Chapter 22

Civil-Military Relations in Hurricane Katrina: A Case Study on Crisis Management in Natural Disaster Response

Jean-Loup Samaan and Laurent Verneuil

In late August 2006, Hurricane Katrina struck the New Orleans region, affecting an area of over 90,000 miles. It began with a hurricane which led to flooding, disrupting millions of lives across multiple jurisdictions, and damaging or destroying much of the local critical infrastructure—21 refineries, miles of electricity transmission lines, and telecommunications equipment—within these regions. Over 100,000 patients received medical treatment; housing assistance or direct housing was provided to over 390,000 displaced individuals and families; and over 1.7 million victims registered for disaster assistance.

In the end, Hurricane Katrina caused over \$96 billion in property damage, destroyed an estimated 300,000 homes, produced 118 million cubic yards of debris, displaced over 770,000 people, and killed an estimated 1,330 people. In comparison, Hurricane Andrew (one of the costliest U.S. natural disasters before Hurricane Katrina) created \$33 billion in property damage, destroyed approximately 250,000 homes, and killed 60 people. About 80 percent of the fatalities caused by Hurricane Katrina occurred in the New Orleans metropolitan area; 231 fatalities occurred in Mississippi.¹

Many assessments have been issued on the failure of the Bush administration to contain and control this major disaster. How could the local authorities lack such basic logistics, like search and rescue teams on the ground? Why did the Government react so slowly? Why did the Federal Emergency Management Authority (FEMA) appear as an irrelevant coordinator? Why was it so difficult to communicate between civil and military units? As a matter of fact, the events happening in the Gulf Coast the summer of 2005 only underlined one key dilemma of federalism as a political system when it comes to crisis management. More particularly, the 10th Amendment states that "powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." This means that since the inception of the U.S. Constitution, policymakers have always preferred community-centered processes over Washington-centric planning.²

Indeed it is worth noticing that all the debates surrounding the aftermath of the events—when the Administration was attempting to learn lessons from its mistakes—turned around a few simple questions: What is the best solution between coordination and centralization when

¹ Lynn Davis (ed.), *Hurricane Katrina: Lessons for Army Planning and Operations* (Santa Monica: RAND Corporation, 2007), p. 2.

² James Jay Carafano, Richard Weitz, "Learning from Disaster: The Role of Federalism and the Importance of Grassroots Response", Joint Center for Operational Analysis Bulletin, vol. III, issue 2, June 2006, p. 43.

facing a national disaster? Shall we promote a single and unified chain of command? Or a joint management structure based on local authorities' primacy? Shall we advocate a centralized logistic with an exclusive command and control structure? Or shall we preserve the existing and separate civil and military systems and only incite organizations to create some commonalities?

In that perspective, Hurricane Katrina is not only a case study to understand the American political system and the way it manages natural crises. It also sheds light on issues that international or supranational organizations like the European Union can face in the future. For instance, this research paper will demonstrate how comparing the deployment of neighboring states' national guards in the New Orleans area to the potential deployment of the various national militaries in Europe on a member's soil is relevant. Indeed, it helps to better understand the need for civil-military cooperation in disaster response. As we will see, this cooperation remains intrinsically dependent upon the political as well as legal framework that countries have established.

Therefore, based on the numerous "lessons learned" made available and several interviews conducted with key actors, this paper will explore this fundamental dilemma—centralizing versus coordinating—in three parts. First, we will give an assessment of the mismanagement of Hurricane Katrina by describing how legal and bureaucratic constraints at the top hindered civil-military cooperation at the bottom. Second, we will analyze the multiple institutional changes which occurred in the aftermath of Katrina: the publication of a new National Response Framework as well as the refinement of the command & control structure. Finally, based on the outcomes of this case study, we argue that they are two main lessons from Katrina that can be applied to other context: the need for a military agenda including crisis management; and the need for implementing multiple political exercises to strengthen civil-military cooperation.

The Mismanagement of Hurricane Katrina

Arguing about the irrelevance of the political response to Katrina could be an easy thing. Nevertheless, if statistics tend to present the events as one of the biggest natural disasters in American history, it would be wrong to think that this was mainly due to some kind of human carelessness before the crisis. Most of the failures can be traced to and explained by the inadequate institutional framework which was put into place long before Katrina. Indeed, a report from the Washington-based think tank, the Center for Strategic and International Studies, wisely states:

Tensions between the state/local and federal level are hardly unusual, though they rarely interfere so significantly with the actual response effort as they did after Katrina.³

This framework was only refined after 9/11 but in a way to address the terrorist threat, not the one of disaster emergency. Uundoubtedly, the scope of Katrina was unexpected, but many actors interviewed concede that the legal constraints were critical, starting with the "first responder" issue.

³ Christine Wormuth, Anne Witkowsky, "Managing the Next Domestic Catastrophe: Ready (or Not)?", CSIS, June 2008, p. 7.

The First Responder Issue and its Bureaucratic Consequences

Because of American federalism, states are legally nominated as "first responders" regarding crises like natural or man-made disasters. Theoretically, when state resources are exhausted, state governors may request assistance from neighboring states through the Emergency Management Assistance Compact (EMAC) or directly from the Federal Government under a presidential disaster or emergency declaration.

In this context, this framework induces all the issues at the core of U.S. civil-military relations during such a crisis, especially the difficult interaction between state and federal authorities. As a matter of fact, state governors may call up members of the National Guard under their control to respond to domestic emergencies, including natural disasters, civil unrest, terrorist incidents, and other complex contingencies. The operation is then commanded by state-level authorities and funded by the state. If state-level authorities happen to be overwhelmed by the events, they can transfer their power to the federal government.

Therefore, on August 27, 2006, one day after Hurricane Katrina struck the town of Buras-Triumph, Louisiana, 66 miles southeast of New Orleans, Mayor Ray Nagin announced a state of emergency and issued a call for voluntary evacuation. In the meantime, Louisiana's Governor Blanco sent a letter to President George W. Bush asking him to declare a major disaster for the State of Louisiana, in order to release federal assistance. At that moment, the FEMA federal coordinating officer (FCO) became the person in charge of coordinating relief efforts with Government bodies, relief agencies and local authorities.

The Inability to Coordinate at the Top

Many commentators emphasized the operational liability of such disaster response planning. First, some argued that the decision to transfer responsibility to the state of Louisiana was disingenuous because these same institutions were overwhelmed. Indeed if events are progressing extremely fast, how can one step back and decide to transfer power? Edward Cavin from the Center for Naval Analyses underlined this problem by describing the National Response Plan as a "sequential process—local, then state, then federal—that assumed the federal response was the last resort for major natural disasters."

Second, Louisiana's Governor Blanco and New Orleans' Mayor Nagin were rapidly criticized for their blurry, inadequate, and inaccurate requests to federal authorities regarding the troops, supplies, and logistics necessary. In that perspective, a report from the American Bar Association asked:

How did the state express or clarify its authority through statutes or executive orders; how was that authority implemented through plans, procedures, and protocols; in what manner did the state execute that authority during incidents; and how did the state delegate its authority to local units of government?⁵

⁴ Edward Cavin, "Triggers for National Response," Joint Center for Operational Analysis Bulletin, vol. III, issue 2, June 2006, p. 11. In 2005, the National Response Plan was the central administrative document designing crisis response processes.

⁵ American Bar Association, Hurricane Katrina Task Force Subcommittee Report, February 2006, p. 15.

But on an institutional level, FEMA Director Michael Brown quickly had to seek the approval from his direct supervisor, Homeland Security Secretary Michael Chertoff, on many decisions. This obviously created bureaucratic nonsense as FEMA was supposed to be the central link in the chain of command.

A few months before the events on the Gulf coast, FEMA was clearly portrayed as a major victim of the new national security institutional framework following the 9/11 attacks. The newly created Department of Homeland Security took the lead on 22 independent organizations making FEMA—a former autonomous organization—a sub-directorate of the Department. Because the major concern at that time was the potential of a terrorist attack, policy-makers did not take into consideration this institutional issue when facing a natural disaster.

Legal Constraints on Military Involvement

While FEMA quickly appeared to lack resources to control the crisis, coordination with the military was entangled with the legal context prohibiting the extensive use of active-duty soldiers. The Posse Comitatus Act [1878] (literally "the power of the county") and the Stafford Act give states the primacy over the federal government and the military. But the Posse Comitatus Act also states that only National Guard units have the authority to act as law enforcers, because they are under the control of governors. The Posse Comitatus Act states that:

Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or the Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both. (Title 18, U.S. Code, Section 1385)

Consequently, under the Posse Comitatus Act, the Army, the Air Force, the Marines, and the Navy may not be used to enforce domestic law. Nevertheless, under specific circumstances, Congress can authorize their use.⁶

The interpretation of the Posse Comitatus Act has been so controversial in American history that the American Bar Association explains that "*it is just as much empowering as pro-bibitory*." Still, the general consensus is that the military shall only be involved as domestic law enforcers in the event of some sort of insurrection, uprising or invasion (according to the Insurrection Act).⁸

Therefore, the eventuality of a military intervention in the midst of Katrina quickly became a very sensitive issue as lawlessness and anarchy were growing in earnest in the New Orleans

⁶ This is the case of the Coast Guard, which does not fall under *posse comitatus*.

John Mc Carthy, Randall Jackson, Maeve Dion, "Posse Comitatus and the Military's Role in Disaster Relief," American Bar Association, Hurricane Katrina Task Force Subcommittee Report, February 2006, p. 23.

The President has the authority to enact the Insurrection Act for one of the following conditions: the request of the state government; the President believes that "unlawful obstructions, combinations, or assemblages, or rebellion against the authority of the United States make it impracticable to enforce the laws of the United States" and use the military forces is only enforcing the law or suppressing the rebellion; the President believes that local law enforcement is unable or unwilling to protect individuals due to the insurrection or domestic violence. In the last two decades, it appeared during the Los Angeles riots in 1992 and during Hurricane Hugo in 1989.

area in the first days of September. As local security authorities were clearly overwhelmed, could the Government invoke the Insurrection Act? A member of the Bush Administration summed up the dilemma in a September 9, 2005, article from the *New York Times*:

Can you imagine how it would have been perceived if a president of the United States of one party had pre-emptively taken from the female governor [Kathleen Blanco] of another party the command and control of her forces, unless the security situation made it completely clear that she was unable to effectively execute her command authority and that lawlessness was the inevitable result?⁹

As a matter of fact, when Governor Blanco asked for federal assistance on August 27, the request did not call for "federalizing" the Louisiana National Guard. Moreover, in the end, when the Bush Administration nominated Lieutenant General Russel Honore as the commander of Joint Task Force Katrina, the latter did not command alone the troops on the ground. He shared the responsibility with Louisiana's Adjutant General, Major General Bennett Landreneau. General Russel Honore as the command alone the troops on the ground.

The Stafford Act, also known as the Disaster Mitigation Act, substantially eases the use of the military as it provides the President with the right to activate and use Department of Defense forces in order to provide a domestic disaster response if other Government agencies are unable to respond. The Act can be enacted in one of four ways: federal declaration of a major disaster; federal declaration of an emergency; provision of essential assistance for a limited period of time; and protection of federal property. But still it does not alleviate the government from the Posse Comitatus Act, which remains the law unless it invokes the Insurrection Act.

Private Sector Integration

Hurricane Katrina also reinforced a negative assessment which all experts made explicit regarding the integration of the private sector into crisis management.¹²

Indeed, the U.S. legal framework insufficiently covers this issue. Neither the National Response Plan (NRP), nor the Stafford Act, seriously takes into account the private sector's resources for crisis management like goods, services, or logistical support. According to the NRP, the Red Cross and National Voluntary Organizations Active in Disasters (NVOAD) remained organizations supporting—not taking over—the local authorities' role.

Hurricane Katrina showed how important coordination between the public and private sector can be regarding the delivery of essential medical supplies by cargo and freight carriers,

⁹ Eric Lipton, Eric Schmitt, Thom Shanker, "Storm and Crisis: Military Response; Political Issues Snarled Plans for Troop Aid," *New York Times*, September 9, 2005, section A, page 1, column 5.

¹⁰ Under chapter 10 of the Stafford Act.

¹¹ According to several reports, the White House proposed a "dual-reporting structure" in which the Louisiana National Guard would have been federalized, while Lt. Gen. Honore would have reported to both Governor Blanco and the President. The Governor rejected the proposal fearing that she might lose control of the military intervention.

¹² By private sector, we designate both business and civil society organizations.

Box 1. The American Red Cross and the Need for Better Integration with Military Units

A key partner for state and local governments is the American Red Cross, which responds to thousands of disasters, large and small, every year. Although the Red Cross is not a Government agency, it was chartered by the U.S. Congress in 1905 to "carry on a system of national and international relief [in response to] fire, floods, and other great national calamities." During Katrina, the American Red Cross distributed financial assistance to over 1.2 million families, provided 3.42 million overnight stays in 1,100 shelters across the country, and served over 52 million meals. Despite this massive response, the American Red Cross was barely integrated to the crisis response units. It lacked the logistics capacity to reach affected areas and was dependent on FEMA and the Department of Defense for assistance. Although the Red Cross had embedded staff at most relevant state and federal emergency operating centers, the NGO experienced significant communication and coordination breakdowns with FEMA regarding some of its requests for fuel and mobile refrigeration equipment, which were not processed. FEMA often failed to coordinate the transportation of evacuees, making it difficult for the Red Cross to track and shelter hurricane victims.

the reconstitution of internet services, and the restoration of fuel refining and distribution facilities.

During Hurricane Katrina, for example, Anheuser Busch donated 9.4 million cans of safe drinking water to victims, and was able to leverage its packaging operations, logistics personnel, and government affairs office to distribute the supplies. Ford Motor Company sent 275 vans, pickup trucks, and sport utility vehicles to law enforcement personnel in the disaster region and dispatched a mobile command center to serve as a temporary headquarters for a local sheriff's office in Louisiana that had been destroyed.

In a policy paper from the American Bar Association, Lee Zeichner specified three priorities that needed to be addressed by the government on that subject: facilitating the private sector's own response to catastrophic disasters; ensuring coordination and cooperation between government and the private sector; and supporting the government's response and restoration efforts.¹³

¹ U.S. House of Representatives, A Failure of Initiative, Washington: D.C., Government Printing Office, 2006, pp. 343–44.

¹³ Lee Zeichner, "Private sector integration," Hurricane Katrina Task Force Subcommittee Report, February 2006, p. 34.

The Difficulties of Civil-Military Cooperation

The disaster response to Hurricane Katrina included federal government agencies like the Federal Emergency Management Agency (FEMA), state and local-level agencies, federal and National Guard soldiers, non-governmental charities, and private individuals. Tens of thousands of volunteers and troops responded or were deployed on the ground to face the disaster, most in the affected area, but also throughout the U.S. in at least 19 states. ¹⁴ This answer thus inevitably required civil-military cooperation on the ground, as well as through the whole chain of command.

The Deployment of the National Guard and the Bureaucratic Process

Hurricane Katrina made landfall in Louisiana on Saturday August 29 at 6 am local time. The Louisiana National Guard called almost 3,500 of its members to state active duty as of 7 a.m.. Army Lt. Col. Pete Schneider then reported a successful evacuation from the city, crediting the Louisiana Guard's partners in neighbouring States for carrying out 'a coordinated effort' that incorporated lessons learned from past evacuations. During an interview with *Fox News*, Schneider said the state demonstrated its readiness regarding the evacuation of people from their homes to the Superdome. At that time, Louisiana had 65 percent of its troops available for state missions, Mississippi, 60 percent, Alabama, 77 percent, and Florida, 74 percent.¹⁵

Before this day, even if New Orleans Mayor Ray Nagin declared a mandatory evacuation of the city and opened the Superdome to those who could not leave the city, the Louisiana National Guard was overwhelmed. They only had sufficient food for 3 days to deliver to 15,000 people.¹⁶

However at that point, local authorities knew that the strength of the hurricane would almost certainly exceed the levees' design capacity, and therefore that the possibility for major flooding was real. If the levees did fail, people throughout the city would find it very difficult to obtain food and water.¹⁷

Then the last resort became the implication of armed forces in the crisis response preparation regarding the events which were going to occur. But as we described in the legal framework above, these armed forces could only act upon the request of local authorities and not under the impulse of the federal state or one of its agencies in charge of preparing the response to the events and in preventing their consequences.

On Tuesday, August 30, an estimated 7,500 National Guard troops from Alabama, Florida, Louisiana and Mississippi were on duty, supporting civil authorities, distributing generators,

¹⁴ Donna Miles, "National Guard Responds to Hurricane Katrina," American Forces Press Service, August 29, 2005.

¹⁵ Donna Miles, "Military Providing Full-Scale Response to Hurricane Relief Effort," American Forces Press Service, Aug. 31, 2005.

^{16 &}quot;A Failure of Initiative," op. cit.

¹⁷ Matthew Davis, "FEMA Knew of New Orleans Danger," BBC News, October 11, 2005.

providing medical care, and setting up shelters for displaced residents. As of 8 a.m., almost 3,800 Louisiana Army and Air Guard members were on duty to remove debris, provide security and shelter, distribute water, food and ice, and offer medical and law-enforcement support.¹⁸

On Wednesday, August 31, the number of National Guardsmen on duty rose to almost 8, 300. Simultaneously, Joint Task Force Katrina was set up at Camp Shelby, Missouri, as the DoD's focal point to support the FEMA's relief efforts.¹⁹

On Thursday, September 1, the guardsmen remained under their respective governors' control, which enabled them to provide law-enforcement support in the affected regions, something the Posse Comitatus Act prohibits active-duty forces from doing within the United States.

It clearly appears that the National Guard's units were allowed, at the same time in the anticipation phase and in the return to the normal phase, to maintain a link between authorities and citizens. That is the reason why it is a pity that their poor preparation and the lack of adequate forecasting from FEMA decreased the Guard's capacity to intervene. Because of the inadequate policy process described above, the National Guard did not have the means—men, material and food supplies to ensure a decent supply of the refugees out of water and food.

Let us finally note that the ambivalent position of the national guards regarding the Posse Comitatus Act quickly urged the governors of the states concerned to require that these units be placed out of the federal sphere of activity, which constituted the only legal solution to integrate military units into law enforcement missions.²⁰

While the National Guard mobilized and ensured first aid and enforced the law, a federal administration managed to react sufficiently quickly and effectively so that its action had significant effects on the ground.

Indeed, beyond the local deployment of the firemen and the police, one of the central factors in the Katrina events was the mobilization of the Coast Guard, which constituted the primary federal governmental actor in response to Hurricane Katrina. The Coast Guard response included the deployment of as many helicopters as it could to the affected areas and the call to duty of 500 reservists. The Coast Guard was saving lives before any other federal agency, despite the fact that almost half the local Coast Guard personnel lost their own homes in the hurricane. They rescued or evacuated more than 33,500 people, six times as many as they saved in all of 2004. According to an article in *Time* magazine, Sheriff Jack Stephens said the Coast Guard was the only federal agency to provide any significant assistance for a full week after the storm.²¹

Finally it is very interesting to note that the only federal agency to show responsiveness and effectiveness, the Coast Guard, is a structure accustomed to organizing the rescue operations

¹⁸ Donna Miles, "Guard, NORTHCOM Respond to Hurricane Aftermath," American Forces Press Service, Aug. 30, 2005.

¹⁹Donna Miles, "National Guard Responds to Hurricane Katrina," American Forces Press Service, Aug. 29, 2005.

²⁰ John Mc Carthy, Randall Jackson, Maeve Dion, "Posse Comitatus and the Military's Role in Disaster Relief," American Bar Association, Hurricane Katrina Task Force Subcommittee Report, February 2006.

²¹ Staff Writer, "Coast Guard Response to Hurricane Katrina," US Coast Guard, May 2006.

in extreme conditions, equipped with average logistics flexible and fast and led by a small number of men with a spirit of mission.

The Chain of Command: National Guard vs. Active Duty Soldiers

As Col K. E. Ring Jr. from the United States Army National Guard wrote in his Strategic Research Report, many dysfunctions in the chain of command became obvious during the management of the Katrina crisis. These lessons from history must be learned and understood, as well as the obvious need for civil-military co-operation:

Given the certainty of catastrophes on our soil—no matter how unprecedented or extraordinary—it is our collective duty to provide the best response possible. This interest was more abstract than real to most Americans before September 11, 2001. However, subsequent natural disasters and security threats highlight America's continuing vulnerability. Compounding America's sobering threat awareness was the government's response to Hurricane Katrina—four full years after the 9/11 terrorist attacks. Massive government reorganization, rewritten national strategic documents, and billions of invested homeland security dollars failed to prevent an uncoordinated local, state, and federal response to Hurricane Katrina. This failure precipitated hundreds of additional policy, strategy, planning, and organizational changes at all levels of government to increase disaster response effectiveness. Yet the question of America's preparedness still remains.

The surprise nature and devastating effects of catastrophic incidents call for a massive coordinated response on short notice. While the primary responsibility for disaster response rests with civilian agencies at the local, state, and federal levels, only the military has the manpower, equipment, training, and organization necessary to amass the relief effort required during catastrophic incident recovery. The military made many improvements in its ability to perform Defense Support to Civil Authorities (DSCA) operations after Katrina, but it still lacks a clear, effective, and coordinated response capability. ²²

The National Strategy for Homeland Security (NSHS) clearly acknowledges that "America's constitutional foundations of federalism and limited government place significant trust and responsibility in the capabilities of state and local governments to help protect the American people."²³

That automatically moves active duty forces to the second front with the mission of supporting other means of intervention, in particular those depending directly on the local authorities like the governor of the state or the tribal government. Therefore it seems impossible to consider a centralized command structure led by the active federal military structure

²² Col. K. E. Ring Jr., Military Disaster Response: Strategy, Leadership and Actions—Closing the Gap. Strategy research report, U.S. Army War College, United States Army National Guard, 2008.

²³ National Response Framework report, DHS, Jan. 2008, p. 47.

with the Guardsmen of affected states at the tactical level. This system cannot work unless we consider a chain of command close to the operational needs and tactical objectives, and assisted by the national coordination structure (FEMA). To this purpose, FEMA must have reliable observers on the field at the onset of engagement. This direct channel of information will make it possible for the coordinating structure to have a capacity of real time evaluation of the evolution of the situation. It would efficiently integrate the actors referring progressively to the mechanism of assistance.

In that context, the legal framework for deploying the National Guard on U.S. soil was recently refined to adapt to this type of contingency. A newly-amended section of the National Defense Authorization Act allows a National Guard officer to command active duty forces. In a reversal of roles, the FY04 amendment—Title 32, United States Code, Section 325—makes it possible through an agreement between the Governor and the President of the United States for the National Guard to appoint an officer to be the Joint Task Force Commander and provide command and control of both federal and state forces during a state emergency.²⁴

Hurricane Katrina: What Was Really Learned?

Hurricane Katrina led to many investigations from various public and private organizations. The White House, the House of Representatives, the Government Accountability Office and the Senate issued their own reports. "Almost exactly four years after 9/11, Katrina showed that the nation is still unprepared to respond to a catastrophe" wrote the Senate bipartisan committee. Moreover, the RAND Corporation published a report sponsored by the military on the use of the army during the events. The American Bar Association created a Hurricane Katrina Task Force aiming at addressing all legal issues encapsulating the civil-military response.

Three years after the events and approximately two years after the publications of most of the reports, some major refinements have been executed within the government. In a way, the efficiency of the response to Hurricane Gustav during the summer of 2008 showed this improvement. In that perspective, two interesting examples of this evolution are the modification of the previous National Response Plan into a new National Response Framework and the current project inside the Department of Homeland Security on the command and control structure.

The National Response Framework and the Need for a New Policy Process

In the first part of this chapter, we underlined how the response process during Hurricane Katrina was entangled with its bureaucratic constraints. To understand the controversies that led to political reforms after the events in Louisiana, we need to go back to the core dysfunctions of the process. Indeed, the process of responding to natural disasters was then shaped by the U.S. Government's National Response Plan (NRP), released at the end of 2004. One important goal of the plan was to improve interagency and civil-military coordination during a relief operation, together with the National Incident Management System (NIMS). At the

²⁴ Region's Largest Hurricane Drill Since Katrina Gives NH Opportunity to Command Federal Forces, National Guard Bureau, 2008.

beginning, it was conceived as the blueprint for the newly establish Department of Homeland Security. Therefore it described the structure and mechanisms for coordinating federal support during emergencies (or exercising direct federal authority).

It stated that when local government exhausts its resources, it then requests specific additional resources from the county level. The request process proceeds similarly from the county to the state to the federal government as additional resource needs are identified. In a sense, it built upon the legacy of the two decade experience from FEMA planners. But in the meantime National Response Plan was also the official evidence that FEMA was no longer the central actor for crisis management, but rather the Department of Homeland Security. On August 30, 2005, in the midst of the events, when Homeland Security Secretary Michael Chertoff invoked the National Response Plan, he explicitly emphasized the Department of Homeland Security's centrality in the process.

Surprisingly an annex to the National Response Plan entitled 'The Catastrophic Incident' gave the federal government special powers, including the ability to bypass state governments. But Homeland Security Secretary Michael Chertoff or one of his designees had to approve the use of the annex. According to the news website *govex.com*, the Bush administration thought that the events in New Orleans did not apply for the Catastrophic Incident annex. In late September 2005, Department of Homeland Security spokesman Russ Knocke said that:

The annex is intended to be used during no-notice catastrophic incidents when there is no awareness of an impending disaster and no pre-staging of people, resources and response forces. During Katrina, the FEMA director was on scene days in advance, coordinating preparations, resources and response activities before [the storm] hit.²⁵

In the aftermath of Katrina, the National Response Plan was described as an irrelevant and misleading roadmap. Its core principle—federal government can only intervene upon request of local authorities—was largely criticized. In its report titled *A Failure of Initiative*, the U.S. House of Representatives committee expressed its bewilderment:

The Select Committee was left wondering if the plan as written tried to have its cake and eat it too. How can we rely on the overwhelmed to acknowledge they are overwhelmed, and then expect them to direct and manage the process of coming to their rescue?²⁶

Regarding the no-use of the Catastrophic Incident Annex, the report made its criticisms explicit:

While the National Response Plan-Catastrophic Incident Annex may be particularly applicable to a no-notice event, the Annex itself reflects only that a catastrophic incident may occur with little or no warning. And the pre-positioning of

²⁵ Chris Strohm, "DHS failed to use catastrophe response plan in Katrina's wake," govex.com, October 18, 2005.

²⁶ "A Failure to Initiative," op. cit., p. 15.

supplies to the satisfaction of state and local authorities, while an appropriate measure for a disaster without catastrophic consequences, was clearly not sufficient for the catastrophic consequences of Hurricane Katrina. Instead, absent a catastrophic disaster designation from Chertoff, federal response officials in the field eventually made the difficult decisions to bypass established procedures and provide assistance without waiting for appropriate requests from the states or for clear direction from Washington. These decisions to switch from a "pull" to a "push" system were made individually, over several days, and in an uncoordinated fashion as circumstances required. The federal government stumbled into a proactive response during the first several days after Hurricane Katrina made landfall, as opposed to the Secretary making a clear and decisive choice to respond proactively at the beginning of the disaster.²⁷

Indeed, all the official lessons learned underlined NRP's weaknesses. The White House report explains that "it lacks sufficient clarity regarding when and how an event becomes an Incident of National Significance" and that "it failed to anticipate, plan for, and ultimately integrate all of the Federal government's search and rescue assets during Katrina." Because of its sequential process—local, then state, then federal—NRP created a culture of "wait until asked." Such a non—proactive plan would eventually lead to delayed responses over Hurricane Katrina.

Other issues can be addressed regarding NRP's relevance. For instance, as we know that this was a document issued after 9/11, it is quite puzzling to note that it does not take into account foreign populations (long-term residents, students, businessmen, tourists, foreign government officials). This oversight had disastrous consequences during Hurricane Katrina: slow communication with foreign diplomatic communities, illogical bureaucratic decisions.³⁰

Consequently, due to the level of discontent following the events of Katrina, the whole process needed to be modified. Therefore, after the events in the Gulf area, Congress decided to strengthen FEMA and on October 4, 2006 it passed the Post Katrina Emergency Management Reform Act. It redefined FEMA's role and clearly enhanced its autonomy regarding the Department of Homeland Security.³¹

But this refinement did not prove convincing and the administration quickly decided to write a new plan. In late 2007, the National Response Framework was issued and it formally replaced the National Response Plan on March 22, 2008. Based on previous lessons learned,

²⁷ Ibid., p. 131.

²⁸ White House, The Federal Response to Hurricane Katrina: Lessons Learned, Washington: D.C., Government Printing Office, p. 38

²⁹ Edward Cavin, "Triggers for National Response," Joint Center for Operational Analysis Bulletin, vol. III, issue 2, June 2006, p. 11.

³⁰ See Anne Richard, *Role Reversal: Offers of Help From Other Countries in Response to Hurricane Katrina* (Washington, DC: Center for Transatlantic Relations, 2006); Sarah Ulrich, "The Impact of Hurricane Katrina's Crisis Management on Transatlantic Relations: Lessons Learned Regarding Assistance to Foreign Nationals and Foreign Disaster Assistance to the U.S.," Occasional Paper, Texas A&M University, February 2007.

³¹ United States Government Accountability Office, National Disaster Response, op. cit., p. 12.

the National Response Framework aims at building "upon scalable, flexible, and adaptable coordinating structures to align key roles and responsibilities across the Nation." ³²

From a scholarly perspective, this sounds like a common catch-phrase one can read in U.S. government reports: how 'scalable, flexible and adaptable' could the authorities be when facing a clear and present emergency? It is too soon to give an appropriate assessment of the operational relevance of the National Response Framework. Melissa Flournoy, founding president and CEO of the Louisiana Association of Nonprofit Organizations, noted however that "so far, nothing changed regarding the roles on the ground and we'll have to wait before observing any clear evolution."

Nevertheless, it is worth noting that Hurricane Gustav in September 2008 highlighted the progress of the government planning process prescribed by the National Response Framework. For instance, compared to 2005, the evacuation of New Orleans residents at the beginning of Hurricane Gustav was clearly more efficient: More than 30,000 public transport places were provided with special provisions made for the evacuation of the elderly and disabled.³⁴ While Michael Chertoff traveled on the first day of the evacuation to New Orleans to supervise it, 23,000 National Guardsmen from Louisiana and neighboring states were deployed.

More importantly, the National Response Framework allowed FEMA to regain credit as a coordinating organization.³⁵ For instance, it shifted the primary agency responsibility for coordinating federal support for mass care from the Red Cross to FEMA. It is now responsible for supervising organizations focused on that function such as National Voluntary Organizations Active in Disasters (NVOAD), an umbrella organization of 49 nonprofits.³⁶ In this emergency support function, FEMA would be counting on the National Shelter System (NSS) which provides data from shelters.³⁷

Nonetheless, if one could perceive the refinement of FEMA's role during emergency situations as a positive initiative, the Government Accountability Office remains skeptical on the means the agency can use towards fulfillment of that aim. In a recent report, it claimed that:

the NRF places increased responsibility on FEMA for coordinating with voluntary organizations, but FEMA does not have sufficient staff resources to meet this

³² Department of Homeland Security, National Response Framework, Washington: D.C., Government Printing Office, January 2008, p. 1.

³³ Interview with Melissa Flournoy, October 2008.

³⁴ Jennifer Cole, "The mass evacuation of New Orleans in the days preceding Hurricane Gustav tested the lessons learned after Katrina. The response to Gustav should be incorporated into the corporate memory of emergency responders everywhere," RUSI Commentary, September 2008.

³⁵ Siobhan Gorman, "FEMA Chief Praised for Cool Head, Preparation as Gustav Approached," The Wall Street Journal, September 10, 2008.

³⁶ United States Government Accountability Office, National Disaster Response: FEMA Should Take Action to Improve Capacity and Coordination between Government and Voluntary Sectors, Washington: DC, Government Printing Office, February 2008, p. 1.

³⁷ The National Shelter System is a Web-based system that provides information on shelter facilities, capacity, and population counts.

responsibility [...] although FEMA has made progress, its efforts to identify and fill gaps in mass care capabilities are not yet complete.³⁸

Toward An Enhanced Command and Control Structure

Apart from the National Response Framework, the American emergency response process is built upon the National Incident Management System, which provides a pattern for command & control structures:

The National Incident Management System (NIMS) provides standard command and management structures that apply to response. This common system enables responders from different jurisdictions and disciplines to work together to respond to incidents.³⁹

It is the first step towards the installation of a sufficiently flexible organization to ensure an effective response to diverse catastrophic situations. However, the National Incident Management System remains relatively inflexible and is marked by a lack of means, actors and responsibilities at the local, state or federal levels, not to mention possible roles and implications for NGOs and the private sector.⁴⁰

Furthermore it is possible to imagine a "variable geometry device of command" according to the elements resulting from the analysis of the Intervention Zone (IZ). Figure 1 seeks a balance between the optimal exploitation of competences of the men engaged in the operation and, on the other hand, the minimization of their exposure to risks.

In the first quadrant, at the top on the left, it is necessary to face a natural event of strong intensity concerning a solid and socially stable structure. In this case, the highly hierarchical and structured organization proposed within the framework of the NIMS seems perfectly adapted; the strategic objectives then would be laid down by the civil authorities coordinated by the FEMA federal coordinating officer (FCO); whereas the logistic function deals with the armed forces and the operational function is entrusted to the specialized units, possibly composed in a mixed way.

In the second quadrant, at the top on the right, there are events which refer to situations with a high intensity natural event which occurs in a very weak societal structure. This typically refers to missions of overseas assistance to developing countries. In this very particular case only, the military units are equipped simultaneously with the robust capacity for projection and a capacity for self-defence in complex emergencies and a readiness to intervene.

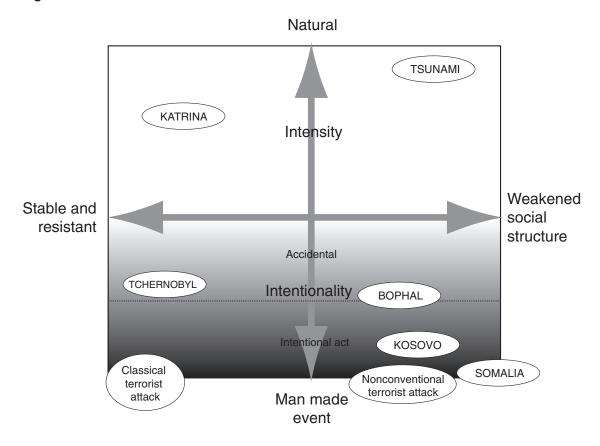
In the lower quadrants, we have conflict situations from either traditional origins or from terrorist origins. Within this framework, the share taken by the armed forces depends especially on the stability of the local official structures. For example, after the southeast Asian

³⁸ National Disaster Response, op. cit., pp. 13-14.

³⁹ Ibid. p. 8.

⁴⁰ Ibid. p. 27.

Figure 1.



tsunami there was a marked difference between the intervention in an area controlled by the governmental Mangyar forces, where the food could arrive in three days, and where the physical safety of humanitarian workers was assured; and areas held by the Tamil Tigers, where the situation was extremely unstable.

This diagram gives a clear vision of the spectrum of interventions where civilian and military units—in the U.S. as well as in the EU—have to cooperate. Taking into account the difficulty to anticipate or comprehend the specificities of an event like Hurricane Katrina when it happens, the diagram offers a better awareness to adapt.

In that context, this kind of analytical tool must be seen as a first step toward a new set of rules to respond to such crisis.

Beyond Katrina: Toward A New Set Of Rules?

Hurricane Katrina is obviously a very particular event which occurred in a specific context. It occurred in a federal political system where federal and local authorities compete for their

sovereignty and where the military can not be easily deployed (compared to other countries in Europe). Despite of these particularities, it is possible to identify key lessons from the event, its immediate management and its institutional fallouts. Indeed, we think that Hurricane Katrina gives relevance to the idea of putting crisis management onto the military agenda. Furthermore, civil-military cooperation will improve not only if the armed forces refine their doctrines but also if all actors get involved in training and exercises. This is the best way to build a shared culture of crisis management.

Putting Crisis Management onto the Military Agenda

It is worth noticing that Hurricane Katrina did not initiate the debate regarding the role of the U.S. military in crisis management: 9/11 did. In 2002, Air Force General Ralph Eberhart, the first head of Northern Command, the unified command created in the wake of 9/11, responsible for defending the United States, expressed support for changes in existing law that would expand the military's domestic powers in the war against terrorism. Then-Senator Joe Biden also endorsed the idea of granting soldiers the power to arrest American civilians.⁴¹

But the military has traditionally been among the strongest opponents of a growing involvement in crisis management. The armed forces are wary of any move that would take training time or money away from its fundamental mission: preparing for and waging war.

Moreover, the contemporary rationale against the revision of the Posse Comitatus Act is the same that led the founders of the law a century ago: the fear of the politicization of the U.S. armed forces. For instance, Mackubin Owens from the Ashbrook Center wrote several months after Katrina in the *New York Post*:

Do we really want the American public turning to the military for solutions to the country's problems, with all that means for healthy civil-military relations? And do we really want to saddle the military with a variety of new, non-combat missions, vastly escalating its commitment to formerly ancillary duties? If we do, we will find that we have involved the military in the political process to an unprecedented and perhaps dangerous degree. These additional assignments will also divert focus and resources from the military's central mission of combat training and warfighting.⁴²

Moreover, since its inception the American military has been building a strategic culture which systematically avoids any involvement in such low-intensity crises as Katrina. It is a well-known fact that the Department of Defense dislikes crisis management as much as nation-building operations. Both are not part of the so-called "American Way of War." ⁴³

⁴¹ Mackubin Owens, "Hurricane Katrina and the Future of American Civil-Military Relations," New York Post, September 2005.

⁴² Ibid.

⁴³ Russell Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (New York: NY, Macmillan Publishing Co, 1973). The well-respected scholar Colin Gray defined it as: "The exploitation of machinery is the American way of war. One may claim that airpower is virtually synonymous with that way of war, and that its employment as the leading military instrument of choice has become routine. [...] Necessity bred preference and then excellence, and the choice of mechanical solutions assumed a cultural significance that has endured. [...] The way of war that succeeded in that

If the "American Way of War" proscribes soldiers from low-intensity interventions like disaster response or nation-building efforts, does it mean that it is barely possible to expect any change in the near future? Not necessarily. Strategic cultures are intertwined with bureaucratic habits and doctrines are not only the illustration of a state of mind, of a warrior ethos, they are also the expression of a battle within the Pentagon between conservatism and modernism. After all, for the last two decades, counterinsurgency used to be a taboo in U.S. Army manuals before General Petraeus and his team issued their well-known COIN manual. Of course, one has to remain sceptical when expecting concrete administrative changes, but it is worth noticing that some interesting lessons have been learned in the years following the events on the Gulf Coast.

For instance, naval vessels happened to play a major role during the events. Amphibious assault ships like USS Bataan and USS Iwo Jima provided key responses (supplies, equipment, intelligence gathering). More particularly, upon its arrival of September 5, 2005, Iwo Jima became the center for relief operations, acting as the proxy air traffic control agency (in lieu of the Federal Aviation Agency), providing more than 3,000 extra meals per day for first-responders and National Guardsmen. As Tim Jackson wrote, "this component of sea power has several capabilities that can be reliably utilized during a future disaster to provide rapid, close in operations by both sea and air." In that context, it appears that "big deck" vessels like hospital ships, high speed transport vessels, and aircraft carriers were a military tool extremely useful for disaster response. Meanwhile it can sound ironic when pundits claim the irrelevance of sea power in conflicts in Iraq and Afghanistan.

If the U.S. Navy proved that it could play a decisive role, the National Guard remains the key element. On that subject, the RAND Corporation published an in-depth assessment of the military intervention during Hurricane Katrina. More particularly, the task force focused on the implications for the U.S. Army. They concluded that the National Guard had to become the main military force leading crisis response efforts. They go further by supporting the idea that the National Guard should be federalized to conduct homeland security activities and be prepared for rapid response not only within their states, but also for emergencies in other states. RAND then supported the idea of the creation of ten regional task forces that would work closely with FEMA and other civilian agencies.⁴⁷

The regional structure would streamline and speed up the process leading to the deployment of neighbour states' National Guard units on the ground as this process appeared to be too slow during the events of 2005.

most bloody of America's struggles was logistical, having been enabled by an exploitation of raw industrial power that foreign observers found awesome. American soldiers say that the human being matters most, but, in practice, the American way of war, past, present, and prospectively future, is quintessentially and uniquely technology-dependent" in Colin Gray, Irregular Enemies and the Essence of Strategy: Can the American Way of War Adapt? (Washington: D.C., Strategic Studies Institute Monograph, 2006), pp. 35-36.

⁴⁴ Tim Jackson, "Sea Power and Domestic Disaster Response: Exploring the Role of Naval Vessels in U.S. Coastal Disasters," George Mason University, 2007.

⁴⁵ Ibid., p. 24.

⁴⁶ Among others, John Arquilla, Worst Enemy: The Reluctant Transformation of the American Military (Chicago: Ivan Dee, 2008).

⁴⁷ Davis, op. cit.

Furthermore, enhancing the efficiency of the National Guard, as well as active-duty units, requires us to rethink the readiness process and the deployment ratio. It is widely known that the wars in Iraq and Afghanistan overstretched the National Guard leading to major political issues: multiple tours, 'stop-loss' phenomenon. Added to the traditional discontent from the military for crisis response tasks, the current overuse of the National Guard in overseas operations could seriously hinder any initiative regarding the place of homeland security missions for the military.

Nevertheless the RAND report believes that it is feasible to give extensive crisis response training to all units in the Army Force Generation Ready pool.⁴⁸ The idea is to create a kind of 'tailored readiness' subdivided into homeland security missions and traditional warfighting missions:

The Army's Force Generation (ARFORGEN) process, whereby units move through a structured and predictable process of unit readiness over time, offers additional possibilities to improve the military's readiness to respond to a catastrophic event, and these possibilities deserve serious consideration. Some National Guard units could be given homeland security (HLS) as their mission, with their training and readiness tailored accordingly. To achieve a quick and robust response to catastrophic emergencies, National Guard and active-duty Army units in the available pool could be designated for an HLS mission. While in the ARFORGEN process these units would be designated as "theater committed" and planned for use within the United States, they could still be deployed overseas if needed.⁴⁹

According to the ARFORGEN process, this would allow some flexibility to rapidly deploy troops to execute homeland security missions.

While the National Guard response to Hurricane Katrina depended upon volunteers without any special HLS training or preparations, under the model outlined above, one or more of the National Guard units in the ARFORGEN available pool would be trained for HLS emergency operations and ready to respond very quickly. The size of a future response would then become a function of how many in these pools were actually designated in advance or chosen to respond at the time.⁵⁰

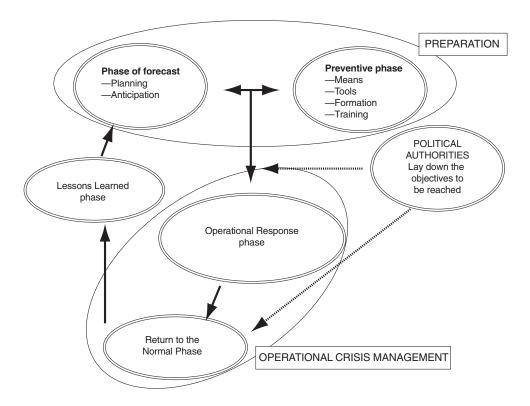
Educating and training the armed forces to get ready for crisis response is a first step. But this will only become operational when it works in tandem with a global effort.

⁴⁸ Army Force Generation (ARFORGEN) is the current readiness process for National Guard and active-duty units from the U.S. Army.

⁴⁹ Davis, op. cit., p. xiii.

⁵⁰ Davis, op.cit., p. 59.

Figure 2.



Toward Global Interoperability

The need for a global interoperability of the rescue actors comes with an accurate definition and prioritization of the mission goals. To this end, we distinguish a preparation phase, which includes forecast and prevention, from an operational response phase, which constitutes the visible phase of the deployment.

The forecasting phase must involve planning and the anticipation of possible scenarios, which include natural risks, but also major industrial risks or the risk of a major terrorism attack: Events which would require an answer depending on the number of victims and the degree of social disorganization caused. This preparation and scenario-making phase must imperatively include the treatment and the medico-psychological aspects of the response to a major event. This treatment will make it possible to limit the post-traumatic syndrome risk within the population touched by a major natural or manmade emergency.

The preventive phase encompasses the preparation of the means and tools for the operational response. That includes the storage of foodstuffs, drinking water, supplies in drugs, means of lodging, and so forth. But it also includes the formation of the units and their joint training through exercises of sufficient breadth.

To that aim, we need to implement many interagency exercises. These exercises should be realistic and include the maximum number of actors that would eventually get involved in a possible intervention. They must aim at training the decision-makers from the political, military and private spheres. Moreover they must be followed by a rigorous assessment of collaboration and coordination capacities; that means that one must be ready, at the time of the exercises, to highlight malfunctions without the fear to deduce negative consequence neither for the actors nor for the image of the implied administrations. It is necessary, to be effective, to agree "to lose" an exercise in order to draw quintessence from it from the lesson.

The natural rationale for the political decision-maker is to want to move toward total interoperability of the various forces, which could be implied in the response to a major event like Hurricane Katrina. Indeed, initially, this convergence seems to have very many advantages, such as better field awareness, rationalization of means, and gaining economies by standardizing equipment.

However, there are limits to such an attempt. To avoid the risk that convergence confuses individual actors with regard to the nature of their principal missions and capacities, the diagram above has to enable each to acquire the capacity to interact in synergy with other units, in order to optimize the response on the ground. In order that each unit can be integrated as well as possible into a unified device it is then necessary to evaluate the legal mode under which the unit is committed; establish procedures of communication common to the units or at least to their headquarters on the ground; conduct joint training and exercises; and define geographically the sites of intervention as sectors, and encourage the creation of mixed specialized units in these sectors (civil-military rescue clearing units; civil-military medical help teams; civil-military hazmat teams; civil-military dogs assisted research teams, etc.)

Conclusion

In this context, Hurricane Katrina shed light on the extreme necessity to think about crisis response through exercises and simulations. These represent opportunities to constantly ask ourselves if our organizations and processes are suited to address a major event. Of course, a new set of rules and procedures, within and between the military and civilian sectors, is not an easy project—it faces the fundamental inertia of huge bureaucracies. Thinking and writing about change is useful only if it leads to concrete change. Looking at Hurricane Katrina and all the reports issued in the aftermath, one could sum up the need for evolution with a simple recommendation: "learn the lessons learned." Indeed, as we stated at the beginning of this chapter, most of the problems with civil-military cooperation during Katrina have been characterized. We now know what went wrong but we need to leverage this knowledge in a way to gain awareness for future events. Getting from *a posteriori* knowledge to proactive operational awareness will requires an active dialogue between pundits and practitioners.