Figure 1. The NIMS includes command structures only at the field level and command is designed to provide on-scene emergency management, even in the case of multiple incident sites.

## National Incident Management System (NIMS) Framework

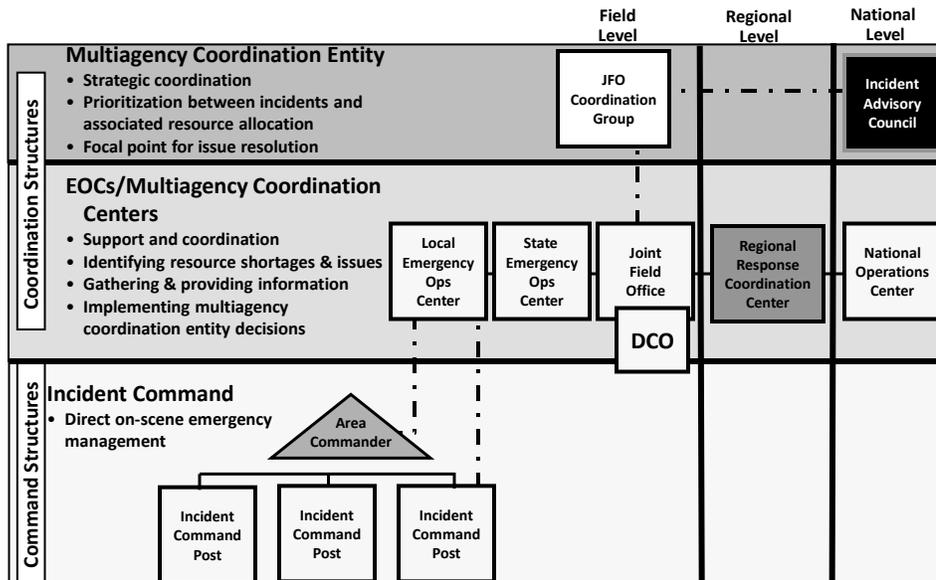


Figure 1: National Incident Management System Framework<sup>47</sup>

Figure 1 also depicts multiagency coordination structures in two different tiers at the field, regional, and national levels. The top tier consists of the Joint Field Office (JFO) Coordination Group at the field level, nothing at the Regional Level, and the Incident Advisory Council (IAC) at the National Level. The National level provides strategic coordination, prioritization of assets between competing incidents, and issue resolution.

DHS has published a Standard Operating Procedure (SOP) titled *Joint Field Office Activation and Operations*.<sup>48</sup> The SOP specifies the JFO role in resolving policy issues and articulates that unresolved resource issues “may be handled by the Regional Response Coordination Center (RRCC), the National Operations Center – National Response Coordination Center (NOC – NRCC), the IAC, or may be forwarded through the respective agency chains of command...”.<sup>49</sup> In other words, resource issues are

managed and gain unity of effort at the middle tier – the tier with Emergency Operations Centers (EOCs) and Multiagency Coordination Centers. This tier warrants greater review.

The intermediate tier, between the on-scene command tier and the strategic policy tier, consists of operations or coordination centers at field, regional, and national levels. This tier coordinates and supports operations, identifies resource shortages and issues, manages information, and implements multiagency decisions. Within this tier, the field level includes standing local and state emergency operations centers and the JFO.

The NOC is a multi-agency operation center, operates continuously, facilitates HLS information sharing and a common operating picture (COP), and provides for coordination with governmental and NGO partners.<sup>50</sup> Within the NOC, the National Response Coordination Center (NRCC) is FEMA’s primary operations center and operates continuously to monitor potential incidents and support regional and field elements. The NRCC can immediately increase staff in response to an event to cover the full range of Emergency Support Functions (ESFs).<sup>51</sup> The 15 ESFs are the primary functional areas for assistance.<sup>52</sup> “ESFs provide staff to support the incident command sections for operations, planning, logistics, and finance/administration, as requested.”<sup>53</sup>

FEMA provides a regional structure through 10 regional offices which provide continuous representation to and access for states and communities. FEMA deploys people to the offices when state governments request federal assistance.<sup>54</sup> The regional offices are staffed by many of FEMA’s most experienced personnel and mobilize federal assets and teams in response to an event. Each office includes a

continuously-operating RRCC that expands to become an interagency facility in preparation for or response to an event. “Ongoing RRCC operations transition to a Joint Field Office (JFO) once it is established, so that the RRCC can remain ready to deal with new incidents.”<sup>55</sup>

The JFO is a temporary federal entity, the primary federal incident management field structure, and has primary responsibility for response and recovery. It provides centralized coordination of governmental, private sector, and NGO organizations, but does not provide on-scene operations management. The JFO is staffed by request, based on the incident requirements and may include federal, state, law enforcement jurisdictions, private sector, and NGO representatives. Multiple JFOs may be established if an incident or multiple incidents impact the entire country or multiple states or locations.<sup>56</sup> The JFO is supported by the Regional Defense Coordinating Officer and Element (DCO/E) which serve as the conduit for Defense Support of Civil Authorities (DCSA). Of course, DCSA timeliness is a concern in the case of a major homeland regional incident.<sup>57</sup>

To recap, the current NIMS framework consists of a command system at the field level on the bottom tier, policy arbiters at the top tier, standing mid-tier state EOCs, and ad-hoc mid-tier RRCCs and JFOs. It is worth noting that the only standing organizations at the field level are state entities. This framework is not an issue if the incident and time allows for a deliberate creation of federal capability. The current framework assumes that state and local authorities will desire to and be capable of handling the incident for the first 72-96 hours – an assumption that becomes less valid should a multi-state or regional disaster or emergency occur. In fact, current timelines

reflect local, state and National Guard involvement preceding and immediately after the event while the first federal civilian involvement begins between 12-24 hours after the event and DOD participation begins after the 24-48 hour mark.<sup>58</sup> Any attempt to assemble, plan and coordinate for, receive and integrate, and employ additional capabilities just adds additional response time. Again, this is not an issue, for instance, for a predictable flood in a single state; but it would be a major issue for a multi-state issue, such as an earthquake.

On 30 September 2010, FEMA's Assistant Administrator for Disaster Operations, Colonel (Retired) Bill Carwile, testified before the U.S. Senate. His testimony emphasized the necessity for a unified effort across all of the tiers of government and non-governmental players, even within the first 72 hours. He stated that a major event such an earthquake "requires immediate, massive, and sustained support from not only the whole community and federal, state, and local governments, but also from our many private sector and volunteer agency partners."<sup>59</sup> FEMA seeks "the active participation of the whole community to heighten awareness, plan, train, and organize as a practiced team."<sup>60</sup> "We have identified the highest priority tasks necessary to save and sustain lives and stabilize a catastrophic incident during the crucial first 72 hours."<sup>61</sup>

The current policy is reactive and does not provide for immediate, effective response. It requires the federal government to wait until called and then respond, but the rapid and ad-hoc assembly of personnel and capability is not always effective. The President may declare a national state of emergency as another way to quickly marshal the resources of the federal government with less bureaucracy.<sup>62</sup> Even with an early declaration, precious hours are lost as teams assemble - hopefully with the right

capabilities, resources, and people. Current threats demand that our federal, state, and local systems prepare to provide immediate, effective response to a regional or multi-state disaster or emergency.

### Requirements and Recommendations

Katrina and subsequent assessments demonstrated significant shortfalls in providing for regional disaster response and identified the requirements for immediate, effective, unified effort in regional response. Solutions to strategic issues include the identification of the desired ends, the methods/ways to achieve those ends, and the means required by the methods. The desired capability is to provide immediate and effective, whole of community, unity of effort in responding to a multi-state or regional emergency or disaster. Given this broad strategic capability vision, we now must identify the ways and means.

To achieve the desired vision, a regional organization will have to identify essential tasks, develop systems, and gain proficiency in those essential tasks. Based on the GAO reports and FEMA testimony, it is clear that holistic planning, readiness reporting, and synchronization remain as areas requiring improvement. To improve overall performance, one must identify the organizational characteristics and supporting tasks that a regional organization must perform.

According to the FEMA, there are fourteen “proven management characteristics that contribute to the strength of the overall [Incident Command] System.” A few are listed as challenges in the 2010 annual update on the National Security Council (NSC) and Interagency System, including incident action planning, timely unity of effort, and information and intelligence management.<sup>63</sup> Each of these three management characteristics is supported by three essential tasks which must be achieved to obtain

effective regional response. A summary of each of the three tasks is outlined in subsequent paragraphs. It should be noted that these tasks are some of the most difficult things that military organizations struggle with and each of these tasks are currently included as some of USNORTHCOM's unique challenges in the October 2010 annual update titled *National Security Policy Process: the National Security Council and Interagency System*.<sup>64</sup>

The first essential task is to: *manage information and maintain situational understanding and a Common Operating Picture (COP)*. The regional organization must receive, process, distribute, and store information. Information management is incredibly important and grows more challenged as information sharing is promoted between federal, state, local, and NGO partners.<sup>65</sup> Based on historical assessments, information management should include reception and review of Incident Action Plans (IAPs), preparedness reports, and the current status of personnel, systems, and equipments. Data concerning capabilities and synchronization efforts should be maintained on a COP and staff section running estimates and preferably posted to what could be referred to as a "Regional Portal." The COP should also contain the disaster assessments and identification of support needs. Responders "...require real time information about the magnitude and effects of natural and manmade disasters to properly, and promptly, tailor effective ... support ..."<sup>66</sup> Clearly, the COP must include a common view of organizations, capabilities, and the problem.

The second essential task is to *coordinate and synchronize*. With a clear understanding based on information sharing and a COP, the real work can begin.... "Planning for, integrating, and synchronizing the activities of the DOD, DHS, DOJ, state

and local entities, and NGOs to ensure mutual understanding and unity of effort.”<sup>67</sup> Specifically, a regional organization must be capable of rapidly and continuously coordinating with DHS, all levels of government, governmental departments and agencies, the military components, and the private sector. It must be able to prioritize competing efforts and employ multiple capabilities against a variety of issues, threats, and requirements.

The third essential task is to *manage resources*. The regional office must have precise, up-to-date, knowledge of the types, quantities, and readiness status of all available resources. With this situational understanding, the regional office should identify resource requirements and shortfalls and prioritize limited assets and capabilities. Finally, the regional office must be capable of immediately integrating other capabilities and organizations, at least for the first 72 hours or until a JFO is active. This integration of other units would include, but is not limited to three main tasks:

*Reception, Staging, and Integration.*

Each of the three tasks contains many sub-tasks and associated skills. Given this set of essential tasks, one can identify requisite staff functions. Since the RRCC is designed to stand in as a JFO until a JFO is activated, it makes sense that a standing regional capability should mirror the capability in a functioning JFO – which mirrors the Incident Command System (ICS). The DHS JFO Activation and Operations SOP outlines the JFO staff. It consists of a Chief of Staff; a support staff including a safety coordinator, legal affairs officer, equal rights officer, and a JFO Security Officer and several deputies; Liaison Officers; External Affairs Officers; a Public Affairs Information Center; and the DCO/E. The JFO staff is typically organized into four major sections

including plans, operations, logistics, and finance/administration.<sup>68</sup> The ICS staff is identically organized. For continuity and interoperability, this paper recommends mirroring the ICS and JFO staffs.

Having identified the requisite characteristics, essential tasks, and a base structure, it is important to further describe some key points that will make a regional organization capable of obtaining the desired end state. First, a regional organization should include permanent representation from federal agencies and each state, in addition to on-call representation from non-governmental organizations as required by the incident. The requirement for state representation is non-negotiable. Agency representatives might be able to double-up or rotate, depending, for instance, on whether or not they are involved in an ESF. Structurally, the most effective coordinating organizations have a flat hierarchy and free flow of information. This type of organization facilitates collaboration, and ensures that all participants have equal prestige and autonomy.

The facility and information management design should be such that it facilitates continuous situational awareness and collaboration, rapid assessments and prioritization, and timely unified response across the region. Design of physical space and facilities must emphasize the equality of all players and facilitate collective focus on problem solving and synergistic response. Everything must be designed to facilitate collaborative and continuous coordination based on a central common operating picture.

To this point, this paper has listed the characteristics, essential tasks, a base structure, and a few keys to success. Given these details, a team can assemble and

begin to form. Any team, expected to perform at an acceptable level within a very short time, must develop systems and processes and train before they can be expected to execute.

In quantifying minimum team processes, the author draws heavily on experience as the Senior Command and Control Trainer at the Joint Readiness Training Center. The most essential tasks, and the biggest challenges, that headquarters have in managing on-going operations or executing pre-planned missions all revolve around the establishment and enforcement of base systems: Organizational and Section Battle Rhythms; Individual and Section Duties and Responsibilities; Planning, Synchronization, and Assessment Systems; and Knowledge Management.<sup>69</sup> Even in a standardized organization like the ICS, it would be virtually impossible for an ad-hoc team to gain any reasonable level of performance in a short period of time, especially when reacting to a major regional disaster or emergency. It is possible for a cadre to develop, refine, and lead others if the base systems exist and have been previously exercised by the entire team. With those base systems in place, any organization attempting to gain unity of effort must address and collectively practice communication, sharing situational understanding, providing assessments and recommendations, and planning for and synchronizing future operations.<sup>70</sup>

As a regional organization establishes these key processes, their proficiency in the three essential tasks will improve. These improvements will not only show in daily situational understanding, but will show through improved planning, readiness reporting, and the ability to execute crisis and consequence management. It is feasible that the regional offices could take on the task of standardizing and articulating readiness

reporting metrics and ensuring the subsequent reporting, tracking, and COP of a region's disaster readiness.

After building the regional capability, the regional teams should be incorporated into pre-planned and no-notice disaster response and military exercises. FEMA will host the National Level Exercise 2011 (NLE 11). NLE 11 is a series of congressionally mandated exercises culminating in May of 2011 with the capstone. It will test the whole of community catastrophic earthquake response, including focus on the interaction between state EOCs, FEMA RRCCs, and federal EOCs. Specifically, response capabilities will be measured in communications, logistics, mass care, medical surge, evacuation, sheltering, public information and warning, EOC management, and long-term recovery.<sup>71</sup> The capabilities that NLE 11 will evaluate should be the desired no-notice and continuous capabilities we intend to maintain.

Having identified the strategic vision and the methods required to reach that vision, means must be applied. Specifically, regional capability facilities and personnel requirements must be identified. Forecasted budgetary constraints will likely limit the means available. This paper has already enumerated the threat and response requirements for a regional capability. Budgetary constraints should not drive a shortsighted or narrow view when searching for means. As we look to raise homeland security capabilities and readiness, we must accept that it will take time, remembering that it took decades to build our national security systems, arguably the best in the world.

Budgetary constraints require current organizations, capabilities, and facilities be maximized. This paper would suggest that the most effective approach is to integrate

all requirements within the existing 10 FEMA Regional Offices and RRCCs. With the facilities identified, the next challenge becomes identifying the personnel to man them.

The optimal solution is to man every RRCC at 100% using new hires, but that is not likely to be considered feasible. Fiscal concerns at all levels of government require the most efficient use of resources. Maximizing current capacity and existing structure will provide the most feasible, acceptable, and suitable course of action.

How could DHS and FEMA obtain a regional capability? FEMA has already invited associations to nominate corporate candidates to serve three month rotations within the NRCC and recognizes that “success depends on the collective and collaborative efforts of the whole of community.”<sup>72</sup> This approach also has the potential to work at the regional level, given FEMA’s existing ties at local and state level. To minimize requirements, the best approach should be one of batching where a single expert or group of experts represents several grouped industries, businesses, vocations or organizations. For example, one person represents an entire state’s first responder organizations. Individual proficiency, regional understanding, and overall preparedness would improve through shared information and lessons learned. FEMA could offset some of the financial burden through readiness grants, much as it did historically for the state disaster response planners.

With an already standing RRCC and some ESF augmentation, one significant manning issue remains – the military. All branches and components of the military may have a large part in regional response, especially within the first 72 hours. In fact, a briefing slide presented by the FEMA administrator in September 2010 reflected DoD as an ESF lead or supporter in all ESFs.<sup>73</sup> The challenge is to ensure an immediate

regional military coordinating entity, capable of coordinating all branches of service and components.

Regional DCO/Es, if collocated inside the FEMA RRCC and augmented by a National Guard representative from each of the states within the region, can serve as immediate, temporary operations centers to facilitate military unity of effort until the appropriate Joint Task Force headquarters is established. The Guard representative would be directly responsible for the status of military within their state – Army and Air Guard and the reserves of all branches. Additionally, the state Guard representative would be the conduit for, partner in, if not a planner of, the states' holistic disaster response plans.

Several other options to improve regional capability are available for further study, including the realignment of US Army Corps of Engineer Districts and of existing military reserve force structure. Regardless of the final solution, “Regional personnel must remember that they represent the interests of the federal government and must be cautioned against losing objectivity or becoming mere advocates of the State and local interests.”<sup>74</sup> Rewards for regional cooperation and collaboration and for state participation will go a long way in reinforcing the importance of the regional capability.

This paper has captured the requirements for a regional capability. It also identified that the vision of the desired capability is to provide immediate and effective whole of community unity of effort in responding to a multi-state or regional emergency or disaster. This work then provided the requisite characteristics, three essential tasks, a base organizational structure, a few structural keys to success, and minimum team processes required to obtain base proficiency as a regional coordinating organization.

Finally, this study recommended a few means which could be applied to bring about the desired end state. Regional unity of effort is difficult, but it must be achieved. We cannot wait for another 9/11 or Katrina to reprove the existing requirement to immediately synchronize federal support should a catastrophic event simultaneously influence multiple states.

### Endnotes

<sup>1</sup> Frances F. Townsend. *The Federal Response to Hurricane Katrina Lessons Learned*. (Washington, DC: The White House, 23 February 2006), 53.

<sup>2</sup> U.S. Constitution, Preamble.

<sup>3</sup> Barrack H. Obama, Presidential Study Directive – 1 (Washington, D.C.: The White House, 23 February 2009), 1.

<sup>4</sup> U.S. Congress, Senate, Homeland Security and Governmental Affairs Committee Hearing; Earthquake Preparedness: What the United States can Learn from the 2010 Chilean and Haitian Earthquakes[1],” Congressional Documents and Publications September 30, 2010, 2. <http://www.proquest.com/> (accessed January 10, 2011).

<sup>5</sup> United States Government, *National Planning Scenarios: Created for use in National, Federal, State, and Local Homeland Security Preparedness Activities, Version 20.1 DRAFT*. April 2005.

<sup>6</sup> U.S. Congress, Senate, Homeland Security and Governmental Affairs Committee Hearing; Earthquake Preparedness: What the United States can Learn from the 2010 Chilean and Haitian Earthquakes[1],” Congressional Documents and Publications September 30, 2010, 2. <http://www.proquest.com/> (accessed January 10, 2011).

<sup>7</sup> U.S. Department of Defense, *Doctrine for the Armed Forces of the United States*, Joint Publication 1 (Washington, DC: U.S. Department of Defense, 20 March 2009), GL-11.

<sup>8</sup> Ibid.

<sup>9</sup> U.S. Department of Homeland Security, *National Response Framework*, (Washington, DC: U.S. Department of Homeland Security, January 2008), i.

<sup>10</sup> Congressional Research Service Report for Congress, *Presidential Directives: Background and Overview* (Washington D.C.: Congressional Research Service, November 26, 2008), 3.

<sup>11</sup> Federation of American Scientists Presidential Directives Home Page, <http://www.fas.org/irp/offdocs/nspd/index.html> (accessed 14 November 2010).

<sup>12</sup> George Bush, "Homeland Security Presidential Directive 5: Management of Domestic Incidents", 28 February 2003, [http://www.dhs.gov.xabout/laws/gc\\_1214592333605.shtm](http://www.dhs.gov.xabout/laws/gc_1214592333605.shtm). (accessed 8 Sep 2010).

<sup>13</sup> Ibid.

<sup>14</sup> Wikipedia: National Response Plan, [http://en.wikipedia.org/wiki/National\\_Response\\_Plan](http://en.wikipedia.org/wiki/National_Response_Plan) (accessed February 5, 2011).

<sup>15</sup> Bush, Homeland Security Presidential Directive 5.

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

<sup>18</sup> Congressional Research Service Report for Congress, *Robert T. Stafford Disaster Relief and Emergency Assistance Act: Legal Requirements for Federal and State Roles in Declaration of an Emergency of a Major Disaster* (Washington D.C.: The Library of Congress, 16 September 2005), 1.

<sup>19</sup> Bush, Homeland Security Presidential Directive 5.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> George Bush, "Homeland Security Presidential Directive 8: National Preparedness", 17 December 2003, [http://www.dhs.gov.xabout/laws/gc\\_1214592333605.shtm](http://www.dhs.gov.xabout/laws/gc_1214592333605.shtm). (accessed 8 Sep 2010).

<sup>23</sup> Tammi K. Franks, "Who's in Charge? How the Law Impacts Chain of Command in Regional Disaster Situations," 1, <http://www.fitzhewlaw.com/Whitepapers/RegionalDisasterChainofCommandWhitePaper.pdf> (Accessed 10 OCT 2010).

<sup>24</sup> U.S. Government Accountability Office, *FEMA Has Made Limited Progress in Efforts to Develop and Implement a System to Assess National Preparedness Capabilities* (Washington, DC: U.S. Government Accountability Office, October 29, 2010), 6.

<sup>25</sup> Frances F. Townsend. *The Federal Response to Hurricane Katrina Lessons Learned*. (Washington, DC: The White House, 23 February 2006), 52.

<sup>26</sup> Ibid, 51.

<sup>27</sup> Ibid, 53.

<sup>28</sup> Ibid, 66.

<sup>29</sup> Ibid, 2.

<sup>30</sup> Franks, Who's in Charge?, 2.

<sup>31</sup> Townsend, *Federal Response to Hurricane Katrina*, 66.

<sup>32</sup> United States Congress, "The Bill of Rights," December 15, 1791, [http://www.archives.gov/exhibits/charters/bill\\_of\\_rights\\_transcript.html](http://www.archives.gov/exhibits/charters/bill_of_rights_transcript.html) (Accessed 11 OCT 2010)

<sup>33</sup> Townsend, *Federal Response to Hurricane Katrina*, 70.

<sup>34</sup> Spencer Hsu, "DHS to Unveil New Disaster Response Plan; FEMA Will Regain Power; State, Local Input Included," *The Washington Post*, January 19, 2008.

<sup>35</sup> *Ibid.*

<sup>36</sup> Barack H. Obama, Presidential Study Directive – 1 (Washington, D.C.: The White House, 23 February 2009), 2.

<sup>37</sup> Stew Magnuson and Matthew Russling, "DHS Pilot Program to Focus on State Emergency Planning," *National Defense* 93, issue 663 (February 2009): 13, in ProQuest (accessed January 10, 2011).

<sup>38</sup> Magnuson, "DHS Pilot Program", 13.

<sup>39</sup> U.S. Congress, Senate, Homeland Security and Governmental Affairs Committee Hearing; Earthquake Preparedness: What the United States can Learn from the 2010 Chilean and Haitian Earthquakes[1], "Congressional Documents and Publications September 30, 2010, 2. <http://www.proquest.com/> (accessed January 10, 2011).

<sup>40</sup> Barack Obama, Executive Order 13528: *Establishment of the Council of Governors* (Washington, DC: The White House, 11 January 2010), 1.

<sup>41</sup> George W. Bush. *The National Strategy for Homeland Security*. (Washington D.C.: The White House, 16 July 2002), vii.

<sup>42</sup> U.S. Government Accountability Office, *FEMA Has Made Limited Progress in Efforts to Develop and Implement a System to Assess National Preparedness Capabilities* (Washington, DC: U.S. Government Accountability Office, October 29, 2010), 1.

<sup>43</sup> *Ibid*, 6.

<sup>44</sup> *Ibid.*

<sup>45</sup> Disaster Preparedness Report Shows Modest Progress. 2010. *Congressional Documents and Publications* October 15, 2010, 1. <http://www.proquest.com/> (accessed January 10, 2011).

<sup>46</sup> Barack Obama. *National Security Strategy*. (Washington D.C.: The White House, May 2010), 19.

<sup>47</sup> Homeland Defense and Civil Support Net Forum. Guy Gahres, "Quick NIMS Framework\_flow\_emac," <https://forums.bcks.army.mil/CommunityBrowser.aspx?id=1243678&lang=en-us>. (accessed December 22, 2010).

<sup>48</sup> U.S. Department of Homeland Security, *Joint Field Office Activation and Operations, Interagency Integrated Standard Operating Procedure*, (Washington, DC: U.S. Department of Homeland Security, Version 8.3, Interim Approval April 2006), 14.

<sup>49</sup> Ibid.

<sup>50</sup> U.S. Department of Homeland Security, *National Response Framework*, (Washington, DC: U.S. Department of Homeland Security, January, 2008), 55.

<sup>51</sup> Ibid, 56.

<sup>52</sup> Ibid, 57.

<sup>53</sup> Ibid, 60.

<sup>54</sup> Townsend, Federal Response to Hurricane Katrina, 17.

<sup>55</sup> U.S. Department of Homeland Security, *National Response Framework*, 61.

<sup>56</sup> Ibid, 62.

<sup>57</sup> Whitaker, Alan G., Smith, Frederick C., & McKune, Elizabeth (2010). *The National Security Policy Process: The National Security Council and Interagency system. (Research Report, October 8, 2010 Annual Update)*. Washington, D.C.: Industrial College of the Armed Forces, National Defense University, U.S. Department of Defense, 61.

<sup>58</sup> Homeland Defense and Civil Support Net Forum. "DSCA 101 Briefing," <https://forums.bcks.army.mil/CommunityBrowser.aspx?id=1191308&lang=en-us>. (accessed December 22, 2010).

<sup>59</sup> U.S. Congress, Senate, Homeland Security and Governmental Affairs Committee Hearing; Earthquake Preparedness: What the United States can Learn from the 2010 Chilean and Haitian Earthquakes[1],” Congressional Documents and Publications September 30, 2010, 1. <http://www.proquest.com/> (accessed January 10, 2011).

<sup>60</sup> Ibid.

<sup>61</sup> Ibid.

<sup>62</sup> Franks, Who's in Charge?, 4.

<sup>63</sup> Whitaker, Alan G., Smith, Frederick C., & McKune, Elizabeth (2010). *The National Security Policy Process: The National Security Council and Interagency system. (Research Report, October 8, 2010 Annual Update)*. Washington, D.C.: Industrial College of the Armed Forces, National Defense University, U.S. Department of Defense, 61.

<sup>64</sup> Ibid.

<sup>65</sup> Ibid.

<sup>66</sup> Ibid.

<sup>67</sup> Ibid.

<sup>68</sup> U.S. Department of Homeland Security, *Joint Field Office Activation and Operations, Interagency Integrated Standard Operating Procedure*, (Washington, DC: U.S. Department of Homeland Security, Version 8.3, Interim Approval April 2006), 16.

<sup>69</sup> Valery C. Keaveny, Jr., "Brigade C2 Trends at JRTC," briefing slides with commentary, Fort Polk, LA JRTC, May 2010.

<sup>70</sup> Ibid.

<sup>71</sup> U.S. Congress, Senate, Hearing; Earthquake Preparedness, 5.

<sup>72</sup> Ibid, 9.

<sup>73</sup> Craig Fugate, "A Whole of Community Framework for Catastrophic Planning and Response," briefing slides, Washington DC, US Department of Homeland Security, FEMA, September 10, 2010.

<sup>74</sup> Townsend, Federal Response to Hurricane Katrina, 54.