

ECOLE POLYTECHNIQUE



CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

KATRINA: EXAMEN DES RAPPORTS D'ENQUÊTE Tome 3 : "A Nation Still Unprepared " - U.S. Senate

Patrick Lagadec

Octobre 2007, première version

Cahier n° 2007-25

LABORATOIRE D'ECONOMETRIE

1rue Descartes F-75005 Paris (33) 1 55558215

http://ceco.polytechnique.fr/mailto:lyza.racon@shs.poly.polytechnique.fr

KATRINA: EXAMEN DES RAPPORTS D'ENQUÊTE Tome 3: "A Nation Still Unprepared" - U.S. Senate

Patrick Lagadec¹

Octobre 2007, première version

Cahier n° 2007-25

Résumé:

Le cyclone Katrina a donné lieu, notamment, à trois grandes enquêtes : Chambre des Représentants , Maison-Blanche, Sénat. Nous proposons ici un premier travail sur le rapport de du Sénat. Comme précédemment, sur d'autres productions de commissions d'enquête, le principe est de rendre compte des éléments les plus riches, en termes d'information factuelle, d'enseignements pour le pilotage de pareils événements. Il s'agit aussi, à chaque fois qu'il apparaîtra pertinent et possible, de tenter de prolonger la réflexion proposée pour nous préparer aux crises non conventionnelles qui sont désormais notre principal défi.

Abstract:

Hurricane Katrina has led to three main inquiries: House of Representatives, The White House, the Senate. This study examines the third of these reports. As previously done on other official inquiry reports, the goal is to determine and clarify the key factual findings and the most stimulating lessons for the handling and steerage of such off-the-scale events. Moreover, whenever it seems relevant, we try to extend the reflection offered by the report to help prepare for unconventional crises which are increasingly our most vital challenge.

Mots clés :

Katrina, Rapports d'enquête, crises non conventionnelles Risques hors cadre, plans d'urgence, simulations, évocations, communications, sécurité publique, armée, santé, hébergement, logistique, ONG

Key Words:

Katrina, Official Inquiries, Unconventional Crises Risks, emergency planning, simulations, evacuations, Communications, The Media, The Military, Law Enforcement, Medical Care, Shelter and Housing, Charitable Organizations

Classification JEL:

_

¹ Directeur de Recherche, Laboratoire d'Econométrie, CNRS et Ecole polytechnique.

"We were horrified when the response to the Katrina catastrophe revealed

– all too often, and for far too long –
confusion, delay, misdirection, inactivity, poor coordination,
and lack of leadership at all levels of government."

"All of this unfolded nearly four years after the terror attacks of September 11, 2001; after a massive reorganization of federal plans and organizations for disaster response and billions of dollars of expenditures; and after a closely observed hurricane struck when and where forecasters said it would.

We knew Katrina was coming. How much worse would the nightmare have been if the disaster had been unannounced – an earthquake in San Francisco, a burst levee near St. Louis or Sacramento, a biological weapon smuggled into Boston Harbor, or a chemicalweapon terror attack in Chicago?

Hurricane Katrina found us – still – a nation unprepared for catastrophe."

[note to the readers]

"Avoiding past mistakes will not suffice.

Our leadership and systems must be prepared for catastrophes we know will be unlike

Katrina, whether due to natural causes or terrorism."

[p. 21]

Hurricane Katrina – A Nation Still Unprepared
Report of the Committee on Homeland Security and Governmental Affairs,
United States Senate
May 2006

http://hsgac.senate.gov/_files/Katrina/FullReport.pdfSommaire

SOMMAIRE

<i>Avant-propos</i> p. 8
Crises: Nouvelles frontières
Tirer le meilleur des grands rapports d'enquête – le cas Katrina, tome 3
Avertissementsp. 13
À l'adresse du lecteur français,
À l'adresse du lecteur européen
PREMIÈRE PARTIE
SYNTHÈSE, RECOMMANDATIONS, RÉFLEXIONS
Chapitre 1
Synthèse : Katrina, une débâcle quasi-généralep. 15
1. Un tableau effarant
2. Une culture d'urgence piégée par la seule logique séquentielle, de poupées russes
3. Un événement prévu depuis 40 ans ; des alertes massives ; une surdité quasi-générale
4. Une préparation insuffisante, sur presque tous les tableaux
5. Une réponse inacceptable, à tous les niveaux de responsabilité
Recherche et Sauvetage
Diagnostic de situation
Évacuation post-impact
Logistique et appui militaire
Maintien de l'ordre
Santé
6. Des problèmes fondamentaux
Une situation globalement inacceptable Des béenees dens le plenification de secours, neterment à le Neuvelle Orléens
Des béances dans la planification de secours, notamment à la Nouvelle Orléans Un système de digues en déshérence ; et, pendant le désastre, les guerres de frontières
bureaucratiques continuent
7. Des problèmes de gaspillage, de fraude dans l'utilisation des fonds de reconstruction
7. Des problèmes de gaspinage, de fraude dans l'atmourbn des londs de reconstruction
Chapitre 2
Recommandations de la Commissionp. 31
1. Supprimer la FEMA
2. Donner un mandat à la NPRA qui soit dégagé des typologies habituelles de risques, et
désormais articulé sur les grands enjeux transverses
3. Développer des capacités régionales
4. Établir un véritable centre de crise interministériel5. S'assurer d'une implication nouvelle et puissante, à tous les échelons administratifs,
dans le système de gestion de crise.
6. Confirmer et renforcer les ancrages essentiels du pays en matière de réponse de crise
7. Renforcer la capacité du pays à répondre aux événements d'échelle cataclysmique.
Tiemester in capacité du pays à répondre dun événéments à conone caucitysinique.
Chapitre 3
Réflexions : face aux crises du 21 ^{ème} siècle, quelles stratégies de réponse ?p. 36
1. Reconnaître les défis du 21 ^{ème} siècle, et se mettre en position de les traiter
Le piège de la guerre de retard : l'anti-manuel pour le pilotage des crises actuelles

Habiter un autre univers : points d'ancrage pour un pilotage 2. Améliorer les systèmes existants Une réorganisation à l'échelon central Une consolidation très forte des entités régionales en charge des crises Une ouverture des entités au secteur privé, aux ONG Une attention forte et spécifique aux événements de niveau cataclysmique 3. Introduire des dynamiques en rupture Deux obstacles majeurs : blocage intellectuel, blocage psychologique Des pistes à éviter Des démarches à impulser Des initiatives à engager
SECONDE PARTIE LECTURE ANALYTIQUE DU RAPPORT
Chapitre 4 Le risque hors-cadres : quand nos cartes de référence ne fonctionnent plusp. 45
Le piège du connu
Du plan-papier à la réalité sociétale
Du réglé au chaotique Des sociétés incapables d'apprendre ?
Le tableau de la débâcle
Application aux cyclones : quand les cadrages de base ne fonctionnent plus
Chapitre 5 L'alerte sur phénomène hors-cadres : des systèmes comme débranchésp. 50
Chapitre 6 L'exercice Pam : une démarche particulièrement hardiep. 53
Chapitre 7 Les digues : entre irresponsabilité et impuissance devant le risque majeurp. 54
Chapitre 8 Préparations en retard d'une guerre : quand le dévouement ne suffit plusp. 56
Chapitre 9
Mobilisation stratégique:
une culture de suivi des problèmes, non de prise en chargep. 60
1. Le DHS: aux abonnés absents
Défaillance dans les préparations globales et spécifiques Leaderhip défaillant
En dépit d'alertes précises, fortes, crédibles, répétées
Un suivi mou, plutôt qu'une forte prise en charge, et un questionnement rigoureux
Un lien étonnamment ténu entre le Secrétaire du DHS et le Directeur de la FEMA
Pas d'activation du texte essentiel pour les catastrophes hors cadres
Pas de nomination d'un représentant personnel, puis confusion des rôles pour Brown
La cellule de conduite interministérielle activée deux jours trop tard
Conclusion : une piètre performance

 2. La FEMA : dépassée, avant même l'arrivée de Katrina	
Chapitre 10	
Le pilotage au sommet : la Maison Blanche	p. 72
1. Avant le désastre, l'hésitation	
Le scénario de désastre à la Nouvelle Orléans était connu de la Maison Blanche	
La Maison Blanche avait été [probablement] informée de la faiblesse de la FEMA	
Des alertes précises, multiples, convergentes, pressantes et répétées	
La difficulté de s'inscrire dans le jeu : on rassure	
Les alertes s'aiguisent ; le Président rassure, en repli Des actions, mais pas les impulsions décisives qui auraient été nécessaires	
2. Sur le désastre, l'évitement	
Une information claire, sans ambiguité aucune	
Une visualisation absente, le soulagement, la confusion	
Une réponse hésitante	
Chapitre 11	
Les évacuations pré-impact :	70
des avancées, mais des réalités encore loin d'être maîtrisées	p. 78
Un succès, un problème résiduel pourtant colossal	
Des progrès en matière d'évacuation : un très important travail préalable Une communication vigoureuse	
Le problème de l'évacuation obligatoire	
Des moyens d'alerte réadaptés, une forte préparation du public	
Le transport des personnes incapables d'évacuer d'elles-mêmes : des initiatives, tu	iées
La question des conducteurs de bus : l'impuissance publique en majesté	
100 000 personnes à l'abandon : perdues de vue	
La défaillance de l'échelon fédéral : un problème connu, un manque d'initiative	
Pour en finir avec les arguments spécieux sur l'impossibilité du fédéral d'interven	ir
Un casse-tête supplémentaire : les animaux de compagnie, critiques dans l'évacua	tion
	tion
Chapitre 12	
Chapitre 12 Les moyens de communication : blackout quasi total, défaillances de pilotagep	
Chapitre 12 Les moyens de communication : blackout quasi total, défaillances de pilotagep L'importance critique des communications	
Chapitre 12 Les moyens de communication : blackout quasi total, défaillances de pilotagep	

L'appui national : décalage stratégique, retard systématique
Téléphone-satellite : de l'utilité de la formation des dirigeants
Une double difficulté : une guerre de retard, des guerres bureaucratiques
Chapitre 13
Le centre national de crise : sous l'empire de la crisep. 96
Le centre clé de voûte du pays, tête de pont de la crise
Des points de situation trompeurs
Une vigilance sur les grands événements bien notés à l'agenda, pas sur l'impromptu Le centre national de crise coupé de ses propres bases sur le terrain : faille verticale Le centre national de crise coupé du terrain : aucune attention prêtée aux bureaux locaux de la météo
Le centre national de crise coupé des autres instances nationales : faille horizontale, lenteur de la transmission de l'information
Une attitude paradoxale vis-à-vis des informations médiatiques : prudence quand elles sont alarmantes, suivi aveugle lorsqu'elles sont rassurantes
Des informations flashs, mais personne ne les consulte Le premier jour : une avalanche de rapports alarmants, des postures résolument aveugles et aveuglantes
L'avalanche de rapports négatifs continue, l'aveuglement est solidement installé, le système n'embraye pas
La Situational Awareness ne s'améliore pas au long de la semaine, le décrochage est manifeste dans l'épisode du Convention Center
Les ruptures d'information : au moins éviter les énormités. Les failles FMEA/DHS Quand l'ampleur de l'événement fait exploser les références habituelles : des documents de synthèse de 75 pages
Chapitre 14
Protection des infrastructures critiques,
Communication avec le public, Rôle des médias p. 110 Effets dominos
La question des rumeurs : lorsque les défaillances de tous se combinent Sous-estimations médiatiques
Défaillances des responsables
Exagérations médiatiques ; envolées officielles débridées
Conséquences de la mauvaise information sur l'effort de secours Des officiels aux idées très étranges sur leurs responsabilités en matière d'information
Chapitre 15
Recherche et Sauvetage : une autre guerre, un système dépassép. 115
Recherche et sauvetage hors des grilles habituelles
Sauveteurs locaux : paralysés
Les raisons du succès de la Coast Guard
L'aveuglement : prépositionnement dans les zones inondables Anticiper la perte totale de communication, même chez les meilleurs
La perte de tout repère géographique : pas de cartes, zone bouleversée
La perte de tout repere geographique : pas de cartes, zone bouleversee La perte de toute coordination
Des outils inadaptés, dans un contexte de confusion
La confusion organisationnelle, l'absence de contrôle aérien

Chapitre 16
Logistique : un monde public submergé, un monde privé préparép. 121
Effondrement
Un problème récurrent
Un décalage de compétence avec le privé
Une posture statique totalement en décalage
La FEMA submergée passe le tout au DOD : pour 1 milliard de \$
Trois problèmes : l'eau, les communications, la sécurité
Le filtrage des demandes par des bureaucrates plus ou moins bien inspirés
Le défi de répondre à des nuages de cibles
Une cascade de défaillances, depuis l'impréparation jusqu'au choix de sites sous l'eau
Entre grains de sables et impuissance : les check-points qui achèvent de bloquer le
système
Confusion : lorsque les responsables confondent Superdome et Convention Center
Loin de l'amateurisme du secteur public, le professionnalisme du privé
1 / 1
Chapitre 17
Le système médical confronté à un autre mondep. 127
25 hôpitaux, 12 000 patients
Une analyse bénéfice-risque, mais sur hypothèses conventionnelles, donc fausses
Un système qui va au fiasco, en le sachant
L'inverse du schéma de référence : non plus un "ground zero", et un contexte préservé
qui vient aider, mais un univers entièrement affecté
Une hypothèse hors-cadre : pas d'évacuation
Aux confins de l'insaisissable
Face à des impensables qui cristallisent brutalement
Plans-papiers
Les volontaires : la question des accréditations, et l'impréparation générale
nes voicinaires : la question des accreatations, et i impreparation generale
Chapitre 18
Le domaine militaire : entre pesanteurs et initiativesp. 132
Un niveau d'engagement inédit
Des demandes inadéquates, réponses mal maîtrisées
Le piège de la précision, en lieu et place du jugement
Les pesanteurs naturelles
Des initiatives qui terrorisent le système
Un système qui reste lourd
Un système très mal informé à haut niveau
Manque d'information, ou incapacité à détecter de l'information non classique ?
Malaise croissant en raison du silence de la FEMA – comment respecter des règles
dont on voit qu'elles mènent au fiasco?
•
Et l'on finit par passer à une posture plus offensive
Blocage et frustration
Ce que l'on a fait, en rongeant son frein, tandis que la FEMA était aux abonnés
absents
La Marine : une forte capacité d'initiative
L'armée de Terre : la détermination inventive du Général Honoré – le déclenchemen
d'un « exercice Katrina » pour tourner les impossibilités
Des problèmes de coordination : l'intervention des Marines, comme OVNI
Des liens plus souples qu'il faut savoir reconnaître

	,
Une posture très proactive	
Se préparer à des bouleversements dans les rôles	
Ou, à tout le moins, à des ajustements un peu chaotiques	
Et l'on découvre que le partenaire central n'a pas du tout les compétences attendues Avant, finalement, de se voir assigner une liste impressionnante de missions Mais, en réalité, beaucoup de dispositions avaient été prises et engagées préalablemen	t
La question du retard dans l'intervention de l'Armée	
Les limites de l'enquête, en raison de l'opacité de la Maison Blanche et des ordres de silence envers la Commission	e
Entre complexité et confusion	
Le changement d'échelle, qui dépasse les dispositifs prévus	
Confusion toujours, même si l'on passe par le sommet, à n têtes	
La rupture de langage traduit une rupture de système de référence : Babel	
Quand la réalité a de la difficulté à se faire entendre au milieu du fracas de la bataille institutionnelle	e
Grandes questions	
1°) La place de la Défense dans les crises civiles	
2°) Le bon équilibre entre initiative et coordination	
3°) La tension entre niveaux institutionnels	
Chapitre 19	
La planification nationale d'urgence : un paravent ?p. 149)
Le Plan, ou la fascination pour une improbable mise en tuyau	
Pas d'entraînement	
La fausse solution miracle : pour contrer les béances, toujours plus de détails	
Autres crises, autres paradigmes	
Réticences multiples, problèmes fondamentaux non identifiés	
La planification, un exercice purement esthétique, disjoint de la décision ?	
Incompréhention-résistance générale	

Chapitre 20

Fraudes et gaspillages......p. 153

Paiements dans la confusion

Gaspillages et attitudes peu responsables

L'archétype du gaspillage : l'odyssée de la glace

Autre cas emblématique : les caravanes pour l'hébergement

Avant-propos

Crises: Nouvelles frontières

11-Septembre, Anthrax, 11-Mars 2003 à Madrid, Canicule 2003, Katrina en 2005 – *The Perfect Storm*. Et maintenant, l'éventualité d'une pandémie grippale, la possibilité de bouleversements climatiques ou de tout autres « nouvelles donnes » globales.

Les sociétés complexes sont désormais confrontées à des risques et des crises de classe nouvelle, sur de multiples fronts, imbriqués. Les niveaux de gravité sont pulvérisés, les théâtres d'opérations plus larges que jamais, les cartes d'acteurs foisonnantes et illisibles, les outils de référence ne sont plus guère pertinents quand on doit traiter de véritables mutations. Les institutions, les organisations, arrivent en limite de compétence – placées de plus en plus souvent hors domaine de pilotabilité comme on le dirait d'un avion sorti de son domaine de vol.

Il convient de prendre toute la mesure des multiples franchissements de seuil dont nous sommes les témoins. 1

- des sauts quantitatifs : l'événement en arrive souvent à peser aussi lourd, ou plus encore, que la somme de tous les accidents passés de même nature ;
- la sur-complexité : c'est la multiplication concomitante de multiples chocs, qui traversent les catégories usuelles ;
- *une expertise dépassée* : en situation, elle se trouve plongée non plus seulement dans l'incertitude, mais bel et bien dans l'ignorance ;
- *l'hyper-connectivité* : elle provoque des effets dominos inédits ;
- la vitesse : elle surclasse tous les dispositifs prévus. Le virus circule à la vitesse du jet, ajustant ses déplacements aux facilités offertes par les hubs tarifaires (Toronto, 2003). Les grands black-out énergétiques ont raison de la moitié d'un continent en quelque vingt secondes (USA-Canada, août 2003). Les industriels de l'informatique soulignent qu'un black-out électronique planétaire pourrait se propager en moins d'une minute. Or, on le voit à chaque grand choc, le temps de réponse des grandes institutions sauf heureuse exception varie de 4 jours à deux semaines pour une mobilisation initiale, dans le cas des organisations les moins mal préparées ; les autres réagissent encore plus lentement voire ne réagissent tout simplement pas ;
- des crises de texture : ce ne sont plus des installations spécifiques, ni même des infrastructures critiques qui sont en jeu, mais bien les textures profondes de nos sociétés, de type organique, avec leurs couplages et maillages serrés, leurs interdépendances cachées (cela fut notamment documenté de façon magistrale par Eric Klinenberg sur la canicule à Chicago en 1985²);
- des crises de conviction : les vraies vulnérabilités ne procèdent plus de simples considérations techniques, mais des cultures de nos sociétés face aux risques, de leurs

¹ Patrick Lagadec: "Crisis Management in the Twenty-First Century, "Unthinkable" Events in "Unthinkable" Contexts", in Dynes, Quarantelli, Rodriguez, *Handbook of Disaster Research*, Springer, September 2006; H. Quarantelli, P. Lagadec, A. Boin: "Trans-System Ruptures: The New Disasters and Crises of the 21st Century and the Implications for Planning and Managing", in R. Dynes, H. Quarantelli, H. Rodriguez, *Handbook of Disaster Research*, Springer, September 2006; Patrick Lagadec and Erwann Michel-Kerjan: « A New Era Calls for a New Model », *International Herald Tribune*, November 1, 2005.

² Eric Klinenberg, *Heat Wave, A Social Autopsy of Disaster in Chicago*, Chicago, The University of Chicago Press, 2002.

- convictions, et de la façon dont elles formulent leurs peurs ou leurs volontés de relever les défis de leur histoire ;
- des crises de leadership, enfin : dès lors que les règles habituelles ne fonctionnent plus, le "management" ne peut plus suffire. Il faut redonner sens, vision, direction, cohérence à des ensembles soudains emportés dans des turbulences non prévues dans nos scripts de référence. Sans céder aux illusions et aux dangers de l'homme providentiel, il convient cependant de remettre les dirigeants en responsabilité.

Le caractère dominant de ces chocs "hors-cadres" est d'abord la confrontation à "*l'inconcevable*". Non que les phénomènes en jeu soient par nature impossibles à comprendre ou à imaginer, mais parce que les acteurs restent prisonniers de visions, de cloisonnements, d'interdits, de modes d'action, qui n'ont pas été pensés pour un monde où dominent la surprise, la mutation et le chaotique.

Les acteurs sont violemment projetés dans un autre espace. Leurs repères sont soudainement inappropriés. Et lorsque la stratégie est prise en défaut, les défaillances tactiques se multiplient. Davantage : le fossé entre les repères habituels et les réalités à traiter est tel que les opérateurs subissent d'emblée un phénomène aux conséquences majeures mais le plus souvent ignoré : une *tétanisation* qui bloque les intelligences, la recherche de solutions nouvelles, la capacité d'écoute, la volonté de coordination, et même la simple application des savoir-faire habituels. Après-coup, toute analyse "au fil de l'eau" ne fait qu'enregistrer des motifs de consternation sur le mode : « Comment autant de gens ont-ils pu faire montre d'une aussi faible capacité de réaction ? ».

Ces difficultés critiques conduisent au déclenchement d'une dynamique funeste : le désarroi des décideurs, la défiance des citoyens, le découplage entre gouvernés et gouvernants. Ce fut ainsi le "cyclone" de Madrid en mars 2004 qui emporta le gouvernement Aznar. Ou le cri, après Katrina : "Nous avons été abandonnés », « This is not America! ».

Aucune formule magique – y compris même la référence rituelle au "partenariat public/ privé" – ne permet de contourner l'obstacle. Le diagnostic doit être pleinement accepté : pour affronter les grandes crises actuelles, faites de discontinuités déconcertantes et de dynamiques chaotiques (fondamentalement exclues de nos logiques managériales, y compris dans le domaine de la gestion des désastres) de nouvelles références intellectuelles, organisationnelles et culturelles doivent être construites. ³ De nouveaux outils sont à penser et à développer. ⁴

Les questions sont foisonnantes :

- Quels décalages de compréhension et de pilotage pénalisent la gestion des crises ?
- Quelles pesanteurs historiques et culturelles, quelles routines, donnent leur force à ces décalages ?
- Quels sont les meilleurs enseignements de l'expérience pour une anticipation et un traitement de ces défis "hors-cadre"?

³ Patrick Lagadec: "The Borderline of Chaos", *Crisis Response*, Vol 2, Issue 3, June 2006, p. 62-63. http://www.patricklagadec.net/fr/pdf/062-063_crj2_3_lagadec.pdf
Michel Nesterenko and Patrick Lagadec "Complexity and chaos", *Crisis Response*, vol. 3, issue 1, December 2006, pp. 62-64. http://www.patricklagadec.net/fr/pdf/Crisis_nester.pdf

⁴ Pierre Béroux, Xavier Guilhou, Patrick Lagadec: "Implementing Rapid Reflection Forces", *Crisis Response*, vol. 3, issue 2, pp. 36-37. http://www.patricklagadec.net/fr/pdf/Implementing_Rapid_Reflection_Forces.pdf

- Quelles initiatives bien précises peut-on lancer à court terme, pour apprendre et consolider organisations et systèmes face aux menaces de crises majeures ?
- Quels nouveaux rapports public/privé développer en vue de ces environnements ?
- Quelles répartitions et organisations de compétences entre les étages locaux, régionaux, nationaux, continentaux, intercontinentaux ?
- Quelles formations des décideurs et futurs décideurs mettre sur pied pour traiter de réalités aussi surprenantes et instables ? ⁵
- Quelles préparations de tous les autres acteurs parties prenantes, ONG, élus locaux, syndicats, experts, citoyens puisque ces crises de textures ne peuvent être traversées sans implications collectives puissantes ?

Tirer le meilleur des grands rapports d'enquête – le cas Katrina, tome 3

L'importance de l'événement Katrina oblige à une réflexion en profondeur sur l'épisode et ses enseignements. Les angles d'interrogation comme les méthodes d'analyse à solliciter sont multiples, reflétant la complexité du phénomène et des questions qu'il pose.

Pour notre part, nous avons engagé la démarche, avec l'appui de la Direction du Contrôle des risques d'EDF – sous l'impulsion de Pierre Béroux. En équipe, nous sommes rendus à La Nouvelle Orléans et dans le Mississipi (février 2006). Pour rencontrer les grands opérateurs du domaine de l'électricité, des télécommunications, de l'eau, des services postaux, des transports aériens et portuaires ; des responsables de médias, la Croix-Rouge – et explorer avec eux les leçons essentielles qu'ils retiennent de Katrina. Cette mission sur le terrain a été complétée par d'autres interviews et séminaires à Washington (mars, avril 2006), et a conduit à un premier rapport. Une nouvelle mission à La Nouvelle Orléans a permis de nouvelles

http://www.patricklagadec.net/fr/pdf/EDF Katrina Rex Faits marquants.pdf

Voir aussi Patrick Lagadec et Xavier Guilhou: "Katrina - Quand les crises ne suivent plus le script", *Préventique-Sécurité*, n° 88, Juillet-août 2006, pp. 31-33. http://www.patricklagadec.net/fr/pdf/PS88 Katrina ok.pdf

⁵ Patrick Lagadec: "Enseigner la question des crises: Enjeux, Obstacles, Initiatives", *Cahiers du Laboratoire d'Econométrie*, janvier 2007, Ecole Polytechnique.http://www.patricklagadec.net/fr/pdf/2007-01.pdf Patrick Lagadec: "Crises hors-cadres: Oser un enseignement", in *Ethique, Médecine, Société – Concepts et enjeux pratiques*, sous la direction d'Emmanuel Hirsh, Vuibert, octobre 2007.

⁶ Soucieuse de toujours rester en phase avec les défis de notre temps, EDF a pour politique de rechercher systématiquement les leçons des grands événements qui tranchent avec le quotidien. Ainsi :

[•] La crise du verglas au Québec en 1998, qui a donné des leçons stratégiques immédiates pour le traitement des grandes tempêtes en Europe en décembre 1999 – http://www.patricklagadec.net/fr/pdf/Lagadec PS 49.pdf).

La crise du SRAS à Toronto en 2003 – dans l'optique d'une pandémie grippale. Voir : Patrick Lagadec, William Dab : "Pilotage d'activités vitales en univers imprévisible – Les grands opérateurs de réseaux et le risque de pandémie : Mission Toronto – Enseignements du Sras, préparation à la pandémie grippale, 10-14 octobre 2005", Electricité de France, Direction du Contrôle des Risques, 10 Novembre 2005 http://www.patricklagadec.net/fr/pdf/EDF Pandemie Grippe Toronto.pdf

[•] Le cyclone Katrina et les grands réseaux, voir note 7.

⁷La mission comprenait : Xavier Guilhou (XAG Conseil), Daniel Madet (EDF), Jean-Pierre Roche (Aéroports de Paris), Erwan Lagadec (Harvard University). La mission fut en outre appuyée par l'Amiral Alain Oudot de Dainville, Chef d'état-major de la Marine, le Préfet Christian Frémont, Préfet de la Zone de Défense Sud ; et, aux Etats-Unis, par son Excellence Jean-David Levitte, Ambassadeur de France, et par Pierre Lebovics, Consul Général de France à La Nouvelle Orléans.

⁸ Xavier Guilhou, Patrick Lagadec, Erwan Lagadec: "Les Grands Réseaux Vitaux et Katrina, enseignements sur les crises hors-cadre et leur pilotage". Dans le cadre d'une mission Electricité de France, à la demande de Pierre Béroux, Directeur du Contrôle des Risques.

rencontres, ou des approfondissements, notamment avec le "patron" des Coast Guard¹⁰ locaux, le Captain Paskewich¹¹ (mars 2007).

Une autre voie d'examen, et c'est celle qui a conduit à ce travail, consiste à analyser en profondeur les grands rapports d'enquête. C'est là pour nous une pratique habituelle¹², qui répond à plusieurs objectifs : tirer tout le parti de ces volumineux documents, d'une très grande richesse factuelle ; explorer de nouvelles lignes d'analyse, au-delà de ce qu'ont pu faire les commissions d'enquête. Et mettre ces réflexions au service du plus grand nombre : décideurs, experts, chercheurs, journalistes, étudiants.

Le cyclone Katrina, a donné lieu à de très nombreuses analyses, et notamment à trois grands rapports d'enquête. Celui de la Chambre des Représentants¹³, celui de la Maison Blanche¹⁴, celui du Sénat¹⁵.

Nous proposons ici un troisième travail sur le rapport du Sénat¹⁶, à la suite des tomes 1 et 2, consacrés respectivement à l'examen des rapports de la Chambre des Représentants, et de la Maison Blanche.

Le tome 1 avait permis de cerner l'épisode en lui-même, à travers une présentation des données de base, sur le cyclone, ses impacts, et les actions des acteurs essentiels. Le tome 2 avait privilégié l'examen de grands thèmes de réflexion transverse : impréparation, mutation culturelle, leadership, gestion et communication, rapports public-privé, infrastructures critiques, place des armées, place du citoyen.

Pour ce troisième tome, nous avons choisi de proposer deux lectures :

• La première (Partie 1) synthétique et stratégique, permettant d'aller directement aux conclusions (Chapitre 1) et propositions (Chapitre 2) de la Commission. Nous y

⁹ Avec l'appui et de la Direction du Contrôle des Risques d'EDF et de l'IRGC – International Risk Governance Council, Genève, http://www.irgc.org/irgc/.

¹⁰ Nous prenons la liberté de mettre un pluriel sur ce collectif en anglais.

¹¹ Vidéo: "Katrina and the US Coast Guard", Captain Frank M. Paskewich, PE, Commanding Officer, Captain of the Port, talking to Xavier Guilhou, Caroline Guilhou, Patrick Lagadec, New Orleans, 9 March 2007 — programme de retour d'expérience sur les crises hors-cadre à l'échelle internationale conduit par Pierre Béroux, Directeur du Contrôle des Risques d'Electricité de France, mission confiée à Patrick Lagadec et Xavier Guilhou (1h16mn).

¹² P. Lagadec: "La canicule de l'été 2003. Auscultation des rapports d'enquête", in "Retour sur les rapports d'enquête et d'expertise suite à la canicule de l'été 2003", cahiers du GIS Risques Collectifs et Situations de Crise, Claude Gilbert et Isabelle Bourdeaux Editeurs, CNRS et Maison des Sciences de l'Homme-Alpes, n°4, Mai 2005, pp. 17-200. http://www.patricklagadec.net/fr/pdf/retoursurenquetescanicule.pdf

P. Lagadec: "Le rapport de la Commission d'enquête britannique sur l'Encéphalopathie Spongiforme Bovine (ESB) au Royaume-Uni entre 1986 et 1996", Cahiers du GIS Risques Collectifs et Situations de Crise, n°1, juillet 2001, 170 pages. http://www.patricklagadec.net/fr/pdf/retour_ESB.pdf

¹³ A Failure of Initiative, Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, US House of Representatives, US Government Printing Office, 15 February 2006, 362 p. + Annexes).

¹⁴ The Federal Response to Hurricane Katrina – Lessons Learned, The White House, 23 February 2006 (217 p).

¹⁵ *Hurricane Katrina – A Nation Still Unprepared*, Report of the Committee on Homeland Security and Governmental Affairs, United States Senate, Washington, DC., May 2006 (749 p.).

¹⁶ Pour des raisons évidentes, nous nous abstiendrons de reprendre en détail dans ce tome 2 des éléments descriptifs de Katrina, déjà largement produits dans le tome 1, et nous nous concentrerons sur les messages clés appelant repérage et réflexion.

ajoutons une réflexion personnelle (Chapitre 3) en examinant la question qui se pose à tout pays désormais, alors que d'autres Katrina, dans tous les domaines, pointent à l'horizon ou immédiatement à nos portes : « Et maintenant ? ». Comment penser, organiser, nos systèmes institutionnels, nos outils pour traiter ces défis non conventionnels ? C'est bien là en effet une préoccupation centrale, qui serait celle de toute commission d'enquête : Que proposer ?

• La seconde (Partie 2), analytique, pour faire justice à l'énorme travail de la Commission, pour utiliser au mieux cette nouvelle mine d'informations, pour aider le lecteur intéressé à développer ses capacités de questionnement sur les grands cas de crise contemporaines.

Nous sommes bien conscient de la complexité des questions abordées. Aussi bien, comme pour les deux premiers tomes mis en ligne, nous proposons ici une version provisoire, destinée à susciter la réflexion, en en aucune manière à la fixer.

Avertissements

À l'adresse du lecteur français

Lors des émissions de radio et télévision aux mois d'août-septembre 2005, nombre d'intervenants, experts ou commentateurs ont glosé sur le thème : « Les Américains ont trop de problèmes avec leur système fédéral et leur pauvre organisme de sécurité civile (FEMA). Nous, nous avons un système centralisé, les préfets et les plans Orsec ». Pareils commentaires sont tout à la fois stupides et indécents. Nous travaillons ici sur un désastre qui a touché une superficie égale à la moitié du territoire français, avec perte totale de tous les services vitaux, et impossibilité de reconstruction à court terme.

La seule attitude responsable est de commencer par écouter le cas et ses difficultés. En nous interrogeant en premier lieu sur ce qui sort de nos cadres de référence. Sauf à signer par avance nos propres capitulations en cas de phénomène également hors cadre qui pourrait toucher notre pays, ou l'Europe. Les capacités dont nous avons fait montre lors de l'épisode de la canicule 2003 – 20 000 morts en France, 70 000 en Europe – devraient nous inciter à quelque prudence. Nous engager à un nouveau regard scientifique sur ces enjeux, à une véritable mobilisation stratégique des dirigeants, dans tous les secteurs.

À l'adresse du lecteur européen

Un ouvrage est actuellement en cours de rédaction et qui paraîtra à l'automne 2007. Il prend l'ouragan Katrina et vient le superposer sur le nord de l'Europe : nord de la France, sud-est de l'Angleterre et notamment Londres, Pays-Bas. Dans l'attente de sa parution, on pourra lire le présent travail relatif à Katrina, aux Etats-Unis, et s'interroger sur ce que serait la réactivité de l'Union Européenne en cas de phénomène de cette nature, sur la préparation des dirigeants, des réseaux vitaux, des ONG, des médias, à un choc de ce niveau de difficulté. Là encore, il serait bien présomptueux de partir de l'idée que, de ce côté de l'Atlantique, nous avons tout ce qu'il faut pour anticiper, réagir et reconstruire.

PREMIÈRE PARTIE

SYNTHÈSE, RECOMMANDATIONS, RÉFLEXIONS

Chapitre 1

SYNTHÈSE KATRINA, UNE DÉBÂCLE QUASI-GÉNÉRALE

1. Un tableau effarant

La Commission trace quatre lignes fondamentales expliquant la faillite du système :

- La non prise en compte des alertes lancées de longue date ;
- L'incapacité à se mobiliser dans les jours précédant et suivant le sinistre ;
- La défaillance des systèmes de réponse ;
- Un déficit général de leadership.

Le tout s'inscrit sur un fond de tableau traduisant une incapacité à construire une réponse nationale en cas d'événement de grande ampleur. Dès son premier test, la réorganisation générale engagée à la suite des événements du 11 septembre a connu un échec cinglant. Tout au plus peut-on noter l'efficacité de l'U.S. Coast Guard, et les performances remarquables de certains acteurs du secteur privé. Eux, avaient anticipé, s'étaient entraînés, surent mobiliser des moyens, et eurent au front de vrais leaders, qui avaient carte blanche pour agir.

These failures were not just conspicuous; they were pervasive. Among the many factors that contributed to these failures, the Committee found that there were four overarching ones: (1) long-term warnings went unheeded and government officials neglected their duties to prepare for a forewarned catastrophe; (2) government officials took insufficient actions or made poor decisions in the days immediately before and after landfall; (3) systems on which officials relied on to support their response efforts failed; and (4) government officials at all levels failed to provide effective leadership. These individual failures, moreover, occurred against a backdrop of failure, over time, to develop the capacity for a coordinated, national response to a truly catastrophic event, whether caused by nature or man-made.

The results were tragic loss of life and human suffering on a massive scale, and an undermining of confidence in our governments' ability to plan, prepare for, and respond to national catastrophes.[...] Following the terrorist attacks of 9/11, this country went through one of the most sweeping reorganizations of federal government in history. While driven primarily by concerns of terrorism, the reorganization was designed to strengthen our nation's ability to address the consequences of both natural and man-made disasters. In its first major test, this reorganized system failed. Katrina revealed that much remains to be done

Most of the hearings focused on what went wrong in Katrina. Two of the hearings, however, examined the successes: the effective and heroic search and rescue efforts by the U.S. Coast Guard; and the outstanding performance of certain members of the private sector in restoring essential services to the devastated communities and providing relief to the victims. These successes shared some important traits. The Coast Guard and certain private sector businesses both conducted extensive planning and training for disasters, and they put that preparation into use when disaster struck. Both moved material assets and personnel out of harm's way as the storm approached, but kept them close enough to the front lines for quick response after it passed. Perhaps most important, both had empowered front-lin leaders who were able to make decisions when they needed to be made. (p. 2-3)

2. Une culture d'urgence piégée par la seule logique séquentielle, de poupées russes

Chaque niveau de responsabilité est marqué par un principe de stratification séquentielle : le local intervient ; puis l'état, à la demande du niveau de base ; puis le fédéral, à la demande des états. Ce type de référence ne convient plus du tout pour les catastrophes de très grande ampleur. La Commission introduit la notion de désastre "ordinaire", pointant clairement la nécessité d'ouvrir d'autres références pour les désastres qui sortent précisément de l'ordinaire.

It has long been standard practice that emergency response begins at the lowest possible jurisdictional level – typically the local government, with state government becoming involved at the local government's request when the resources of local government are (or are expected to be) overwhelmed. Similarly, while the federal government provides ongoing financial support to state and local governments for emergency preparedness, ordinarily it becomes involved in responding to a disaster at a state's request when resources of state and local governments are (or are expected to be) overwhelmed. Louisiana's Emergency Operations Plan explicitly lays out this hierarchy of response.

During a catastrophe, which by definition almost immediately exceeds state and local resources and significantly disrupts governmental operations and emergency services, the role of the federal government is particularly vital, and it would reasonably be expected to play a more substantial role in response than in an "ordinary" disaster. (p. 3)

3. Un événement prévu depuis 40 ans ; des alertes massives ; une surdité quasi générale

La surprise extrême est souvent une dimension essentielle des grands événements catastrophiques actuels. Mais il n'est pas besoin de surprise pour faire montre d'une incapacité de réaction: Katrina l'illustre de façon magistrale. Les risques avaient été identifiés, et rappelés au cours des années. Des cyclones, tels Betsy en 1965, puis Camille en 1969, avaient confirmé les pronostics. La simulation Pam en 2004 avait identifié des béances majeures. L'échelon central fut très précisément informé. Les alertes pour Katrina furent claires, précises, justes, répétées, massives, et même exceptionnellement personnalisées. Rien n'y fit.

Top officials at every level of government – despite strongly worded advisories from the National Hurricane Center (NHC) and personal warnings from NHC Director Max Mayfield – did not appear to truly grasp the magnitude of the storm's potential for destruction before it made landfall.

The potentially devastating threat of a catastrophic hurricane to the Gulf Coast has been known for 40 years: New Orleans experienced flooding in some areas of remarkably similar proportions from Hurricane Betsy in 1965, and Hurricane Camille devastated the Gulf Coast in 1969. More recently, numerous experts and governmental officials had been anticipating an increase in violent hurricanes, and New Orleans' special and growing vulnerability to catastrophic flooding due to changing geological and other conditions was widely described in both technical and popular media. Hurricane Georges hit the Gulf Coast in 1998, spurring the state of Louisiana to as Federal Emergency Management Agency (FEMA) for assistance with catastrophic hurricane planning. Little was accomplished for the next six years. Between 2000 and 2003, state authorities, an emergency-preparedness contractor, and FEMA's own regional staff repeatedly advised FEMA headquarters in Washington that planning for evacuation and shelter for the "New Orleans scenario" was incomplete and inadequate, but FEMA failed to approach other federal agencies for help

with transportation and shelter or to ensure that the city and state had the matters in hand.

During the Hurricane Pam exercise, officials determined that massive flooding from a catastrophic storm in New Orleans could threaten the lives of 60,000 people and trap hundreds of thousands more, while incapacitating local resources for weeks to months. The Pam exercise gave all levels of government a reminder that the "New Orleans scenario" required more forethought, preparation, and investment than a "**typical**" storm.

Over the weekend, there was a drumbeat of warnings: FEMA held video-teleconferences on both days, where the danger of Katrina and the particular risks to New Orleans were discussed; NHC's Max Mayfield called the governors of the affected states, something he had only done once before in his 33 year career; President Bush took the unusual step of declaring in advance an emergency for the states in the impact zone; numerous media reports noted that New Orleans was a "bowl" and could be left submerged by the storm; the Department of Homeland Security's Simulation and Analysis group generated a report stating that the levees protecting New Orleans were at risk of breaching and overtopping; internal FEMA slides stated that the projected impacts of Katrina could be worse than those in the Hurricane Pam exercise. The warnings were as widespread as they were dire. (p. 4-5)

4. Une préparation insuffisante, sur presque tous les tableaux

La Commission dresse le tableau d'un système totalement dépassé, comme hypnotisé, qui va au fiasco majeur comme on se soumet à un destin tragique, en toute connaissance de cause, en toute résignation molle devant l'impuissance des hommes (et de la sienne propre) et des institutions (et de la sienne propre) à relever les défis difficiles :

- Certes, on se démène dans les derniers moments, et l'on en fait d'ailleurs bien plus que jamais en matière de préparation.
- Mais, comme l'a dit le Foch, "La guerre n'attend pas les vertus de la dernière heure". Les responsables étaient d'avance vaincus, en raison des graves manquements qui affectaient toute la phase de préparation. Et de leur incapacité à comprendre qu'ils allaient devoir, plus encore, livrer « une autre guerre ».
- En raison aussi de leur incapacité en matière de leadership, qui laissa le champ libre à tous les potentiels de défaillances qui marquaient le système.
- L'échelon fédéral connaissait les mêmes difficultés des failles imposantes, un leadership défaillant –, qui conduisirent à la même impuissance à mobiliser des resssources suffisantes, intersectorielles, ou en provenance du secteur privé.
- Au plus haut niveau, le Secrétaire du DHS se contenta des réassurances reçues. Il n'activa pas le réseau des acteurs essentiels. Il ne sut pas non plus activer les textes spécifiquement prévus pour les castatrophes d'ampleur extraordinaire (Catastrophic Incident Annex du National Response Plan) qui prévoient un passage du *pull system* au *push system* (intervention d'emblée, sans attente de sollicitations explicites et spécifiques de la part de l'état concerné).
- Le Département de la Défense ne sut pas non plus monter une action intégrée à la hauteur des enjeux.
- La Maison Blanche ne fit pas preuve de meilleure réactivité. Certes, le Président, à la demande de M. Brown, Directeur de la FEMA, prit l'initiative d'appeler la Gouverneure Blanco au téléphone pour la pousser à prendre un ordre d'évacuation obligatoire. Certes, il déclara une situation d'urgence alors que le cyclone n'avait pas encore frappé, ce qui était une première. Mais il ne quitta pas son ranch du Texas, et ne rentra à Washington

que deux jours après l'impact. Et c'est seulement alors qu'il réunit une équipe pour superviser la réponse fédérale.

Katrina was not a "**typical**" hurricane as it approached landfall; it was much larger, more powerful, and was capable of producing catastrophic damage.

In some respects, officials did prepare for Katrina with the understanding that it could be a catastrophe. Some coastal towns in Mississippi went to extraordinary lengths to get citizens to evacuate, including sending people door-to-door to convince and cajole people to move out of harm's way. The State of Louisiana activated more than twice the number of National Guard troops called to duty in any prior hurricane, and achieved the largest evacuation of a threatened population ever to occur. The City of New Orleans issued its first ever mandatory evacuation order. The Coast Guard readied its personnel, prepositioned its equipment, and stood by to begin search and rescue operations as quickly as humanly possible. Departing from usual practice, the governors of the three affected states requested, and President Bush issued, emergency declarations before the storm made landfall.

But however vigorous these preparations, <u>ineffective leadership</u>, <u>poor advance planning</u> and an unwillingness to devote sufficient resources to emergency management over the long term doomed them to fail when Katrina struck. Despite the understanding of the Gulf Coast's particular vulnerability to hurricane devastation, officials braced for Katrina with <u>full awareness of critical deficiencies</u> in their plans and <u>gaping holes</u> in their resources While Katrina's destructive force could not be denied, state and local officials did not marshal enough of the resources at their disposal.

In addition, years of short-changing federal, state, and local emergency functions left them incapable of fully carrying out their missions to protect the public and care for victims. For example, the lack of survivable, interoperable communications, which Governor Haley Barbour said was the most critical problem in his state, occurred because of an accumulation of decisions by federal, state, and local officials that left this long standing problem unsolved.

The Committee believes that leadership failures needlessly compounded these losses. Mayor Ray Nagin and Governor Kathleen Blanco – who knew the limitations of their resources to address a catastrophe – did not specify those needs adequately to the federal government before landfall. For example, while Governor Blanco stated in a letter to President Bush two days before landfall that she anticipated the resources of the state would be overwhelmed, she made no specific request for assistance in evacuating the known tens of thousands of people without means of transportation, and a senior state official identified no unmet needs in response to a federal offer of assistance the following day. The state's transportation secretary also ignored his responsibilities under the state's emergency operations plan, leaving no arm of the state government prepared to obtain and deliver additional transportation to those in New Orleans who lacked it, when Katrina struck. In view of the long-standing role of requests as a trigger for action by higher levels of government, the state bears responsibility for not signaling its needs to the federal government more clearly.

Compounded by leadership failures of its own, the federal government bears responsibility for not preparing effectively for its role in the post storm response. FEMA was unprepared for a catastrophic event of the scale of Katrina. Well before Katrina, FEMA's relationships with state and local officials, once a strength, had been eroded in

part because certain preparedness grant programs were transferred elsewhere in the Department of Homeland Security (DHS), not as important to state and local preparedness activities, FEMA's effectiveness was diminished. In addition, at no time in its history, including in the years before it became part of DHS, had FEMA developed – nor had it been designed to develop – response capabilities sufficient for a catastrophe nor had it developed the capacity to mobilize sufficient resources from other federal agencies, and the private and nonprofit sectors.

Moreover, FEMA's former Director, Michael Brown, lacked the leadership skills that were needed. Before landfall, Brown did not direct the adequate pre-positioning of critical personnel and equipment, and willfully failed to communicate with DHS Secretary, Michael Chertoff, to whom he was supposed to report. Earlier in the hurricane season, FEMA had pre-positioned an unprecedented amount of relief supplies in the region. But the supplies were not enough. Similarly, while both FEMA and the Department of Health and Human Services (HHS) made efforts to activate the federal emergency health capabilities of the National Disaster Medical System (NDMS) and the U.S. Public Health Service (PHS), only a limited number of federal medical teams were actually in position prior to landfall to deploy into the affected area. Only one such team was in a position to provide immediate medical care in the aftermath of the storm.

More broadly, DHS – as the Department charged with preparing for and responding to domestic incidents, whether terrorist attacks or natural disasters – failed to effectively lead the federal response to Hurricane Katrina. DHS leadership failed to bring a sense of urgency to the federal government's preparation for Hurricane Katrina, and Secretary Chertoff himself should have been more engaged in preparations over the weekend before landfall. Secretary Chertoff made only top-level inquiries into the state of preparations, and accepted uncritically the reassurances he received. He did not appear to reach out to the other Cabinet Secretaries to make sure that they were readying their departments to provide whatever assistance DHS – and the people of the Gulf Coast – might need.

Similarly, had he invoked the Catastrophic Incident Annex (CIA) of the National Response Plan (NRP), Secretary Chertoff could have helped remove uncertainty about the federal government's need and authority to take initiative before landfall and signaled that all federal government agencies were expected to think – and act – proactively in preparing for and responding to Katrina. The Secretary's activation of the NRP CIA could have increased the urgency of the federal response and led the federal government to respond more proactively rather than waiting for formal requests from overwhelmed state and local officials. Understanding that delay may preclude meaningful assistance and that state and local resources could be quickly overwhelmed and incapacitated, the NRP CIA directs federal agencies to pre-position resources without awaiting requests from the state and local governments. Even then, the NRP CIA holds these resources at mobilization sites until requested by state and local officials, except in certain prescribed circumstances.

The military also had a role to play, and ultimately, the National Guard and active duty military troops and assets deployed during Katrina constituted the largest domestic deployment of military forces since the Civil War. And while the Department of Defense (DOD) took additional steps to prepare for Katrina beyond those it had taken for prior civil support missions, its preparations were not sufficient for a storm of Katrina's magnitude. Individual commanders took actions that later helped improve the response, but these actions were not coordinated by the Department. The Department's preparations

were consistent with how DOD interpreted its role under the NRP, which was to provide support in response to requests for assistance from FEMA. However, additional preparations in advance of specific requests for support could have enabled a more rapid response.

In addition, the White House shares responsibility for the inadequate pre-landfall preparations. To be sure, President Bush, at the request of Brown, did take the initiative to personally call Governor Blanco to urge a mandatory evacuation. As noted earlier, he also took the unusual step of declaring an emergency in the Gulf States prior to Katrina making landfall. On the other hand, the President did not leave his Texas ranch to return to Washington until two days after landfall, and only then convened his Cabinet as well as a White House task force to oversee federal response efforts." (p. 5-8)

5. Une réponse inacceptable, à tous les niveaux de responsabilité

Les carences générales en matière de préparation conduisent à un tableau pathétique en matière de réponse :

Recherche et Sauvetage

Certes, l'héroïsme des sauveteurs permit de transporter un nombre considérable de personnes vers des zones hors d'eau, mais le système aval dérailla. Le plan prévoyait que les victimes recevraient nourriture, eau, soins médicaux, transport vers des centres d'hébergement. La destruction des moyens de communication, l'effondrement du système de transport (la flotte de bus de la municipalité était sous l'eau; rien n'avait été prévu pour que l'on dispose de conducteurs), la paralysie de la police (qui perdit des centaines de véhicules, de grandes quantités de munitions, d'uniformes...), l'absence de bateaux, conduisirent à une paralysie générale. Il est atterrant, souligne le rapport, de constater que les pompiers de La Nouvelle Orléans ne possédaient aucune embarcation, et la police seulement cinq —dans une ville dont le risque majeur, d'une évidence criante, était pourtant l'inondation.

The skill and dedication of Louisiana Department of Wildlife and Fisheries (W&F) officials and others working in these adverse conditions stand out as a singular success story of the hurricane response.

Applying a model developed in the Hurricane Pam exercise, rescue teams in Louisiana brought hurricane victims to high ground, where they were supposed to receive food, water, medical attention, and transport to shelters. Here, too, there were problems. Poor communications delayed state and federal officials learning about where rescuees had been dropped, in turn slowing shipments of food and water to those areas. The City of New Orleans was unprepared to help people evacuate, as many buses from the city's own fleet were submerged, while at the same time officials had not arranged in advance for drivers for those buses that were available.

The storm also laid waste to much of the city's police, whose headquarters and several district offices, along with hundreds of vehicles, rounds of ammunition, and uniforms were all destroyed within the first two days of landfall.

Planning for search and rescue was also insufficient. FEMA, for instance, failed to provide boats for its search and rescue teams even though flooding had been confirmed by Tuesday. Moreover, interagency coordination was inadequate at both the state and federal levels. While the Louisiana W&F and FEMA are responsible for interagency search and rescue coordination at the state and federal levels respectively, neither developed adequate

plans for this mission. Staggeringly, the City of New Orleans Fire Department (NOFD) owned no boats, and the New Orleans Police Department (NOPD owned five. (p. 8).

Diagnostic de situation

L'incapacité à percevoir rapidement la dimension de la catastrophe a été au cœur de la défaite. Ce fut le trait majeur au niveau fédéral, qui avait un rôle critique dans la mesure où l'échelon local était submergé. Plus que de l'acquisition rapide des quelques informations déterminantes qui suffisaient largement pour déclencher une opération de grande envergure – en l'occurrence, dès l'instant où il y avait rupture des digues—, les échelons supérieurs se sont réfugiés dans une recherche d'informations exhaustives, minutieusement confirmées. Ils ont attendu le jeudi avant de prendre réellement en charge le désastre survenu le lundi à l'aube – quand il devint impossible de se cacher plus longtemps derrière le besoin de vérification, d'user de tous les subterfuges adminisratifs possibles pour échapper à la réalité. Il aurait fallu s'avancer en terrain non balisé, et sortir des logiques si protectrices des fonctionnements en tuyaux, en silos, au sein d'usines à gaz bureaucratiques étanches à toute situation non nominale. Cette exigence était hors de portée.

While authorities recognized the need to begin search-and-rescue missions even before the hurricane winds fully subsided, other aspects of the response were hindered by a failure to quickly recognize the dimensions of the disaster. These problems were particularly acute at the federal level. The Homeland Security Operations Center (HSOC) - charged with providing reliable information to decision makers including the Secretary and the President - failed to create a system to identify and acquire all available, relevant information, and as a result situational awareness was deeply flawed. With local and state resources immediately overwhelmed, rapid federal mobilization of resources was critical. Yet reliable information on such vital developments as the levee failures, the extent of flooding, and the presence of thousands of people in need of life-sustaining assistance at the New Orleans Convention Center did not reach the White House, Secretary Chertoff, or other key officials for hours, and in some cases more than a day. Brown, then in Louisiana, contributed to the problem by refusing to communicate with Secretary Chertoff opting instead to pass information directly to White House staff. Moreover, even though senior DHS officials did receive on the day of landfall numerous reports that should have led to an understanding of the increasingly dire situation in New Orleans, many indicated they were not aware of the crisis until sometime Tuesday morning. DHS was slow to recognize the scope of the disaster or that FEMA had become overwhelmed. On the day after landfall, DHS officials were still struggling to determine the "ground truth" about the extent of the flooding despite the many reports it had received about the catastrophe; key officials did not grasp the need to act on the less than-complete information that is to be expected in a disaster. DHS leaders did not become fully engaged in recovery efforts until Thursday, when in Deputy Secretary Michael Jackson's words, they "tried to kick it up a notch"; after that, they did provide significant leadership within DHS (and FEMA) as well as coordination across the federal government. But this effort should have begun sooner.

DOD also was slow to acquire information regarding the extent of the storm's devastation. DOD officials relied primarily on media reports for their information. Many senior DOD officials did not learn that the levees had breached until Tuesday; some did not learn until Wednesday. As DOD waited for DHS to provide information about the scope of the damage, it also waited for the lead federal agency, FEMA, to identify the support needed from DOD. The lack of situational awareness during this phase appears to have

been a major reason for DOD's belated adoption of the forwardlooking posture necessary in a catastrophic incident. (p. 9)

Évacuation post-impact

Les grandes catastrophes sont très peu tolérantes à l'impréparation, l'indécision, les erreurs initiales de trajectoires. Les écarts, s'ils ne sont pas repérés et traités, sont très vite irratrappables; les insuffisanses tendent à se coaguler à haute vitesse. La question des transports, nécessaires à l'évacuation post-impact, est une dramatique illustration de cette loi d'airain : erreurs préalables, fausses assurances, manque de réactivité, ont rendu dérisoires les efforts pathétiques que la Gouverneure finit par lancer.

Overwhelmed by Katrina, the city and state turned to FEMA for help. On Monday, Governor Blanco asked Brown for buses, and Brown assured the state the same day that 500 buses were en route to assist in the evacuation of New Orleans and would arrive within hours. In spite of Brown's assurances and the state's continued requests over the course of the next two days, FEMA did not direct the U.S. Department of Transportation to send buses until very early on Wednesday, two days after landfall, and the buses did not begin to arrive at all until Wednesday evening and not in significant numbers until Thursday. Concerned over FEMA's delay in providing buses – and handicapped by the Louisiana Department of Transportation and Development's utter failure to make any preparation to carry out its lead role for evacuation under the state's emergency plan – Governor Blanco directed members of her office to begin locating buses on Tuesday and approved an effort to commandeer school buses for evacuation on Wednesday. But these efforts were too little, too late. Tens of thousands of people were forced to wait in unspeakably horrible conditions until as late as Saturday to be evacuated. (p. 9-10)

Logistique et appui militaire

Une zone sujette à un grand traumatisme nécessite l'injection rapide d'une quantité colossale de ressources. Une préparation insuffisante, une incapacité à mesurer et traiter les échelles requises, l'injection de moyens de communication et de suivi inadéquats, conduisent bien vite à la confusion, l'impuissance, le blocage. Qui n'a jamais envisagé les effets de seuil auxquels le système serait confronté en cas d'événement hors-cadres aura peu de chance de surnager le moment venu. Et, à cette question de l'échelle, s'ajoutent des problèmes bien plus fins, de texture, rapidement bloquants. Ainsi, il ne suffit pas d'avoir prévu des points de déchargement pour les biens commandés : encore faut-il que les destinataires soient en mesure de s'y rendre et de s'y approvisionner effectivement. Si les voies de communication sont bloquées par une inondation, des débris, des check-points de sécurité, même une logistique de qualité sur les grosses artères viendra échouer sur l'absence du système capillaire indispensable.

FEMA lacked the tools to track the status of shipments, interfering with the management of supplying food, water, ice and other vital commodities to those in need across the Gulf Coast. So too did the incompatibility of the electronic systems used by federal and state authorities to manage requests for assistance, which made it necessary to transfer requests from the state system to the federal system manually.

Supplies of commodities were especially problematic. Federal shipments to Mississippi did not reach adequate levels until 10 days after landfall. The reasons for this are unclear, but FEMA's inadequate "surge capacity" – the ability to quickly ramp up the volume of shipments – is a likely cause. In both Mississippi and Louisiana, there were additional problems in getting the supplies the "last mile" to individuals in need. Both states planned

to make supplies available for pickup at designated distribution points, but neither anticipated the problems people would face in reaching those points, due to impassable roads or other issues. And in Louisiana, the National Guard was not equipped to assume this task. One of Louisiana's greatest shortages was portable toilets, which were requested for the Superdome but never arrived there, as more than 20,000 people were forced to reside inside the Superdome without working plumbing for nearly a week.

For their part, Louisiana and Mississippi relied heavily on support from other states to supplement their own emergency resources. Both states were parties to an interstate agreement known as the Emergency Management Assistance Compact (EMAC), which provides a system for sharing National Guard troops and other resources in natural disasters. As in many other areas of Katrina response, however, the magnitude of the demands strained the EMAC process and revealed limitations in the system. Paperwork burdens proved overwhelming. Louisiana experienced difficulties processing the volume of incoming resources. On Wednesday, August 31, the federal National Guard Bureau, which ordinarily serves a coordinating function within DOD, relieved Louisiana and Mississippi of many of the bureaucratic responsibilities by making direct requests for available troops to state adjutants general.

This process quickly resulted in the largest National Guard deployment in U.S. history, with 50,000 troops and supporting equipment arriving from 49 states and four territories within two weeks. These forces participated in every aspect of emergency response, from medical care to law enforcement and debris removal, and were considered invaluable by Louisiana and Mississippi officials.

Although this process successfully deployed a large number of National Guard troops, it did not proceed efficiently, or according to any pre-existing plan or process. There is, in fact, no established process for the large-scale, nation-wide deployment of National Guard troops for civil support. In addition, the deployments of National Guard troopswere not coordinated with the federal Northern Command, which was overseeing the large-scale deployments and operations of the active-duty military. While the NRP has specific procedures for active-duty involvement in natural disasters, their deployment raised unforeseen issues and was initially a source of frustration to Governor Blanco. The governor directed her adjutant general to secure additional troops on the day after landfall, but federal and state officials did not coordinate her requests well, and ground troops didn't arrive in significant numbers for several days. DOD chose to rely primarily on the deployment of National Guard troops (versus federal active duty troops) pursuant to its declared strategy and because it believed they were best suited to the required tasks, including performing law enforcement. In addition, the need to resolve command issues between National Guard and active duty forces – an issue taken up (but not resolved) in a face-to-face meeting between President Bush and the governor on Air Force One on the Friday after landfall, may have played a role in the timing of active duty troop deployments. The issue became moot as the two forces stayed under their separate commands, an arrangement that turned out to work well in this case thanks to the cooperation of the respective commanders.

While the large numbers of active-duty troops did not arrive until the end of the first week following landfall, National Guard troops did, and DOD contributed in other important ways during that period. Early in the week, DOD ordered its military commanders to push available assets to the Gulf Coast. They also streamlined their

ordinarily bureaucratic processes for handling FEMA requests for assistance and emphasized movement based on vocal commands with the paperwork to follow, though some FEMA officials believe that DOD's approval process continued to take too long. They provided significant support to search-and-rescue missions, evacuee airlifts, logistics management of buses arriving in the state for evacuation, and other matters.

Toward the end of the week, with its own resources stretched thin, FEMA turned to DOD to take over logistics for all commodity movements. DOD acceded to the request, and provided some logistics assistance to FEMA. However, it did not undertake the complete logistical take-over initially requested by FEMA because that was not needed.

By Tuesday afternoon, the New Orleans Superdome had become overcrowded, leading officials to turn additional refugees away. Mayor Nagin then decided to open the Morial Convention Center as a second refuge of last resort inside the city, but did not supply it with food or water. Moreover, he communicated his decision to open the Convention Center to state and federal officials poorly, if at all. That failure, in addition to the delay of shipments due to security concerns and DHS's own independent lack of awareness of the situation, contributed to the paucity of food, water, security, or medical care at the

Convention Center, as a population of approximately 19,000 gathered there. Those vital commodities and services did not arrive until Friday, when the Louisiana National Guard, assisted by National Guard units from five other states, brought in relief supplies provided by FEMA, established law and order, and then evacuated the Convention Center on Saturday within eight hours. (p. 10-12)

Maintien de l'ordre

Nous avons ici une illustration particulièrement nette du phénomène de complexification systémique brutale qui marque les situations de grande crise. Soudain, aucune strate, aucune niche, aucun domaine, ne peut plus se traiter indépendamment des autres. Une défaillance grave de maintien de l'ordre, liée notamment à une absence quasi-totale de préparation, dans une ville déjà marquée par de très sérieux problèmes de sécurité publique, conduit rapidement à des désordres, et plus encore à une perception de situation bien plus grave qu'elle ne l'est en réalité. Une pauvre préparation des responsables conduit ces derniers à enchérir encore sur les rumeurs et à consolider une vision générale, mais fausse, de quasi-guerre urbaine. Les conséquences sont immédiates sur nombre d'activités de secours et de supports. Le manque de leadership ne permet pas de récupérer des leviers d'action. La pauvreté de compétence générale conduit à donner toute leur puissance aux guerres de territoires préalables, bien plus naturelles qu'une coopération constructive.

Law enforcement outside the Superdome and the Convention Center was a problem, and was fueled by several contributing factors, including erroneous statements by top city officials inflaming the public's perception of the lawlessness in New Orleans.

Without effective law enforcement, real or imagined safety threats interrupted virtually every aspect of the response. Fearing for their personal safety, medical and search and rescue teams withdrew from their missions. FEMA and commercial vendors of critical supplies often refused to make deliveries until military escorts could be arranged. In fact, there was some lawlessness, yet for every actual act there were rumors of dozens more, leading to widespread and inaccurate reporting that severely complicated a desperate situation. Unfortunately, local, state, and federal officials did little to stanch this rumor flow. Police presence on the streets was inadequate, in part because in a matter of hours Katrina turned the NOPD from protectors of the public to victims of the storm.

Nonetheless, most New Orleans police officers appear to have reported for duty, many setting aside fears about the safety of their families or the status of their homes.

Even so, the ability of the officers who remained to perform their duties was significantly hampered by the lack of basic supplies. While supplies such as weapons and ammunition were lost to flooding, the NOPD leadership did not provide its officers with basic necessities such as food; nor did the Department have logistics in place to handle supplies. Members of the NOPD also identified the lack of a unified command for this incident as a major problem; eight members of the Command Staff were extremely critical of the lack of leadership from the City's Office of Emergency Preparedness (OEP). The Department's rank and file were unfamiliar with both the department's and the city's emergency-operations manuals and other hurricane emergency procedures. Deficiencies in the NOPD's manual, lack of training on this manual, lack of familiarity with it, or a combination of the three resulted in inadequate protection of department resources.

Federal law-enforcement assistance was too slow in coming, in large part because the two federal Departments charged under the NRP with providing such assistance – DHS and the Department of Justice (DOJ) – had done almost no pre-storm planning. In fact, they failed to determine even well into the post-landfall period which of the two departments would assume the lead for federal law enforcement under the NRP. As a result, later in the week, as federal law-enforcement officers did arrive, some were distracted by a pointless "turf war" between DHS and DOJ over which agency was in the lead. In the end, federal assistance was crucial, but should have arrived much sooner. (p. 12)

Santé

On trouve là encore les facteurs de déstabilisation que sont : 1°) les franchissements de seuils quantitatifs (70 000 personnes à trier et prendre en charge sur le plan sanitaire, 25 hôpitaux et de très nombreuses maisons de retraite à évacuer, ou en perdition); 2°) les croisements de difficultés de toutes natures. Ces enchevêtrements anéantissent les visions habituelles qui permettent d'optimiser la gestion dans chaque sous-territoire, en faisant abstraction de l'environnement. Ainsi, il est bien prévu que les populations ayant des besoins spéciaux en matière de santé soient hébergées au Superdome. Mais il n'était pas prévu que le Superdome soit rapidement endommagé, privé d'électricité et de nourriture, submergé par l'arrivée incontrôlée de 20 000 personnes, et non assisté pendant plusieurs jours... Il n'était pas prévu que des équipes d'assistance médicale quittent les lieux pour cause de sécurité publique. Ainsi encore, les hôpitaux crurent pouvoir rester ouverts, mais ce fut sans compter avec l'inondation et les pertes d'électricité qui en découlèrent ; certes, les plans prévoyaient une assistance via les hélicoptères, mais on se trouva très rapidement en compétition intense sur ce front – là encore, toute la réflexion « nominale » est pulvérisée : la flotte d'hélicoptères d'appui n'est plus disponible, tous les autres appuis anéantis ou engagés sur d'autres fronts, les communicaitons ne fonctionnent plus, etc. Nous sommes à l'opposé des cadres fondamentaux qui prévalent en matière de plan de secours, tous fondés sur l'hypothèse implicite selon laquelle tout problème spécifique est envisagé « toute chose égale par ailleurs ».

New Orleans had a large population of "special needs patients," individuals living at home who required ongoing medical assistance. Before Katrina struck, the City Health Department activated a plan to establish a care facility for this population within the Superdome and provided transportation to evacuate several hundred patients and their caregivers to Baton Rouge. While Superdome facilities proved useful in treating special needs patients who remained behind, they had to contend with shortages of supplies,

physical damage to the facility necessitating a postlandfall relocation of patients and equipment to an area adjacent to the Superdome, and a population of more than 20,000 people using the Superdome as a refuge of last resort. Also, FEMA's Disaster Medical Assistance Teams (DMATs) which provide the invaluable resources of pharmacies and hospital equipment, arrived at the Superdome on the night following landfall, but left temporarily on Thursday, before the evacuation of the Superdome's special needs population was completed, because of security concerns."

In Louisiana, hospitals had to evacuate after landfall on short notice principally due to loss of electrical power. While hospitals had evacuated some of their patients before landfall, they had retained others thought to be too frail for transport, and believed by staying open they would be available to serve hurricane victims. Their strategy became untenable after landfall when power was lost, and their backup generators were rendered inoperable by flooding and fuel shortages. The Louisiana Department of Health and Hospitals (DHH) stepped in to arrange for their evacuation; while successful, it had to compete with search and rescue teams for helicopters and other needed resources. (p. 13)

6. Des problèmes fondamentaux

L'analyse de la Commission est cinglante : la courte-vue, le manque de financement, la méconnaissance générale – à tous les étages de l'administration, et pour tous les Etats-Unis – des principes et du fonctionnement du plan national de crise, constituent le fond de tableau sur lequel s'inscrit le fiasco de Katrina.

Une situation globalement inacceptable

La Commission pointe notamment : le manque de personnel (3 agents seulement pour le bureau de la protection civile de La Nouvelle Orléans), le manque de moyens (pas de bateau pour les pompiers), le manque de budget pour les exercices (ce qui fut la cause de reports multiples pour l'exercice Pam, et pour des sommes aussi minimes que 15 000 \$), un nombre impressionnant de postes non pourvus à la FEMA (350 à 500 pour une agence qui en compte 2 500). Au niveau national, l'exercice TOPOFF 3 (Top Officials) d'avril 2005 avait montré, selon un rapport de novembre 2005 du DHS lui-même, un manque de compréhension des principes et protocoles fixés par le National Incident Management System, la colonne vertébrale du dispositif de crise du pays.

Actions taken – and failures to act – well before Katrina struck compounded the problems resulting from the ineffective leadership that characterized the immediate preparations for the hurricane and the post-landfall response. A common theme of these earlier actions is underfunding emergency preparedness. While the Committee did not examine the conflicting political or budget priorities that may have played a role, in many cases the shortsightedness associated with the underfunding is glaring. Among notable example are the following:

- The Louisiana Office of Homeland Security and Emergency Preparedness (LOHSEP), the state counterpart to FEMA, suffered chronic staffing problems and employee turnover due to underfunding. LOHSEP's Planning Chief also testified that lack of resources prevented the agency from meeting its schedule for periodic review and updates of state emergency plans.
- The Office of Emergency Preparedness for New Orleans, long known to be among the nation's cities most vulnerable to a catastrophic hurricane, had a staff of only

three. Its police and fire departments, responsible for search and rescue activities, had five and no boats, respectively. In 2004, the city turned down a request by the NOFD to fund the purchase of six additional boats.

- The Hurricane Pam exercise faced repeated delays due to funding constraints. It took nearly five years for the federal government to approve the state's initial funding request, and the limited funding finally granted necessitated last-minute cutbacks in the scope of the exercise. Follow-up workshops were delayed by funding shortfalls some as small as the \$15,000 needed for participants' travel expenses shortfalls that either the state or federal government should hav remedied.
- Numerous witnesses testified that FEMA's budget was far short of what was needed to accomplish its mission, and that this contributed to FEMA's failure to be prepared for a catastrophe. FEMA witnesses also universally pointed out that the agency has suffered for the last few years from a vacancy rate of 15 to 20 percent (i.e., between 375 to 500 vacant positions in a 2,500-person agency), including several at key supervisory levels. FEMA sought additional funding but did not receive it. The Committee found that FEMA's budget shortages hindered its preparedness.

The Committee also found inadequate training in the details of the recently promulgated NRP was a contributing factor in shortcomings in the government's performance. Louisiana Emergency Management Officials and National Guardsmen were receiving basic NRP and Incident Command System (ICS) training two days after the storm hit. Certain FEMA officials, also, were inadequately trained on the NRP and ICS. Only one large-scale federal exercise of the NRP took place before Katrina, the DHS's Top Officials 3 (TOPOFF 3) exercise in April 2005, approximately three months after the NRP was issued. TOPOFF 3, sponsored by DHS, involved responders from all levels of government. A November 2005 report by the DHS Inspector General, echoing the findings of an earlier report by DHS itself in May 2005, found that the exercise, which involved federal, state and local responders, "highlighted – at all levels of government – a fundamental lack of understanding for the principles and protocols set forth in the NRP and [National Incident Management System]." The lack of familiarity with emergencymanagement principles and plans hampered the Katrina response. (p. 14-15)

Des béances dans la planification de secours, notamment à La Nouvelle Orléans

Le problème de l'évacuation de la ville était identifié depuis 1994 par les autorités locales, était connu des autorités fédérales. Mais rien ne fut fait, même le minimum qui aurait été un repérage élémentaire des bus disponibles. Le problème ne fut pas intégré comme dimension de l'exercice Pam. Au début de l'été 2005, les responsables de La Nouvelle Orléans informèrent leurs homologues de la FEMA et d'autres agences fédérales que la ville n'était pas en mesure de réaliser l'évacuation pré-impact.

Le fait que les intervenants, en cas de sinistre, auraient à opérer dans une zone privée d'électricité comme de communications ne fut pas pris en compte. L'agence chargée de ces questions au sein du DHS n'avait aucun plan de réponse.

The Committee also identified significant planning failures that predated Katrina. One of the most remarkable stories from this investigation is the history of planning for the 100,000 people in New Orleans believed to lack the means to evacuate themselves. Dating back to at least 1994, local and state officials have known about the need to address this problem. For its part, the federal government, which knew about this problem for some

time, neither monitored their planning nor offered assistance. This evacuation problem was not included in the Hurricane Pam exercise and, during follow up meetings in the summer of 2005, New Orleans officials informed counterparts from FEMA, other federal agencies, and the state preparedness agency that the city was not able to provide for the necessary prestorm evacuation, but nothing was done to resolve the issue.

- The City of New Orleans, with primary responsibility for evacuation of its citizens, had language in its plan stating the city's intent to assist those who needed transportation for pre-storm evacuation, but had no actual plan provisions to implement that intent. In late 2004 and 2005, city officials negotiated contracts with Amtrak, riverboat owners and others to pre-arrange transportation alternatives, but received inadequate support from the City's Director of Homeland Security and Emergency Preparedness, and contracts were not in place when Katrina struck. As Katrina approached, notwithstanding the city's evacuation plans on paper, the best solution New Orleans had for people without transportation was a private-citizen volunteer carpool initiative called Operation Brothers' Keepers and transit buses taking people not out of the city, but to theSuperdome. While the Superdome provided shelter from the devastating winds and water, conditions there deteriorated quickly. Katrina's "near miss" ripped the covering off the roof, caused leaking, and knocked out the power, rendering the plumbing, air conditioning, and public announcement system totally useless.
- The Louisiana Department of Transportation and Development, whose Secretary had personally accepted departmental responsibility under the state's emergency operations plan to arrange for transportation for evacuation in emergencies, had done nothing to prepare for that responsibility prior to Katrina. While the Secretary attempted to defend his inaction in a personal appearance before the Committee, the Committee found his explanations rang hollow, and his account of uncommunicated doubts and objections to state policy disturbing. Had his Department identified available buses or other means of transport for evacuation within the state in the months before the hurricane, at a minimum the state would have been prepared to evacuate people stranded in New Orleans after landfall more quickly than it did.
- FEMA and the U.S. Department of Transportation (DOT), charged under the National Response Plan with supporting state and local government transportation needs (including evacuation) in emergencies, did little toplan for the possibility that they would be called on to assist with postlandfall evacuation needs, despite being on notice for over a month before Katrina hit that the state and local governments needed more buses and drivers and being on notice for years that tens of thousands of people would have no means to evacuate.
- Though much attention had been paid to addressing communications shortfalls, efforts to address interoperability as well as simply operability were inadequate. There was little advance preparation regarding how responders would operate in an area with no power and where virtually all forms of pre-existing communications were destroyed. And while satellite phones were available to some, they either did not function properly or officials were not trained on how to use these relatively complex devices. Moreover, the National Communications System, the agency within DHS that is primarily responsible under the NRP for providing communications support to first responders during disasters, had no plans to do so. (p. 15-16)

Un système de digues en déshérence ; et, pendant le désastre, les guerres de frontières bureaucratiques continuent

Les défaillances dans la planification d'urgence auraient eu moins d'importance si le système des digues avait été suivi de façon moins légère. Il était en fait totalement vérolé, qu'il s'agisse de conception, de construction, de maintenance. Il n'était pas du tout en rapport avec le risque couru. Le fait principal était surtout les conflits majeurs existant entre les acteurs en théorie en charge du système. Conflits qui explosèrent au moment du drame : lorsque les digues cédèrent, les réactions initiales consistèrent en des combats bureaucratiques pour savoir qui était en charge de la réparation ; puis pour décider de la façon de conduire ces réparations. Pendant ce temps, les eaux du lac Pontchartain continuaient à remplir la cuvette de La Nouvelle Orléans.

These planning failures would have been of far less consequence had the system of levees built to protect New Orleans from flooding stayed intact, as they had in most prior hurricanes. But they did not, and the resulting inundation was catastrophic. The levee failures themselves turned out to have roots long pre-dating Katrina as well. While several engineering analyses continue, the Committee found deeply disturbing evidence of flaws in the design and construction of the levees. For instance, two major drainage canals – the 17th Street and London Avenue Canals – failed at their foundations, prior to their flood walls being met with the water heights for which they were designed to protect central New Orleans. Moreover, the greater metropolitan New Orleans area was literally riddled with levee breaches caused by massive overtopping and scouring of levees that were not "armored," or properly designed, to guard against the inevitable cascading waters that were sure to accompany a storm of the magnitude of Hurricane Katrina. The Committee also discovered that the inspection and maintenance regime in place to ensure that the levees, flood walls and other structures existing to protect the residents of the greater New Orleans area was in no way commensurate with the risk posed to these persons and their property.

Equally troubling was the revelation of serious disagreement – still unresolved months after Katrina – among officials of several government entities over who had responsibility, and when, for key levee issues including emergency response and levee repair. Such conflicts prevented any meaningful emergency plans from being put in place and, at the time of Katrina, none of the relevant government agencies had a plan for responding to a levee breach. While the deadly waters continued to pour into the heart of the city after the hurricane had passed, the very government agencies that were supposed to work together to protect the city from such a catastrophe not only initially disagreed about whose responsibility it was to repair the levee breaches, but disagreed as to how the repairs should be conducted. Sadly, due to the lack of foresight and overall coordination prior to the storm, such conflicts existed as the waters of Lake Pontchartrain continued to fill central New Orleans. (p. 16-17)

7. Des problèmes de gaspillage, de fraude dans l'utilisation des fonds de reconstruction

La Commission souligne que la pauvreté générale de préparation conduisit aussi, après la catastrophe, à de sérieux problèmes dans la gestion des fonds de secours. Au 8 mars 2006, le gourvenement fédéral avait engagé des dépenses à hauteur de 88 milliards de \$ pour la reconstruction. Même si cette dimension n'est pas partie intégrante du mandat de la Commission, il apparaît que bien des failles sont à relever aussi dans ce domaine. Ainsi, la FEMA a pu acheter 25 000 maisons préfabriquées dont l'installation ne respectait pas les

propres normes de la FEMA, qui interdisent les constructions en zone inondable.

Besides overwhelming many government emergency-response capabilities, Katrina severely affected the government's ability to properly track and verify its costs when it contracted for disaster relief goods and services. While the Committee did not specifically include this issue in its investigation, the Committee was aware of wasteful, and sometimes fraudulent and abusive spending practices, and held two hearings on the subject.

It takes money to prepare, respond, and recover from a disaster, and typically the bigger the disaster, the more money it takes. As of March 8, 2006, the federal government had committed \$88 billion to the response, recovery and rebuilding efforts. Unfortunately, no all of this money has been wisely spent. Precious taxpayer dollars have been lost due to waste, fraud, and abuse.

Among the problems that have come to the Committee's attention are FEMA's lack of financial controls, failures to ensure eligibility of individuals receiving disaster-related assistance, and poor contracting practices, including use of no bid contracts. A notable example of the resulting wastefulness was FEMA's purchase of 25,000 manufactured homes that are virtually useless because FEMA's own regulations prohibit them being installed in a flood plain. In a similar vein, FEMA's lack of controls in dealing with hotels providing temporary housing for evacuees resulted in instances where hotels charged for empty rooms; individuals held multiple rooms; hotel rooms were used as storage units for personal goods; individuals stayed at resorts; and hotels charged rates as high as \$400 per night. (p. 17)

Chapitre 2

LES RECOMMANDATIONS DE LA COMMISSION

La Commission aligne 7 recommandations fondamentales, pour que le pays soit en mesure de relever les défis du 21^{ème} siècle.

- 1. Supprimer la FEMA. La nouvelle entité préconisée (la NPRA, National Preparedness and Response Authority) serait toujours placée au sein du DHS, mais son directeur serait adjoint direct du Secrétaire du DHS, avec accès direct au Président des Etats-Unis, à l'instar du Chef d'état-major des armées. Les hauts responsables de la NPRA seraient choisis pour leur compétence managériale et de leadership.
- 2. Donner à la nouvelle entité un mandat qui soit dégagé des typologies habituelles de risques, et désormais articulé sur les grands enjeux transverses: une mission intégrée depuis la préparation jusqu'à la reconstruction, en passant par l'intervention; une attention spéciale aux problèmes de communication et d'évacuation, qui sont communs à nombre de désastres; une attention à des problèmes spécifiques comme la décontamination de masse en cas d'attaque radiologique, ou les sauvetages de masse en cas d'inondation; une attention aux questions d'infrastructures critiques, notamment les installations clés pour l'énergie et les télécommunications.
- **3. Développer des capacités régionales,** afin : d'assurer les meilleures interfaces entre l'échelon fédéral et les échelons locaux ; de stimuler les préparations au plus près du terrain, entre les états, avec les ONG, avec le secteur privé ; de constiter des équipes d'intervention rapide ("Strike Teams") pour réceptionner au mieux l'aide fédérale en cas d'aide extérieure à la région, ces Strike Teams devant travailler et s'entraîner très en amont avec les instances locales.
- 4. Établir un véritable centre de crise interministériel pour garantir analyse de situation et coordination générale. Pour l'heure, il existe plusieurs entités de ce type : il convient de les regrouper en un National Operation Center (NOC). Le NOC regrouperait des représentants de toutes les agences fédérales concernées, s'assurerait de la bonne communication entre le gouvernement fédéral et les états concernés. Il incluerait une équipe d'analystes étoffée, en mesure de traiter l'information et de dresser le tableau de référence commun. En cas d'alerte, le NOC aurait notamment pour tâche de s'assurer que la situation est effectivement suivie et prise en charge.
- 5. S'assurer d'une implication nouvelle et puissante, à tous les échelons administratifs, dans le système de gestion de crise. Cela exige que des budgets à la mesure des enjeux soient affectés aussi bien à l'entité fédérale centrale (NPRA) qu'aux entités locales en charge des situations de crise. Il importe de même que les responsables soient formés, et entraînés. Un advisory council au sein de la NPRA, composé de représentants locaux et d'intervenants de première ligne, assurerait le lien nécessaire avec l'échelon local et ses préoccupations. Il conviendrait aussi d'intégrer plus fortement le secteur associatif et le secteur privé. Des responsables devraient être spécifiquement nommés pour prendre en charge cette dimension de coopération hors système administratif. Lorsque cela est approprié, des resprésentants du secteur privé devraient être associés à la planification, à l'entraînement et aux exercices.

- 6. Confirmer et renforcer les ancrages essentiels du pays en matière de réponse de crise. L'ensemble du système mis en place devrait être gouverné par le principe d'intégration des compétences, en lieu et place des traditionnels fonctionnements en tuyaux d'orgues, stratifications et découpages multiples. Il convient de consolider ce système composé essentiellement du National Response Plan (NRP), du National Incident Management System (NIMS), des Emergency Support Functions (ESF). Chacun doit être appelé à consolider ce système, à s'entraîner en conséquence. Et l'on doit, à la marge, supprimer la fonction de Principal Federal Officer qui a introduit des confusions et des conflits lors de Katrina, pour en rester à la seule fonction de Federal Coordinator Officer (FCO).
- 7. Renforcer la capacité du pays à répondre aux événements d'échelle cataclysmique. Le texte de référence existe : le Catastrophic Incident Annex. Il faut s'assurer qu'il est bien compris, tant à l'échelon fédéral qu'à l'échelon régional. Le DHS doit s'assurer qu'il dispose de la capacité voulue pour des interventions d'urgence massives. Et ceci quelle que soit la nature des événements en cause.

A NEW NATIONAL EMERGENCY MANAGEMENT SYSTEM FOR THE 21st CENTURY

The Committee's Report sets out seven foundational recommendations together with a series of supporting "building blocks," or tactical recommendations, all designed to make the nation's emergency preparedness and response system strong, agile, effective, and robust.

Hurricane Katrina exposed flaws in the structure of FEMA and DHS that are too substantial to mend. Our first foundational recommendation is to abolish FEMA and replace it with a stronger, more capable structure, to be known as the National Preparedness and Response Authority (NPRA). To take full advantage of the substantial range of resources DHS has at its disposal, NPRA will remain within DHS. Its Director would be assured of having sufficient access and clout by having the rank of Deputy Secretary, and having a direct line of communication to the President during catastrophes. The Director would also serve as the Advisor to the President for national emergency management, in a manner akin to the Chairman of the Joint Chiefs of Staff. To ensure capable and qualified leadership, senior NPRA officials would be selected from the ranks of professionals with experience in crisis management, in addition to substantial management and leadership experience, whether in the public, private, or nonprofit sector.

Our second foundational recommendation is to endow the new organization with the full range of responsibilities that are core to preparing for and responding to disasters. These include the four central functions of comprehensive emergency management – mitigation, preparedness, response and recovery – which need to be integrated. In addition, NPRA would adopt an "all-hazards plus" strategy for preparedness. In preparing our nation to respond to terrorist attacks and natural disasters, NPRA must focus on building those common capabilities – for example survivable, interoperable communications and evacuation plans – that are necessary regardless of the incident. At the same time, it must not neglect to build those unique capabilities – like mass decontamination in the case of a radiological attack or water search and rescue in the case of

flooding - that will be needed for particular types of incidents. NPRA's mandate should also include overseeing protection of critical infrastructure, such asenergy facilities and telecommunications systems, both to protect such infrastructure from harm and to ensure that such infrastructure is restored as quickly as possible after anatural disaster or terrorist attack.

Our third foundational recommendation is to enhance regional operations to provide better coordination between federal agencies and the states and establish regional strike teams. Regional offices should be adequately staffed, with representation from federal agencies outside DHS that are likely to be called on to respond to a significant disaster in the region. They should provide coordination and assist in planning, training, and exercising of emergency preparedness and response activities; work with states to ensure that grant funds are spent most effectively; coordinate and develop inter-state agreements; enhance coordination with NGOs and the private sector and provide personnel and assets, in the form of Strike Teams, to be the federal government's first line of response to a disaster. The Strike Teams would consist of, at a minimum, a designated Federal Coordinating Officer (FCO); personnel trained in incident management, public affairs, relief and recovery, and communications support; a Defense Coordinating Officer (DCO); and liaisons to other federal agencies. These regional Strike Teams should coordinate their training and exercises with the state and local officials and the private sector entities they will support when disasters occur.

Our fourth foundational recommendation is to build a true, government-wide operations center to provide enhanced situational awareness and manage **interagency coordination in a disaster**. Currently, there is a multiplicity of interagency coordinating structures, with overlapping missions, that attempt to facilitate an integrated federal response. Three of these structures – the Homeland Security Operations Center (HSOC), the National Response Coordination Center (NRCC), and the Interagency Incident Management Group (IIMG) - should be consolidated into a single, integrated entity – a new National Operations Center (NOC). The NOC would include representatives of all relevant federal agencies, and should provide for one clearly defined emergency management line of communication from the states to the federal government and from the federal government to the states. It would also include a strong analytic team capable of sorting through and assessing information and determining which pieces would become part of the common operating picture. To improve its performance in future disasters, the NOC should establish clear protocols and procedures to ensure that reports are received and reviewed, at appropriate levels, in a timely manner. When there is notice of a potential major disaster, the NOC should implement plans, including one for securing information from DOD, for obtaining postdisaster situational awareness, including identifying sources of information and data particular to the region in which the disaster may occur and, where appropriate, bringing in individuals with particular knowledge or expertise about that region.

Our fifth foundational recommendation is to renew and sustain commitments at all levels of government to the nation's emergency management system. FEMA emergency response teams have been reduced substantially in size, are inadequately

equipped, and training for these teams has been all but eliminated. If the federal government is to improve its performance and be prepared to respond effectively to the next disaster, we must give NPRA – and the other federal agencies with central responsibilities under the NRP – the necessary resources to accomplish this. We must fund NPRA commensurate with the significance of its mission and ensure that those funds are well-spent. To be full partners in the national preparedness effort, states and localities will need additional resources as well. The Administration and DHS must also ensure that federal leaders of all agencies with an emergency support role understand their key responsibilities under the NRP and the resources they need to effectively carry out the comprehensive planning required, while also training and exercising on NIMS, NRP and other operational plans. To fully integrate state and local officials into the system, there should be established an advisory council to NPRA made up of state and local officials and first responders. The advisory council should play an integral role in ensuring that the full range of activities of the new organization - including developing response plans, conducting training and exercises, formulating preparedness goals, effectively managing grants and other resources – are done in full consultation and coordination with, and take into account the needs and priorities of, states and localities. DHS and the NPRA should more fully integrate the private and nonprofit sectors into their planning and preparedness initiatives. Among other things, they should designate specific individuals at the national and regional levels to work directly with private sector organizations. Where appropriate, private sector representatives should also be included in planning, training and exercises

Our sixth foundational recommendation is to strengthen the underpinning of the nation's response to disasters and catastrophes. Despite their shortcomings and imperfections, the NRP and National Incident Management System (NIMS), including the Emergency Support Function (ESF) structure currently represent the best approach available to respond to multi-agency, multi-jurisdictional emergencies. Federal, state, and local officials and other responders must commit to supporting the NRP and NIMS working together to improve the performance of the national emergency management system. We must undertake further refinements of the NRP and NIMS, develop operational plans, and engage in training and exercises to ensure that everyone involved in disaster response understands them and is prepared to carry them out. In particular, the NRP should be strengthened to make the unity of effort concept very clear, so that everyone understands the concept and their roles in establishing unity, and there should be clarification of the importance of integrating agencies with ESF responsibilities into the ICS, rather than their operating in "stovepipes." The roles and responsibilities of the PFO and FCO are overlapping and were a source of confusion during Hurricane Katrina. The Stafford Act should be amended to clarify the roles and responsibilities of the FCO, and the NRP should be revised to eliminate the PFO position for Stafford Act-declared emergencies and disasters. It should also be amended to ensure that the Act addresses response to all disasters and catastrophes, whether natural or man-made.

Our seventh foundational recommendation is to improve the nation's capacity to respond to catastrophic events. DHS should ensure that the Catastrophic Incident Annex (CIA) is fully understood by the federal departments and agencies with responsibilities associated with it. The Catastrophic Incident Supplement should be completed and

published, and the supporting operational plans for departments and agencies with responsibilities under the CIA should be completed. These plans should be reviewed and coordinated with the states, and on a regional basis, to ensure they are understood, trained and exercised prior to an emergency. DHS must also develop the national capabilities B especially surge capacity – it needs to respond to catastrophic disasters, ensuring it has sufficient full time staff, response teams, contracting personnel, and adequately trained and sufficiently staffed reserve corps to ramp up capabilities, as needed. These capabilities must be scalable so that NPRA can draw on the appropriate resources from supporting ESF agencies to respond to a disaster irrespective of cause, size, or complexity. (p. 17-21)

Chapitre 3

RÉFLEXIONS : FACE AUX RISQUES DU 21^{ème} SIÈCLE, QUELLES STRATÉGIES DE RÉPONSE ?

Les réflexions de la Commission sont d'autant plus intéressantes que, fondamentalement, elles ne sont pas spécifiques au cas de Katrina. Certes, bien des défaillances sont de nature strictement locales, régionales, ou nationales. Mais, face aux enjeux du $21^{\rm ème}$ siècle, tous les pays à économie complexe sont globalement confrontés aux mêmes défis. Sauts quantitatifs dans les désastres, sauts qualitatifs – complexité, réseau, vitesse, ignorance, inconcevable –, contextes globaux instables, dynamiques de liquéfaction accélérée des socles cuturels, stratégiques, tactiques, sur lesquels sont ancrés nos perceptions, nos visons, nos réponses, nos outils.

Bien des pays, en cas d'événements aussi lourds que Katrina, et quels que soient les événements initiateurs (catastrophe naturelle, menaces de santé publique, effondrement technologique, attaque terroriste, etc.), en viendraient à se poser les mêmes questions que la Commission du Sénat américain sur le cas de Katrina : quel diagnostic, quelles recommandations ?

L'habitude est de se focaliser immédiatement sur des réorganisations (avec une centralisa tion renforcée), de nouveaux plans, des outils plus puissants, etc. Hélas, ces jeux de mécano restent illusoires quant aux résultats si, comme c'est le cas, nos difficultés tiennent à l'inadéquation qui existe entre, d'une part, les défis à relever et, d'autre part, les visions, les références de fond, les cultures managériales des acteurs concernés.

La première exigence est de clarifier l'enjeu : il ne s'agit pas seulement de faire un peu plus que par le passé ; il faut prendre acte d'une rupture de complexité, et donc de la nécessité d'un tout autre cadrage de l'action stratégique.

La seconde exigence est de conduire une mise à niveau de nos systèmes décisionnels et opérationnels. Deux stratégies sont sans doute à suivre, en parallèle : une dynamique de progrès tandentiel, pour faire monter en compétence les dispositifs existants, sans les ébranler outre mesure (lorsque les peurs sont trop élevées, les changements trop accélérés risquent fort de paralyser plus que de faire avancer) ; une dynamique de rupture créatrice, pour se doter au plus vite de points d'ancrage qui permettront de mieux tenir en cas de tempête trop dure pour nos systèmes actuels – qui, sauf sursaut, auront besoin d'une décennie ou deux pour se reconfigurer.

1. Reconnaître les défis du 21ème siècle, et se mettre en position de les traiter

Le rapport du Sénat sur Katrina apporte des illustrations remarquables de ces enjeux, qui sont l'essentiel du problème.

Le piège de la guerre de retard : l'anti-manuel pour le pilotage des crises actuelles

Les crises actuelles plongent rapidement les acteurs sur des théâtres d'opérations de grande échelle, d'une complexité stupéfiante. Surtout, elles laissent les intéressés sans mode d'emploi. Le cœur de l'action n'est plus la mise en œuvre rapide de réponses préprogrammées, mais la capacité personnelle et collective au questionnement, à l'ouverture des réseaux, au leadership, à l'initiative hors des sentiers battus.

Quiconque est tout entier dans un mode d'évitement et de refus vis-à-vis de cette nouvelle donne sera instantanément mis en état de grande fragilité à la moindre ombre de phénomène

hors-cadre, en état de choc à la première information qui ne rentre plus dans les balisages conventionnels.

Des milieux non préparés appliquent alors avec la plus grande obstination les commandements suivants, d'autant plus dirimants que la situation est hors-cadre, donc pétrifiante. Ces Commandements sont tirés directement de l'expérience Katrina, mais cette expérience n'est en rien spécifique.

Anti-manuel de pilotage des crises du 21ème siècle

Avant toute action, s'assurer de la façon la plus exhaustive, la plus réglementaire, la plus indiscutable, que les conditions suivantes sont bien réunies :

- Disposer d'une vision claire de la situation dans son ensemble.
- Disposer de toutes les assurances garantissant que l'action est absolument nécessaire. Toute nouvelle grave doit faire l'objet de vérifications avant qu'elle n'engage à prendre une initiative – par défaut, la situation doit être considérée comme normale et sous contrôle, ne justifiant aucune action ou initiative inhabituelles.
- Imposer que les sollicitations éventuelles suivent rigoureusement les canaux administratifs prévus et les modes de transmission prévus (même s'il n'y a plus de moyens de communication, plus d'électricité, il n'est pas question de tenir pour valide une demande arrivant par l'Internet, par exemple, s'il est stipulé qu'elle doit arriver par courrier comme ce fut le cas de demandes d'aide en provenance de Louisiane); et s'il n'y a pas de sollicitation explicite, la situation doit être tenue pour nominale aussi longtemps que l'on ne dispose pas des preuves écrites et transmises par plusieurs canaux officiels indiquant le contraire de façon évidente et à l'aune des critères habituels.
- Suivre un processus hiérarchique d'autant plus rigoureux, pointilleux et détaillé que les enjeux sont importants, et en évitant toute précipitation.
- Pour éviter tout risque de difficulté de frontière, et afin de bien borner ses propres responsabilités, clarifier de façon minutieuse les lignes de démarcation et les attributions des multiples acteurs concernés.
- Ne rien engager sans plan détaillé et approuvé.
- Disposer de 80 à 90% de l'information avant de s'engager en quoi que ce soit. Surtout dans les cas graves, et plus encore dans les cas inhabituels.

Ce bouclier personnel, managérial et institutionnel, permet de ne prendre aucun risque inconsidéré pour la tranquille dérive au fil de l'eau de son organisation. Même si c'est au prix de fiascos à la hauteur des événements, on disposera quoi qu'il arrive de tout l'arsenal réglementaire et de bon sens de base pour se protéger en cas d'enquête. En quelque sorte, une capitulation dans les règles est toujours préférable à une victoire non conventionnelle.

Ainsi, certains « deviennent fous » en observant que la Navy a envoyé sur zone un porte-hélicoptères alors que tout n'est pas encore ficelé pour autoriser une telle initiative – même s'il s'avère que ce porte-hélicoptère est crucial pour le sauvetage en masse, et que les victimes ne survivraient pas à une attente réglementaire. Comme le remarque la commission d'enquête du Sénat avec acidité, il se trouve qu'un navire a des vitesses de déplacement qui ne sont pas celles de l'avion ; le groupe naval était déjà dans le Golfe, juste après un exercice, et il apparut intelligent de lui faire suivre au plus près le cyclone pour une intervention la plus rapide possible – même si cela fit « s'étrangler » certains au DHS.

Prior to landfall, Lt. Gen. Honoré [Commanding General, First US Army] had asked Maj. Gen. Rowe, NORTHCOM Director of Operations, to identify certain assets for

the response, including helicopters, boats, and communications equipment, but 12 hours after landfall Maj. Gen. Rowe replied that he was "somewhat hamstrung by JDOMS [Joint Directorate of Military support] desire to wait for [Requests for assistance]" and could not provide these critical assets to Lt. Gen. Honoré. To the Committee, Maj. Gen. Rowe explained: "I think the primary resistance is the organizational resistance and absence of a detailed, approved plan."

"It's hard to get them to do anything where there is a chance of failure," Scott Wells [Deputy Federal Coordinating Officer] said, adding that DOD wants "to know 80 to 90 percent of the information before they will commit an asset to work with you."

While FEMA and DHS officials have complained that DOD did not do enough, and was slow to process requests, our investigation has found that, in fact, FEMA originated very few requests in this early period. In one instance, DOD received complaints from DHS about actions it did take. [...] the Navy had ordered the helicopter carrier *USS* Bataan to sail towards New Orleans behind the storm, and to prepare to provide assistance. However, on Monday afternoon, a senior DOD representative to DHS reported to Assistant Secretary McHale's staff that "folks over here [are hopping] mad about the news of the Navy ship that announced their deployment without evident legal authority." The *USS* Bataan, the military's most significant pre-landfall deployment, with helicopters prepared to assist with search and rescue, was challenged by DHS. The Office of the Assistant Secretary of Defense for Homeland Defense had to reassure DHS that *USS* Bataan was simply prepositioning, and in fact would not engage in the response without the proper request and authorization. [...] *USS* Bataan's helicopters launched on Tuesday, the first active-duty aircraft to assist with search and rescue. (Chapter 26-20)

Habiter un autre univers : points d'ancrage pour un pilotage

A l'opposé de ces lourdeurs, trouvées dans toutes les bureaucraties, on a observé sur Katrina des démonstrations d'intelligence et de réactivité stratégiques remarquables, qui traduisaient une culture de fond appropriée aux enjeux contemporains. Ce furent notamment les "instructions orales" du Président des Chefs d'État-major des Armées, consolidées par l'attitude et les contributions du Deputy Secretary of Defense. On change alors d'univers, avec cette fois des références tout autres.

Points d'ancrage pour les crises en émergence

- *Une ligne de fond*: sortir de l'état de « léthargie par défaut » on prend les rênes avant que la crise ait déclenché des états de sidération partout dans le système; on ne laisse pas les différentes instances, à commencer par les plus éminentes, devenir les meilleures têtes de pont de la crise.
- Une ligne de pilotage : il ne s'agit plus de remplir des cases, mais d'afficher une ligne stratégique. Ainsi, dans le chef d'état major des armées donne ses intentions, à chacun ensuite d'utiliser au mieux son jugement pour traduire ces intentions stratégiques sur le terrain. Il ne livre pas le script, il ouvre une page blanche en exigeant que chacun fasse usage de ses capacités pour y transcrire le meilleur de qu'il est en mesure d'inventer et de faire.
- *Une ligne d'audit implicite*: vous ne serez pas jugé sur votre dextérité à utiliser toutes les ficelles des textes pour vous mettre aux abris, mais sur la pertinence de votre réponse à l'exigence de prise en charge. En d'autres termes, une mission d'enquête ne vérifierait

- plus que chacun a bien appliqué ce qu'il était censé faire d'après les textes édictés, mais examinerait la capacité d'intelligence et d'action des uns et des autres lorsque les modes d'emploi habituels ont été pulvérisés.
- *Un rythme en rapport avec les circonstances* : l'acheminement des formulaires et la valse lente des tampons ne doivent pas être les déterminants du rythme de l'action.
- Des initiatives créatrices : c'est par exemple cette décision du Général Honoré de lancer sur le champ un exercice pour légitimer un déplacement des troupes d'active sur le territoire américain. Non de code : Exercice Katrina.

In a meeting at 3:40 p.m., Gen. Myers [Chairman, Joint Chiefs of Staff] then instructed his service chiefs to work together with NORTHCOM in determining necessary assets, telling them to pre-position resources in anticipation of a request for assistance from FEMA, if they thought it prudent. To expedite the deployment process, he instructed the services to proceed on the authority of this vocal command - Secretary England's direct instruction to Adm. Keating, and his own guidance to the service chiefs - and that the necessary paperwork would follow later." Think large," he told them

A vocal command of this magnitude is extremely rare in DOD. For the purpose of ensuring legality, availability of resources, and documentation of the chain of command, all deployments are normally processed rigorously through specific written orders and electronic tracking systems. Deputy Secretary England's command represented an extraordinary delegation of military judgment, on the assurance that Adm. Keating would keep the Department informed. It was a "blank check", Deputy Secretary England said. Assistant Secretary McHale elaborated: "What was communicated... was what we in the military call 'commander's intent.' The message from the Deputy Secretary of Defense, consistent with the counsel provided by the Chairman of the Joint Chiefs, was to act with a sense of urgency and to minimize paperwork and bureaucracy to the greatest extent possible. As Adm. Keating understood the direction, "We're moving anything we think FEMA will need. No obstacles from DOD or Joint While DOD's inherent authorities to respond had not changed, and it was understood that all the necessary paperwork would follow, the decision reflected an extraordinary delegation to the military commanders. Assistant Secretary McHale said, "The climate in the decision-making process in this department could not have been more proactive than it was. (Chapter 26–24-25)

Lt. Gen. Honoré, based at Fort Gillem, Georgia, as Commanding General of First Army, planned to deploy to the Gulf Coast as soon as the storm had cleared. Although he had not been ordered to do so, he wanted to establish himself in the area to be positioned advantageously as the response progressed: "My thought was 'get there,' because the first rule of war is you've got to get there," he said. His authority as an Army commander permitted him to move from one military installation to another provided that such a movement could be considered training. Thus, he created an "Exercise Katrina," and in coordination with NORTHCOM and his superior officer at Army Forces Command, planned his move to Camp Shelby, an Army facility in South Mississippi.

Lt. Gen. Honoré explained that it was not in his nature to wait for a Request for Assistance of deployment orders prior to moving: "That is a response, sometimes, by folks to say, 'Let's wait until they ask for something.' But in this case, we've got a case where we need to save life and limb. We can't wait for a [Request for

Assistance] or shouldn't be waiting for one. If there's capability, we need to start moving."

Lt. Gen. Honoré informed NORTHCOM and Adm. Keating of his plan to deploy to Camp Shelby on Monday but because Katrina continued to track northward from the Gulf Coast, he could not move until Tuesday morning. He arrived at 11 a.m. C T and surveyed the base and the surrounding region of Gulfport and Biloxi, which looked to him like they "had been hit by a nuclear weapon." (Chapter 26–29)

2. Améliorer les systèmes existants

C'est globalement l'approche retenue par la Commission du Sénat. Il s'agit d'identifier des lignes de progrès, à partir des points forts qui se trouvent déjà dans les systèmes en place. En l'espèce, aux Etats-Unis, on dispose déjà d'une planification nationale, de textes qui prévoient l'éventualité de désastres cataclysmiques et les nouvelles exigences qu'ils imposent (le "push system", et non plus le "pull system" historique). Le rapport sénatorial propose un certain nombre d'initiatives, et notamment :

Une réorganisation à l'échelon central

Il s'agit de renforcer l'entité en charge des grandes situations de crise, en en faisant un pôle unique de pilotage, et en donnant à son dirigeant un accès direct au Président des Etats-Unis.

Réflexion: on se gardera toutefois de simplifier outre mesure cette ligne de la centralisation: peut-on envisager un centre de commandement unique quand il s'agit de faire fonctionner en cohérence un secteur régalien et un secteur privé de plus en plus essentiel, et souvent très en avance sur le secteur public? Il faut probablement mettre davantage l'accent sur la capacité à mettre en activité et en cohérence des pôles et réseaux d'intelligence et d'action.

Une dynamisation à l'échelon local

Il s'agit de garantir les meilleurs liens entre le central et le local, et dynamiser tout le maillage régional, public, mais aussi privé, et associatif. Le modèle : « si c'est grave, on reprend au niveau national » ne marche plus dans les grandes crises de texture. Il nous faut des modes d'action bien plus « biologiques » que ne l'est le mécano habituel, fait de parties disjointes, à étages successifs.

Une ouverture au secteur privé, aux ONG

Le principe n'est plus de se demander comment on peut élargir les listes de personnes à convoquer, mais de se préparer à ouvrir très largement les réseaux de décision et d'action – autrement que de façon marginale.

Une attention forte et spécifique aux événements de niveau cataclysmique

Ces scénarios impliquent notamment des puissances logistiques sans commune mesure avec les pratiques habituelles.

3. Introduire des dynamiques en rupture

Deux obstacles majeurs : blocage intellectuel, blocage psychologique

Bien des démarches de progrès peuvent donc être engagées. Mais, au cœur de nos difficultés, il faut reconnaître deux obstacles majeurs, qui pèsent aujourd'hui de tout leur poids :

- Un blocage intellectuel. Dès l'instant où sont énoncés les termes de la problématique à traiter, on observe le plus souvent l'incompréhension, voire le désarroi. Spécialistes et responsables ont été formés pour œuvrer au sein de mondes stables tout au plus sujets à risques accidentels, et pas du tout à un monde chaotique pour lequel nous n'avons pas les repères d'intelligence requis. On peut concevoir de rajouter telle ou telle strate opérationnelle, mais non de devoir inventer des repères, des logiques, des modèles, des mesures, pour ces univers qui ne rentrent pas du tout dans nos découpages. Par exemple, on peut accepter de faire un plan d'exposition au risque, à condition toutefois que le périmètre à circonscrire reste bien délimité, limité au regard de l'ensemble, et affecté par un risque tout de même mesuré, encadré. Si pareils cadrages ne sont pas assurés, on plaidera vite que ces questions ne sont pas sérieuses puisqu'elle ne sont pas susceptible de mesure « scientifique », et ne peuvent faire l'objet d'une responsabilité, puisqu'il ne saurait y avoir de responsabilité en univers aussi mal défini.
- Un blocage psychologique. Bien davantage : ces univers non bornés, non stratifiés, non cartographiés, confrontent brutalement à l'action sans mode d'emploi, à l'ignorance, au risque sauvage, à la responsabilité non limitée par avance. Ce second facteur est de loin le plus pénalisant. C'est lui qui explique au premier chef les fiascos actuels. La simple évocation de pareils espaces de réalité et de responsabilité est souvent ressentie comme une violente agression, quasiment vitale. Aussi longtemps que le choc est à ce point violent, les intéressés sont promis à perdre largement leurs moyens en cas de crise effective. Et, de façon instantanée, les personnes comme les organisations, les systèmes comme les pays, peuvent perdre leurs capacités de réaction, même les plus basiques.

Des pistes à éviter

Pour relever ces défis, éviter le constat de décrochage systématique de nos organisations dès lors qu'elles sont confrontées à des situations hors-cadres, on ne peut se contenter de puiser dans le stock de réponses habituelles. Rajouter une couche organisationnelle à l'édifice, ou des salles de crises, ou des plans... ne permettra pas de changer de niveau de compétence. Au nombre des fausses bonnes solutions, on donc peut citer notamment :

- La création d'un "Conseil national" réunissant des dizaines de représentants d'administrations concernées ;
- Le développement de simples logiques de moyens ;
- La mise en place de centres de crise multipliés ;
- La création d'un étage exécutif supplémentaire pour ce type de crise, doté d'un centre de crise national censé tout contrôler ;
- Le simple discours, par exemple le plaidoyer (verbal) pour le partenariat public-privé, etc.

Des démarches à impulser

Le principe directeur n'est pas de trouver la bonne boîte à outils, à livrer toute faite. En milieu chaotique, le plus important est de prendre des initiatives spécifiques qui permettront d'enclencher des dynamiques de progrès, en transformant les ancrages profonds. Ce n'est pas là une vue sans consistance, mais bien une stratégie imposée par l'enjeu à traiter.

Un certain nombre de traits doivent marquer la démarche :

- Une approche de questionnement ouvert, non de réponses pré-programmées ;
- Un souci d'ouverture aux grands acteurs type grands opérateurs d'infrastructures critiques, ONG et associations ;

- Des formes d'organisation transverses, réactives, inventives, qui n'ajoutent pas de filtres supplémentaires mais tirent bien les systèmes et les décideurs vers le haut, vers les réponses créatrices, adaptées aux univers chaotiques ;
- Des vues larges, des actions fines : dans les univers instables, le plus important est de poser des jalons à partir desquels pourront se développer d'autres dynamiques positives, et non de chercher à tout planifier et résoudre.

Des initiatives à engager

Au nombre des initiatives à considérer (ce ne sont pas des « solutions » mais des jalons possibles), on peut citer :

- La mise à l'agenda de la question des crises hors-cadres, avant d'avoir à le faire en y étant acculé, sous les coups de boutoir d'une suite de fiascos. Cette mise à l'agenda concerne toute grande organisation. Il faudrait notamment le faire à l'échelon international, par exemple au niveau du G8: mettre le sujet des crises hypercomplexe à l'agenda des Chefs d'Etat et de Gouvernement.
- L'énoncé d'une exigence de progrès au niveau du pilotage stratégique. Il s'agit de jeter les bases d'une capacité d'aide au pilotage des grandes crises hors-cadres au sein des grandes organisations, Etats, et institutions internationales et notamment l'échelon décisionnel européen (bien au-delà des avancées déjà réalisées en matière de colonnes secours, de cellule de crise plus tactique que stratégique).
- Le développement d'outils adaptés, et notamment de Forces de Réflexion Rapide comme outil d'aide à l'analyse stratégique et à la décision en temps réel, pour les grandes crises hors-cadres (type pandémie grippale ou autres). Cette capacité est désormais en place à EDF, où elle continue à se développer et se renforcer en compétence sous la conduite de Pierre Béroux, Directeur du Contrôle des Risques.
- La mise en place de plate-formes d'échanges, entre les acteurs, et au niveau international, sur le modèle de celle déjà lancée au Centre des Relations Transatlantique de la SAIS (School of Advanced International Studies) à Washington.
- Une politique systématique de retour d'expérience sur les crises hors cadres, à l'échelle internationale, avec des équipes riches de leur diversité d'expertise, comme ce qui a été fait sur Katrina, ou le SRAS à Toronto, etc.
- Un effort de formation initiale ouvrant les esprits à la reconnaissance, la compréhension, et le pilotage des univers non normés.

Il nous revient, ni plus ni moins, que de refonder notre intelligence des risques et des crises, de leur compréhension comme de leur pilotage. Les dernières décennies ont vu le développement et la consécration des modèles et outils de mesure, de réponse, qu'il s'agisse d'estimation des risques, d'évaluation des risques, d'organisation de crise, de communication. Il nous faut désormais aller affronter de nouveaux océans, inconnus, pour lesquels nous n'avons pas de cartes. Plus encore : pour lesquels nos cartes sont souvent des pièges fondamentaux.

Comme au temps des grandes découvertes, il nous faut comprendre que le plus âpre ne sera pas dans l'affrontement des difficultés inconnues, mais dans une autre battaille —qui aura pour objet nos propres grilles mentales. Nos grilles de perception et d'action ne nous préparent pas à traiter de réalités que nous avons appris à nier (rationnellement) ou à rejeter (viscéralement). Comme l'ont montré les grandes découvertes maritimes, lorsqu'il fallu se décider à franchir tel cap jusque là tenu pour une fin du monde, le principal obstacle n'était pas la difficulté

¹⁷ Patrick Lagadec: "Over the edge of the world", *Crisis Response*, Vol 3, issue 4, September 2007, p. 48-49.

physique, mais la « barrière mentale, le prototype même des obstacles primitifs à l'exploration ». ¹⁸

Aussi longtemps que les dirigeants appelés à piloter les situations de crise en gestation n'auront pas été intellectuellement et psychologiquement préparés à traiter de ces défis de l'hypercomplexe et de l'inconcevable – y compris en formation initiale ou tout au moins au niveau des Mastères – il y a peu à attendre des plaidoiries répétées pour voir advenir un peu plus de responsabilité et de compétence opérationnelle dans le domaine. ¹⁹

¹⁸ Daniel Boorstin: Les Découvreurs, Robert Laffont, Bouquins, 1983, p. 147. Daniel J. Boorstin: The Discoverers, Vintage Books, New York, 1983, p. 166.

¹⁹ Patrick Lagadec: "Enseigner la question des crises: Enjeux, Obstacles, Initiatives", *Cahiers du Laboratoire d'Econométrie*, janvier 2007, Ecole Polytechnique.http://www.patricklagadec.net/fr/pdf/2007-01.pdf Patrick Lagadec: "Crises hors-cadres: Oser un enseignement", in *Ethique, Médecine, Société – Concepts et enjeux pratiques*, sous la direction d'Emmanuel Hirsh, Vuibert, octobre 2007.

SECONDE PARTIE

LECTURE ANALYTIQUE DU RAPPORT

Avertissement

Je propose dans cette seconde partie une lecture de type « Morceaux choisis » pour ne pas reprendre à nouveau des constats faits précédemment (tome 1 et 2) – même si le « plan » s'avère de ce fait plus éclaté que structuré. On doit noter que le texte de la Commission est lui aussi globalement assez peu structuré, plus marqué par l'accumulation de remarques que par des analyses en recul, ce qui accroît certainement la sensation d'éclatement.

J'ai choisi également de retenir prioritairement les messages non spécifiques de la situation américaine, mais de portée générale.

Un grand nombre de sous-titres sont proposés, pour permettre d'aller chercher plus aisément des points d'intérêt très spécifiques.

Chapitre 4

LE RISQUE HORS-CADRES : QUAND NOS CARTES DE RÉRÉRENCES NE FONCTIONNENT PLUS

Le piège du connu

« Je suis passé sans dommage à travers un cyclone de catégorie 5, je passerai à travers Katrina, annoncé de catégorie 4, ou 3 » fut souvent une réaction des résidents concernés. Et c'est ainsi, écrit la Commission, que Camille (niveau 5) a plus tué en 2005, qu'il ne l'avait fait en 1969. La rationnalité n'est certes pas réellement mise en cause, mais plutôt la rationalité simplifiée (fort dégradée) qui sert souvent dans les univers de crises. La question des « souscultures de catastrophe » (l'habitude de populations locales à passer à travers tel ou tel type de désastre), souvent vantées comme des acquis collectifs de fond qui permettent aux groupes humains de mieux affronter des événements graves, sont à reconsidérer dès lors que l'on sort des événements nominaux du passé. Que vaut une bonne culture des cyclones si les problèmes majeurs sont liés non directement au cyclone, mais aux effets dominos qu'il entraîne ? Si les conditions sociétales ont été bouleversées en raison de mutations climatiques, technologiques, sociologiques ?

Gulf Coast residents call it "hurricane roulette." Some who had endured 1969's Category 5 Hurricane Camille, the region's benchmark for catastrophic storms, thought that no other storm could come close. But Katrina ended lifetimes of successful storm-dodging. Jeff Elder, an insurance rep, had ridden out 20 years of hurricanes with his family in a two-story, wood-frame home three miles north of the Biloxi, Mississippi, beachfront and 14 feet above sea level. "The eye of Hurricane Georges passed directly over our home," he wrote in an e-mail, "and, while the bay [just south of the Elders' home] rose to a level of about ten feet above normal, the water never reached our property. In fact, during Hurricane Camille... the water in Back Bay only rose to a level approximately 12 feet above normal." By early afternoon on Monday, August 29, the day Katrina madelandfall, the Elders had six feet of water in their living room.

As Biloxi city spokesman Vincent Creel said of Camille survivors lulled into a false sense of security, Hurricane Camille killed more people in 2005 than it did in 1969. (Chapter 1-5)

Du plan-papier à la réalité sociétale

Nos traditions, en matière de grandes questions de sécurité civile, valorisent le plan, exposé avec fierté, comme on prépare un défilé militaire pour la fête nationale. Il faut souvent bien de la hardiesse pour suggérer que les réalités sociales ne se laissent pas traiter comme à la parade. Le fait que des milliers de personnes n'aient pas évacué La Nouvelle Orléans relève de ces dimensions le plus souvent oubliées de nos plans-papier.

In many cases, however, hubris or miscalculation had nothing to do with why some stayed behind. Katrina struck in the very last days of August, when those living check-tocheck were running out of their bi-weekly or monthly allotments. Tens of thousands didn't have cars. Even many who did may not have been able to shoulder the costs of evacuation; the average cost for three days for a family of four, including lodging, food, and transportation, could easily exceed a thousand dollars, according to an analysis of Hurricane

Ivan prepared for the Federal Emergency Management Agency (FEMA). For the poor of neighborhoods like the Lower Ninth Ward, one of the city's lowest-lying areas, this was an impossible sum, though they had an alternative in the Superdome, the city's "refuge of last resort."

Nearly 100,000 New Orleanians either couldn't or didn't comply with Mayor Nagin's evacuation order. The city had no plan for evacuating them, and the Louisiana Department of Transportation and Development, the state agency responsible for transportation during a disaster, had done nothing by the time of landfall. New Orleans' enterprising health department director, Dr. Kevin Stephens, had begun negotiating agreements with several transportation agencies, but they remained incomplete at the time of landfall. Federal officials, who had participated in the Pam exercise and knew that state and local authorities would need evacuation help, had no plans in place, either. (Chapter 1-5)

Du réglé au chaotique

Notre culture des risques et des crises est fondée sur une vision simple : il existe un état du monde stable, prévisible, réglé ; un écart se produit ; cette occurrence est prévue, connue, mesurée ; les protocoles à suivre pour réduire l'écart sont établis, et il suffit de les suivre. Brutalement, un événement type Katrina pulvérise cette logique fondamentale d'écart spécifique dans un système stable. On se trouve en présence de béances, les stabilités générales ne sont plus assurées, les outils à disposition ne sont plus adaptés car il ne s'agit plus de réduire des écarts. Il s'agit de tracer des chemins dans des univers chaotiques, profondément étrangers à nos cultures.

FEMA, the federal government's primary disaster-response agency, had no effective supply-tracking system, so replenishing provisions turned out to be complicated. Planning and coordination were so poor that truck drivers didn't know where to go, and emergency-management officials didn't know what was en route, or when it might show up. Phone lines were down, so it was hard to clarify. "We'd find [the trucks] parked along [Highway] 49," Mike Beeman, FEMA's liaison to coastal Harrison County in Mississippi, said. "[We'd] go over and find out who he was, what he had in the back end, because... many times [we] knew items were sent to us, but we didn't know where they were... We'd finally find maybe five or six truckloads of water or ice that were sitting off the roadway in some apron at a supermarket. ... Some of them sat sometimes two or three days. I found 25 trucks one day... They were just sitting there, waiting for somebody to tell them where to go... I have no idea where they came from. (Chapter 1-10)

Des sociétés incapables d'apprendre?

L'apprentissage personnel et collectif ne pose guère de difficulté dès lors qu'il s'agit de traiter de phénomènes répétitifs. Hélas, il faut bien mesurer les difficultés colossales que l'on rencontre lorsque l'on tente de faire progresser nos sociétés sur des événements qui sortent des régularités statistiques. Ce problème devient sérieux si d'aventure ces événements non conventionnels sont globalement bien plus lourds que les phénomènes récurrents, peuvent entraîner des effondrements systémiques. La Commission le souligne avec acidité:

This report is a study of a catastrophe, an "ultra-catastrophe," in the words of DHS Secretary Michael Chertoff. The National Response Plan defines a catastrophe as "any natural or manmade incident, including terrorism, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions." By definition, they are rare, but the age of terrorism and climate change has ensured that the next occurrence is

mainly a question of how and where, not when.

For that reason, the Committee intends this report to serve as a catalyst for constructive reform before the next catastrophe, whatever shape it might take. Ironically, many of this report's findings have an alarming resemblance to the General Accounting Office's analysis of the government's inadequate response to 1992's Hurricane Andrew. The Committee hopes that this report will never become part of a compendium of warnings similarly, and tragically, ignored. (Chapter 1-15)

Le tableau de la débâcle

Cette résistance à l'apprentissage est telle que la Commission tient à se faire cinglante dès l'introduction. Le système n'a pas seulement connu quelques points faibles. Il a été enfoncé.

The Committee has found:

- A failure on the part of all levels of government to plan and prepare for the consequences of Katrina.
- A failure to heed the warnings of a looming catastrophe during the weekend preceding the storm, and a failure on the day of landfall to recognize that the worst predictions had come true
- A failure on the part of government leaders to think "big" before Katrina struck and to challenge existing planning assumptions in the face of what was known to be a "nightmare scenario."
- A failure on the part of all levels of government to plan and provide for the timely and effective evacuation of the elderly, the sick, and the disabled from New Orleans, and the evacuation of tens of thousands of able-bodied residents who did not have personal transportation.
- A failure to act on the lessons of past catastrophes, both man-made and natural, that demonstrated the need for a large, well-equipped, and coordinated law enforcement response to maintain or restore civil order after catastrophic events.
- A failure to plan for and provide in a timely manner mass medical care and temporary shelter for tens of thousands of Katrina victims that all levels of government knew were likely to be impacted by a catastrophic hurricane. (Chapter 1-16)

Application aux cyclones : quand les cadrages de base ne fonctionnent plus

Catégoriser, rassurer, réduire à la normalité, sont les tendances les plus ancrées qui marquent les réponses au risque. Dès lors que les risques sortent des niches qui leur sont réservées, on voit soudain s'ouvrir un terrain barbare, qui ne respecte plus nos cartes, nos échelles, nos mots d'ordre. Ainsi :

- En matière de cyclone, nos repères habituels en termes de gravité sont fondés sur la vitesse des vents : ce n'est pas là le critère essentiel, les phénomènes de montée des eaux sont autrement plus importants ; et les protections naturelles offertes par les zones de marais sont une sécurité critique, constamment et gravement mise à mal au fil des ans par destruction des zones de marais et autres zones tampons ;
- Ce n'est pas parce que l'on n'annonce pas une saison dense en matière de cyclones que l'on est à l'abri de cyclones hors normes ;
- Nous avons de bonnes compétences en matière d'évacuation, mais seulement si un délai suffisant nous est donné (plusieurs jours, et trois ce n'est pas suffisant), si les masses de populations concernées ne sont pas trop importantes. Mais voici que les zones à risque sont marquées par des pressions démographiques exponentielles; sont peuplées de populations de plus en plus âgées, de moins en moins transportables.

- Voici que la fréquence des phénomènes météorologiques extrêmes augmente, ce qui peut nécessiter des évacuations de précaution massives et répétées.
- Certes, les progrès de la météorologie permettent de voir plus loin, mais précisément cela risque aussi de multiplier les exigences d'évacuations de précaution. Mais on ne peut évacuer Houston trois fois durant un même été, et trois fois pour rien ; même après un fiasco à La Nouvelle Orléans.
- Si des populations ont été relogées dans des caravanes ou abris de fortune après un cyclone, comme Katrina, tout phénomène un peu fort bien moins puissant qu'un cyclone risque d'exiger un traitement de type cyclone.

On pourrait multiplier les observations. Elles se résument à une mise en garde tautologique : dès lors que l'on entre dans le complexe hors nomenclature habituelle, rien ne fonctionne plus simplement. Et ce n'est plus sur tel ou tel point tactique que l'on rencontre des difficultés. Le fondement même de nos analyses, de nos dispostifs, se révèle fragilisé, voire pulvérisé.

Though hurricanes are measured by their wind speeds, many scientists have come to believe that storm surge is far more deadly than wind, especially considering that the highly populated areas of the Atlantic seaboard and the Gulf Coast lie only 10 feet above mean sea level. [...] "The greatest potential for loss of life related to a hurricane is from the storm surge," according to an official with the National Oceanic and Atmospheric Administration (NOAA). (Chapter 3-2)

During Hurricane Andrew in 1992, alarmed by scenes in South Florida, approximately 1.2 million evacuated from the New Orleans metropolitan area. While the evacuation almost certainly saved lives, federal hurricane experts were alarmed that officials in New Orleans expected 60 to 80 hours warning to complete an evacuation. During testimony before a Congressional committee in 1993, Dr. Robert Sheets, then the director of the NHC, warned that "We don't have the skill meteorologically speaking to provide a sufficient warning for those long lead times. There is no way I am going to have 70 hours of lead time for New Orleans to respond to a hurricane..."

By 2005, advances in technology, such as refinement of satellite capabilities and improvement of pressure-measuring sensors in reconnaissance planes, had drastically increased the NHC's lead times. By 2 p.m. ET Friday, August 26, 65 hours before Katrina made landfall, NHC Director Mayfield was making calls to emergency officials in the Gulf Coast alerting them that a rapidly strengthening storm was heading directly for New Orleans. (Chapter 3-2)

In earlier periods of our history, the physical impact of major hurricanes in the Gulf was softened by swamps, marshes, and barrier islands, while the societal impact was limited by its relatively small concentrations of buildings and people. (Chapter 3-3)

In more recent times, however, the population in the coastal counties from Texas to the Florida Keys has soared. The U.S. Census Bureau reports that 9.46 million people live along the Gulf Coast – 3.5 times the number in 1950 – and their numbers are growing by nearly 7 percent a year. From 1970-1994 the Gulf Coast averaged less than one hurricane landfall per season, and the East Coast averaged one hurricane landfall every five years. This is in sharp contrast to the average of three U.S. hurricane landfalls during very active seasons. Unfortunately, decisions about land use, construction standards, etc. were based on an erroneous assumption, growing out of that period, that hurricanes would no longer affect the United States as frequently or as strongly as they had in earlier decades.

Besides economic and population growth – including the swelling numbers of retirees

drawn to warm-winter locales – engineering projects intended to prevent or reduce flood damage increased the appeal of the Gulf Coast. Here, as in the Southwest and the West Coast, "we are pushing toward the very areas where nature puts us most at risk from tropical storms, mudslides, and forest fires," Princeton University researcher Edward Tenner wrote in 1996. One of Tenner's examples: "a big storm could leave 20 feet of water in downtown New Orleans and flood evacuation routes." (Chapter 3-3)

Marking the beginning of a new multi-decade period of hurricanes activity involves extensive analysis of historical trends, conditions in the Atlantic and the atmosphere. Even so, there are no guarantees. Catastrophic hurricanes occurred in years of normal or even below-normal hurricane activity. In 1972, Hurricane Agnes never got beyond Category 1 strength, but still caused 122 deaths in the United States with severe flooding in Virginia and the Carolinas. Hurricane Andrew, the most damaging hurricane in U. S. history before Katrina, formed during a season (and cycle, lasting until 1994) of belownormal activity. (Chapter 3-3; 3-4)

Chapitre 5

L'ALERTE SUR PHÉNOMÈNES HORS-CADRES : DES SYSTÈMES COMME DÉBRANCHÉS

Nous avons coutume de gommer les problèmes de remontées d'information. Le cas de Katrina montre que, même sur une situation parfaitement anticipée, la cartographie institutionnellement validée d'une situation va demander des délais considérables. Il faut tenir compte bien sûr des problèmes de liaisons. Mais les viscosités organisationnelles sont autrement plus importantes. Et il faut probablement mettre en tête de la liste des facteurs une tétanisation générale, une impossibilité à tout niveau de se saisir d'une information « terroriste », c'est à dire qui ne cadre pas avec les systèmes d'hypothèses en vigueur, qui va poser des problèmes à l'organisation, qui va nécessiter des prises de risques. La tendance va être d'exiger des vérifications en tout genre, avant de tenir une information pour valide – et le plus souvent est tenu pour « valide » ce qui confirme le bienfondé des hypothèses coutumières.

Dans le cas de Katrina:

- Le directeur du service de suivi des cyclones prend l'initiative exceptionnelle d'appeler personnellement les hauts responsables régionaux pour s'assurer qu'ils sont bien au fait de l'extrême gravité des événements.
- La brèche initiale de digue survient le lundi matin dès 6h30, et la brèche catastrophique se produit entre 9h et 10h.
- Deux officiers de sapeurs-pompiers de La Nouvelle Orléans filment les brèches à 11h11 du matin et ils n'ont aucun doute sur la gravité de l'événement.
- Entre 17h15 et 19h, un responsable public affairs de la FEMA, Marty Bahamonde, peut observer la situation depuis l'hélicoptère des Coast Guard, et il n'a aucun doute sur la gravité des brèches, comme de l'inondation générale.
- La mobilisation à Washington n'interviendra réellement que très longtemps après : rapports bloqués ou réécrits de façon « optimiste », demandes de vérification, etc. Le tableau est tout simplement ahurissant.

Deux interprétations sont possibles, probablement à prendre toutes les deux en considération :

- Par construction, les institutions sont des systèmes à haut degré de viscosité, et il ne faut guère s'attendre sauf leadership particulièrement déterminé, comme celui dont sut faire preuve le directeur du centre de suivi des cyclones à une réactivité en moins de 24 heures, tout au moins pour un début d'inscription à l'agenda; plusieurs jours seront encore nécessaires pour un début action organisée; plusieurs semaines pour une dynamique d'ensemble cohérente. L'identité administrative est d'administrer, de déployer une culture de dossiers, de vérifier la conformité des pièces, de rejeter les formulaires incomplets en aucun cas de piloter des situations non conformes.
- Si d'aventure la situation est effectivement gravissime, à la viscosité s'ajoute un syndrome de tétanisation. L'annonce de l'événement se transforme en grenade incapacitante. Et même un message-flash ultra précis, signé d'une autorité crédible, ne parviendra pas à percer les murs érigés en temps réel, dès la perception d'une menace vitale (pour le fonctionnement routinier de l'organisation). En l'espèce, on tiendra le rapport de Marty Bahamonde pour douteux. Et l'on réagit sur le mode : "il a dû mal voir, La Nouvelle Orléans (contrairement d'ailleurs à ce que soulignaient

tous les rapports d'étude préalables pour ce type d'événement) ne peut pas être sous les eaux".

Le premier blocage peut être traité en développant des capacités de leadership tranchant avec le « wait and see » protecteur. Le second invite à traiter instantanément les institutions comme des organisations sujettes à pathologies graves dès l'instant où elles sont confrontées à l'aberrant. Un leadership à la hussarde peut aider chacun à reprendre ses esprits. Mais il est possible qu'il faille bien davantage, relevant plus de la psychiatrie que du management conventionnel. ²⁰

"Max Mayfield, Director of the NHC, phoned Walter Maestri, an old friend and the Emergency Preparedness Director in Jefferson Parish, Louisiana. Maestri recalled Mayfield's words: "This is it. This is what we've been talking about all of these years. You are going to take it. ... It's a 30, 90 storm." Maestri explained, "That's the longitude and latitude of the City of New Orleans." (Chapter 4-1)

On Saturday evening, Max Mayfield made another round of telephone calls to assure himself that local and state officials understood what was coming. At approximately 7:25 p.m., he spoke with Governor Blanco, who suggested he call New Orleans Mayor Ray Nagin. Twenty minutes later, he spoke with Governor Haley Barbour in Mississippi. By 8 p.m., he had spoken with Mayor Nagin. (Chapter 4-2)

Because the storm surge arrived ahead of the hurricane, some residential areas in the greater New Orleans area began to flood just after 4 a.m. (Chapter 4-5)

Based on two very detailed eyewitness accounts in the area, it is estimated that the initial breach on the east side of the 17th Street Canal occurred at approximately 6:30 a.m., and that the catastrophic failure of the levee took place somewhere between 9 and 10 a.m. Similarly, sometime between 7 and 9:30 a.m., a section on the east side of the London Avenue Canal (close to the Mirabeau Bridge) failed; sometime between 7:30 and 10:30 a.m., a section on the west side of the London Avenue Canal breached, "sen[ding] an 8 foot high wall of water cascading into the surrounding neighborhoods." All three of these breaches caused catastrophic flooding in the Orleans East Bank polder, which includes (among others) the Central Business District, Lakeview, Mid City, and Lakewood areas of the city.

Captains Paul Hellmers and Joe Fincher, two New Orleans Fire Department firemen located at a department refuge in the Lakefront area of the city, videotaped the 17th Street Canal breach. In the video, which captures the breach at 11:11 a.m., Capt. Hellmers said: [Y]ou can...see the water pouring through the [inaudible] wall. There's a... concrete wall on top of the dirt levee. And you can see that the... wall is gone – you can see the water pouring through, it looks like about a 200-foot section of wall that's gone! The water is continuing to rise – very slowly.

While Capt. Hellmers observed that the water in the entire area was rising "very slowly," it is clear from the video that the water from the 17th Street Canal breach is pouring through the gaping hole with enormous pressure and speed.65 A second video of the New Orleans area, shot from a Coast Guard helicopter during the early afternoon of August 29, helps explain the different impressions.66 From the vantage point of the helicopter's bay window, it is evident that the inflow from Lake Pontchartrain was

²⁰ Ces considérations peuvent choquer. Hélas, j'ai pu voir à de multiples reprises, certes en exercices (mais je dirais plutôt : « même en exercice »), que la simple injection d'hypothèses non anticipées pouvait « vider » une salle de crise de façon quasi instantanée. Et le mécanisme fonctionne à merveille : personne ne s'en souvient, tant est pressant le besoin d'effacement. Certes, il est possible de filmer la scène, et cela a été fait, mais il apparaît vite que l'on irait au devant de problèmes sérieux si l'on s'avisait de projeter le film.

spreading out rapidly into a vast area of land, so the water level rose slowly despite the power of the flow.

Later in the day, between approximately 5:15 and 7 p.m., Marty Bahamonde, a public affairs official with the Federal Emergency Management Agency (FEMA) who had spent the night at the New Orleans City Hall Emergency Operations Center, joined a Coast Guard helicopter crew to conduct a visual inspection. The first of his two rides began with a quick pass over the 17th Street Canal. A second flight of approximately 45 minutes covered most of the metropolitan area of New Orleans. Bahamonde described the scene:

[A]s far as the eye could see in either direction was completely covered with water. There was no dry land. I saw no dry land the moment I left, other than around the Superdome... It was varying in depth. There were houses that were completely under water. All you saw was rooftops ... It was obvious that there was massive flooding throughout the city... (Chapter 4-6)

And we went out and flew over the [I-10] twin span and it was completely destroyed...We flew over the canal area, may have even been the Mississippi, where a huge tanker had been run aground....Chalmette, the Ninth Ward, all completely flooded... the Intracoastal Industrial Canal. You didn't really know it was a canal because it was just one sheet of water.... And as we got back toward the city, it became obvious now that – it's close to 7 o'clock – that there are literally hundreds of people on rooftops, standing in balconies in apartments, and that there was a desperate need for a rescue mission because it was now getting dark. (Chapter 4-7)

Around the same time that Bahamonde was observing the devastation from a Coast Guard helicopter, Colonel Richard P. Wagenaar, Commander of the Army Corps of Engineers district office in New Orleans, was conducting a similar reconnaissance in a four-wheel-drive vehicle. Col. Wagenaar told the Committee that between 5 and 5:30 p.m. he reached an elevated overpass on Interstate 10 near downtown New Orleans: [T]hen we saw the water, and the water was – all you could see were the trees sticking out of the water... that's probably 10 or 15 feet of water...a sight to behold, because, literally, I mean, you just drive on an interstate and there is a lake. I mean, it literally was a lake." (Chapter 4-7)

Chapitre 6

L'EXERCICE PAM : UNE DÉMARCHE PARTICULIÈREMENT HARDIE

Certes, la Commission souligne les retards subis dans la conduite de ce projet, notamment en raison de limitations budgétaires ; ou encore les difficultés dans la prise en compte des enseignements de l'exercice. Mais on relèvera la puissance de l'action entreprise, la hardiesse des hypothèses retenues. Il ne s'agissait plus d'un exercice-démonstration calibré de telle sorte que les hypothèses habituelles ne soient en rien affectées. ²¹

"Based on scientific research and dozens of emergency-management studies, the Hurricane Pam scenario predicted:

- Widespread flooding throughout the city
- 67.000 dead
- 200,000 to 300,000 in need of evacuation after landfall
- Hundreds of thousands displaced
- Sheltering and evacuation needs exceeding state and local governments' capabilities
- Hospitals would be overcrowded with special-needs patients. Backup generators would run out of fuel or fail before patients could be moved elsewhere.
- Incapacitated first responders and parish resources
- Compromised situational awareness" (Chapter 8-1)

On notera aussi le nombre imposant de participants :

"The initial Hurricane Pam workshops took place from July 16 until July 23. Attendance included over 300 participants from 15 federal agencies, 20 state agencies, 13 parishes, 5 volunteer agencies" (Chapter 8-6)

Cependant, rien n'est dit sur une quelconque participation des dirigeants. Il est probable qu'ils n'y participaient pas, ce qui constitue une grave défaillance. Davantage : ces absences, qui sont la norme la plus courante²², souligne que ces questions de vulnérabilités vitales ne font pas encore partie des responsabilités des dirigeants. Aussi longtemps que cette loi fonctionne, il est inutile de s'étonner des fiascos subis lorsque le risque, comme c'est le cas aujourd'hui, sort des ornières du quotidien. Certes, il est désormais d'usage, en cas de grand malheur collectif, de compenser la désertion par une communication submergeante, mais une émulsion d'émotion ne ressucite pas les morts.

²¹ Lors d'une préparation de ce type, pour un séisme suivi d'un tsunami, il sembla indispensable de tenir pour acquis que : l'aéroport ne serait pas affecté, les autoroutes seraient tout au plus concernées par quelques éboulements, la préfecture serait intacte et disposerait de tous ses agents, les moyens de communication ne seraient en rien affectés, les hôpitaux préservés, l'électricité serait fournie sans difficulté, etc.

²² Ce qui se traduit par des remarques du type : « On peut faire un exercice, mais ne comptez pas sur le dirigeant pour y être, il ne travaille que sur notes » ; « Pour la conférence sur la question des crises la semaine prochaine, nous n'aurons pas les cadres dirigeants, le Président a mis une réunion importante au même moment » ; « On devrait faire quelque chose sur le sujet, mais le comité de direction n'est pas encore mûr », etc.

Chapitre 7

LES DIGUES : ENTRE IRRESPONSABILITÉ ET IMPUISSANCE DEVANT LE RISQUE MAJEUR

Il faut reconnaître l'immense mérite de la Commission d'avoir tenté d'y voir clair dans les attributions des uns et des autres, dans les perceptions des uns et des autres, quant aux périmètres de responsabilité qui étaient peut-être les leurs en matière de digues, de sécurité des digues, d'intervention d'urgence. Aussi longtemps qu'il s'agit tout au plus de régler quelque difficulté marginale, les usages bureaucratiques habituels permettaient sans doute de tenir le quotidien, mais le château de cartes ne pouvait manquer de s'effondrer en cas de phénomène majeur. Ce fut le problème posé par Katrina. L'éventualité de brèche avait été exclue des dispositifs. Dès lors que la réalité ne rentrait plus dans les plans, l'impuissance imposait sa loi.

Mais il faudrait sans doute retourner le raisonnement : vu les grandes difficultés qu'aurait soulevé tout examen un peu lucide, il était plus confortable de bâtir et de consolider un magma organisationnel illisible. Inutile, en pareilles circonstances, de tenter d'organiser quelque exercice, plan ou autre dispositif de sécurité.

Louisiana law requires levee districts to have emergency plans. The Orleans Levee District had such a plan, but the plan did not contemplate repairing major breaches like those experienced along the 17th Street and London Avenue Canals. Instead, the levee district assumed that, consistent with the informal distinction it used in classifying O&M problems – that minor problems were its responsibility and major problems were the Corps' responsibility –fixing any breach in the system would be the Corps' responsibility because it would be "major." The Corps, meanwhile, was under the impression that the Lake Pontchartrain Project had been turned over to the levee district and so it was the levee district's responsibility to be the first responders for any emergency, regardless of the size. The conflicting expectations resulted in a breakdown in the preparation for and response to Katrina among all involved – the Corps, the LA DOTD, and the Orleans Levee District.

At the Committee's December 15, 2005 hearing, "Hurricane Katrina: Who's in Charge of the New Orleans Levees?" the parties involved had no agreement on emergency responsibilities. (Chapter 10-14)

Quant à savoir qui était en charge si d'aventure il y avait brèche des digues, c'est comme demander à des organisations ce qu'elles ont prévu en cas d'invasion de Martiens. Face au désastre, qui aurait nécessité une réactivité collective sans faille ni hésitation, on est empêtré instantanément dans des conflits illisibles. Bien entendu, on ne saurait demander aux Sociétés de se préparer à tout et n'importe quoi, du type invasion de Martiens. Mais, en l'espèce, il s'agissait du scénario le plus central, le plus pressant, pour La Nouvelle Orléans.

La Commission livre le script de la déposition du Colonel Wagenaar, qui s'exprime au nom du Corps of Engineers du district.

"Who was doing it, who was in charge, you know, and what parish was what and who could build what road and what trucks could be used and what equipment could be used, you know. ... I mean, the issue was, is the... [West Jefferson] Levee District had like five trucks, dump trucks and an excavator. And here we bring in a contractor that's ready to go that's got 20 trucks... I mean, we're bringing federal contractors — we're bringing the

federal government to bear on the problem. And they [the West Jefferson Levee District] were like, "Well, you can't do that, that's our road." They were working on building this road back there. 'Well, you can't' – you know, "We're building the road, you can't do that." ...I mean, all – pretty much a turf war almost.... And it just got to the point where, you know, we were mobilizing contractors...and they wouldn't let us operate on the bridge [the Hammond Highway Bridge]. Mike Stack [with LADOTD] and – you know, Giuseppe [with the West Jefferson Levee District blocked some of our equipment from moving with his vehicles."

This disagreement illustrated the overall confusion among federal, state, and local entities over who was responsible for the Lake Pontchartrain Project. As mentioned above, Col. Wagenaar thought the levee districts were responsible for the repairs, but the Orleans Levee District did not have the personnel or the material available to address the situation. The leadership vacuum was filled by LA DOTD [Louisiana Department of Transportation and Development] personnel who assumed command of the initial repair efforts. That effort, too, proved inadequate, at least according to Col. Wagenaar, who thought it was best that the Corps take over—"[W]e had a bunch of dysfunctional stuff going on out there, and we figured if we didn't do it and take over and marshal federal resources at this problem, that we'd be here for quite a while trying to fix this hole."

The levee districts and the LA DOTD personnel on the scene did not agree with Col. Wagenaar's decision, so ultimately, on Thursday, September 1, LA DOTD Secretary Johnny Bradberry, and the Corps' Director of Civil Works, Major General Don Riley, resolved the dispute, concluding that the repair effort would be a Corps-directed operation.

En conclusion, la Commission en est réduite à préconiser des lignes inimaginables de bon sens. On se prend à se demander si elle s'adresse à des institutions responsables ou à des malades mentaux – qui ont mis trois jours à harmoniser leurs violons alors que l'on était en plein désastre humanitaire. Elle en est effectivement réduite à traiter les institutions responsables comme des invalides graves en leur rappelant certaines exigences on ne peut plus élémentaires. Comme si, à la suite d'un crash aérien, une commission d'enquête faisait savoir, avec tact pour ne pas heurter, qu'il serait préférable que les pilotes soient dans le cockpit au moins lors du décollage et de l'atterrissage.

Mais il faut bien comprendre le fond du problème, pathétique. L'idée que l'on pourrait être concerné par des scénarios dépassant le simple écart à la marge est hors champ de vision, et au-delà du supportable. Telle est, en vérité, le ressort de l'incompétence et de l'irresponsabilité générales. C'est le facteur qui permet de donner sens à tout ce débat surréaliste.

Resolving the dispute over who was in charge of the repair effort and the full-scale efforts to fill the breaches took three days. No such dispute should have occurred, and resolution should not have taken so long. Responsibilities among the levee districts, the LA DOTD, and the Corps should have been understood and documented. An interagency emergency response plan should have been in effect. The Corps should have prepositioned personnel and material from either the New Orleans District, or the other districts within the Mississippi Valley Division and identified in the Division's Hurricane Contingency Plan, to assess and repair immediate problems. In the end, neither the Corps, the LA DOTD, nor the levee districts had any plan in place, nor had they determined or planned in advance who would be responsible for, and have the assets nearby, to address (Chapter 10-16)

Chapitre 8

PRÉPARATION EN RETARD D'UNE GUERRE : QUAND LE DÉVOUEMENT NE SUFFIT PLUS

Il y a bien eu des réactions, du dévouement et de la compétence. Mais quand il s'agit de livrer une « autre guerre », la bonne application de chacun à mettre en place les moyens usuels, et même à les renforcer, ne permet pas d'échapper au fiasco. Comme l'avait écrit un officier français sur un papier retrouvé sur son corps lors de la débâcle de juin 1940 : « Je me tue, Monsieur le Président, pour vous faire savoir que mes hommes étaient de braves, mais que l'on n'envoit pas des gens avec des fusils contre des chars d'assaut ».

La Commission ne manque pas de souligner ce problème : l'état de Louisiane n'était pas préparé face au scénario qui allait se dérouler – et qui était pourtant parfaitement répertorié, et même nommé de façon directe *The New Orleans Scenario*, sans qu'il soit même besoin de préciser davantage. Aussi sûrement que la Tour Eiffel est attachée à Paris. La Commission insiste : dès l'annonce de l'arrivée de Katrina, l'état de Louisiane avait toutes les raisons de savoir que son plan allait échouer. Ce qui ne manqua pas de se produire.

The seeds of Louisiana's failure to prepare were sown long before Hurricane Katrina approached the state. As detailed in other report sections, Louisiana had been on notice of its vulnerability to catastrophic hurricanes for decades, but over the long term had never fully upgraded its emergency response systems to the level necessary to protect its citizens from those events. Based on its own models and experience, it could have foreseen the inadequacy of many of its plans and resources, particularly its plans to evacuate people without personal transportation and the staffing of its state emergency preparedness office.

In short, when it received warnings of Katrina's approach, the state had reason to know that its emergency response systems were likely to fail, however diligently they were implemented. And fail they did. (Chapter 11-1)

La Commission rend pourtant justice à nombre d'actions engagées par l'état et sa Gouverneure : dispositifs de crise, mobilisation de forces de sécurité, lettres au Président Bush pour obtenir aide et appuis, etc. Mais un message, souligne la Commission, n'est pas suffisamment mis au centre de ces démarches : le fait que l'on va être totalement dépassé.

C'est là un trait classique en situation de crise non conventionnelle n'ayant pas fait l'objet d'attention suffisante. La sourde sensation que quelque chose ne va pas, l'angoisse tétanisante que l'on risque d'être submergé et que l'on ne pourra pas être à la hauteur de ses devoirs, de son image, déclenche rapidement une posture de protection : « Nous faisons face ».

Au plus haut niveau, comme on le voit régulièrement, cette fière affirmation est généralement prise comme une bonne nouvelle, « rassurante », et volontiers réutilisée en communication médiatique pour « rassurer » le public : les services « font face ». Il faut savoir décrypter ce message. En cas de situation non conventionnelle, il y a de fortes chances que ce soit davantage un signal de détresse qu'une réassurance effective.

While Governor Blanco's letter sounded a note of urgency, she and other state officials missed other critical opportunities over the weekend to convey the extent to which the state's response capabilities were likely to be overwhelmed. Most important, in a video teleconference of federal, state, and local officials on Saturday, Colonel Jeff Smith, Acting Deputy Director of LOHSEP, answered a question from former FEMA Director Michael Brown of whether the state had "any unmet needs, anything that we're not getting to you that you need" in the negative:

Mike Brown: Any questions? Colonel, do you have any unmet needs, anything that we're not getting to you that you need or—

COLONEL SMITH: Mike, no. (Inaudible) resources that are en route, and it looks like those resources that are en route are going to – to be a good first shot. Naturally, once we get into this thing, you know, neck deep here, unfortunately, or deeper, I'm sure that things are going to come up that maybe some of even our best planners hadn't even thought about. So I think flexibility is going to be the key.

Brown later testified that he was seeking information from the state on what it needed at that moment only, and Col. Smith later tried to downplay the significance of his response. But his remarks reflect an underestimation of the extent to which the state was unprepared. Given the frenzied efforts over the weekend to get hold of the incomplete drafts of plans under development in the Hurricane Pam exercise, it should not have taken Louisiana's "best planners" to identify shortfalls in ongoing preparations. (Chapter 11-3)

En ce qui concerne la ville de La Nouvelle Orléans, la question du Superdome est retenue par la Commission. C'est l'exemple pur d'une sortie des univers habituels. Le plan prévoyait que cette installation pourrait être utilisée comme centre d'hébergement de dernière extrémité pour 200-400 personnes nécessitant des aides particulières (mais en aucun cas des malades exigeant une assistance lourde), ce qui signifiait, en comptant leurs accompagnateurs, 400 à 800 personnes. Dans les cas des deux derniers cylones, environ 30 personnes ayant besoin d'assistance s'étaient présentées au Superdome. Pour Katrina, le responsable en charge prit de la marge, et prépara le Superdome à recevoir environ 1200 personnes, dont 600 personnes à assister – soit 20 fois plus que dans les cas précédents. Dès son ouverture, le dimanche matin, le Superdome vit arriver 1000 patients, dont certains exigeaient des traitements lourds, cas totalement exclu du périmètre de mission défini. Il fallut tout reconsidérer, demander de l'aide – qui n'arriva pas à temps (avant l'impact) en raison d'un refus d'assistance de la police du Texas, puis des conditions météorologiques qui s'aggravèrent.

Autre nouvelle donne : jusqu'alors ce type d'hébergement était pensé pour quelques heures avant retour à domicile. Cette fois, il faudrait compter en jours.

Pour le dimanche soir environ 10 000 personnes étaient arrivées au Superdome. Il fallait tout repenser en termes de nourriture. Et l'on allait oublier les toilettes portables, dont l'absence allait se révéler désastreuse.

Le système n'était pas pensé pour cette fonction. Il ne pouvait qu'aller au fiasco. On ne saurait plaider la surprise absolue. Le Maire avait demandé des crédits pour renforcer les capacités du Superdome afin qu'il puisse mieux remplir sa fonction de centre d'hébergement de dernière extrémité. Les crédits lui avaient été refusés.

Cependant, ce que l'on omet généralement de dire, c'est que, dans les conditions qui prévalaient en matière d'impréparation, les 10 000 puis les 20 000 personnes allaient certes vivre l'horreur, mais échapperaient au moins à la mort.

The Region 1 plan called for preparations to receive 200 to 400 special-needs individuals and each was expected to bring a caregiver, meaning a total of 400 to 800 individuals. Hurricanes Isidore and Ivan had each resulted in about 30 special-needs people, plus caregivers. As a result of the plan, past experience, and the capacity of the Superdome, Dr. Kevin Stephens, Director of the City's Health Department, set up the shelter to accommodate approximately 1,200, comprised of 600 special-needs people and their caregivers. (Chapter 11-4)

At 8 a.m. on Sunday, the Superdome opened, as planned, for special-needs patients.59 Approximately 1,000 special needs patients arrived throughout the day,60 plus an undetermined number of caregivers. Colonel Pat Prechter, Deputy Commander of the

National Guard's Louisiana Medical Command, noticed that some patients arriving in the shelter, following processing through registration and triage, required dialysis or constant oxygen which would normally disqualify them as candidates for special-needs shelter admission. Following this observation, and at the city's request, National Guard medical officials began assisting with triage. Of the approximately 1,000 individuals who arrived at the special-needs shelter, 450 to 500 of the most critical were evacuated to a special-needs shelter in Baton Rouge.

Despite the pre-staging of substantial assets, officials realized on Sunday that additional supplies were necessary. The city provided more medical oxygen and large quantities of other supplies ranging from saline solution to adult diapers. When Simonson called again on Sunday, Dr. Stephens accepted the help, which included a FEMA Disaster Medical Assistance Team (DMAT) and material from the U.S. HHS's Strategic National Stockpile of emergency medical supplies. While FEMA was able to get military-style rations, water, and ice to the Superdome, the DMAT had to stop in Baton Rouge because the Texas State Police denied two requests for police escorts and then once in Louisiana the team met worsening weather conditions. The team didn't make it to the Superdome before landfall. (Chapter 11-5)

In prior hurricanes, the Superdome had served as a refuge for those needing to ride out the storm for a few hours before returning home. During Katrina, thousands would stay for days.

In 2004, recognizing the need for greater sheltering capacity, Mayor Nagin requested \$850,000 from the New Orleans Congressional delegation for "a study ... to determine the feasibility of upgrading the Louisiana Superdome, or any other facility, to serve as a refuge of last resort." The city made similar requests to the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) in 2005. These funding requests were denied, although the record does not indicate why. The city did not appeal to the state because of the perception that the state lacked the capability to help, and the city was planning on upgrading the Dome under FEMA – not state – regulations. The upgrade would have taken at least two more years (and cost \$7 millionto \$17 million).

By late Sunday evening, about 10,000 people had shown up at the Superdome. The Louisiana National Guard had pre-positioned 900,000 Meals Ready to Eat (MREs) rations and water for its staff's needs (though most were ultimately given to the storm victims). Officials realized that even that cache would need augmenting, and rushed out requests for 350,000 additional MREs from the city and additional food and water from the state. FEMA and the Louisiana National Guard were able to move in more rations and water before landfall.

No one had made arrangements for portable toilets, however. Dr. Stephens tried to contract directly with individual vendors on Saturday, August 27, but could not reach them. Several Superdome witnesses interviewed considered this omission a central failure in pre-storm planning.

The large number of people at the Superdome also required a significant security presence. The New Orleans Police Department (NOPD) under Deputy Chief Lonnie Swain were in charge, first with 40 officers and later with double that amount. In support of NOPD, the Louisiana National Guard pre-positioned considerable troops to assist with security, as well as other missions, such as engineering functions, communications, and food distribution. Pre-landfall security mainly entailed screening walk-ins and bus arrivals searching for weapons. When the downpour started around 6 p.m. Sunday, security

screening moved inside the building. This made it harder for city police to ensure that no one entered with a weapon. The National Guard also pre-positioned about 10 high-water vehicles at the Superdome. These trucks proved invaluable after many of the streets around the Superdome flooded. When the Superdome opened to the general population, National Guard officers there asked the LOHSEP and the Texas and Florida National Guards for additional support. NOPD Deputy Chief Swain also requested additional police officers to assist at the Superdome.

At Katrina's landfall on Monday morning, August 29, the Superdome's special-needs shelter and refuge of last resort housed over 10,000 people who would ride out the stormin its cavernous interior. (Chapter 11—6-7)

Il faudrait aussi accepter de discuter d'un point jamais traité par les Commissions d'enquête. Et si, demain, les décisions et investissements exigés pour la protection des populations ne cadraient plus du tout avec les conceptions et les moyens qui sont les nôtres? Comme le disait un préfet français : « Si je voulais vraiment faire une mise à l'abri efficace face au risque inondation, je devrais faire évacuer les 2/3 du département ». Nos outils sont prévus pour protéger des « zones à risques », tenues pour spécifiques, marginales, résiduelles. Et si demain la question est de protéger toutes les côtes sud et est des Etats-Unis?

Nous savons traiter les risques domestiqués. Pas les risques barbares. Comme le disait bien la Munich Ré dans un document publié pour son centenaire : « La prévoyance, les mesures préventives contre les dommages ne sont que trop souvent rattrapées et dépassées par des périls encore plus considérables [...]. L'institution des assurances résulte de la raison humaine. Dans une large mesure, elle permet la réparation matérielle des conséquences des défaillances humaines. Mais elle trouverait logiquement ses limites dès l'instant où l'humanité ne disposerait plus de la capacité de régler les problèmes de son existence raisonnablement ». ²³

²³ Münich Ré, Plaquette éditée à l'occasion du centenaire de la société, 1980, p. 36. "Foresight and preventive measures against damages are only too often overtaken and exceeded by evermore considerable hazards (...). Insurance was instituted as the result of human reasoning. To a large extent, it allows us to repair the material consequences of human failures. But it faces logical limitations as soon as mankind no longer has the capacity to deal with the problems of its existence in a reasonable way."

Chapitre 9

MOBILISATION STRATÉGIQUE : UNE CULTURE DE SUIVI DES PROBLÈMES, NON DE PRISE EN CHARGE

1. Le DHS: aux abonnés absents

La Commission dépeint une mobilisation fédérale totalement décalée. Certes, en jouant systématiquement sur les mots, les dirigeants peuvent prétendre qu'ils ont rempli leur mission en s'assurant que, globalement, les rouages fonctionnaient. Et les rouages, à haut niveau, considèrent eux-aussi qu'ils ont rempli leur devoir dès lors qu'ils recevaient des assurances du terrain – ce qui justifiait l'attente.

Les idées de pilotage, d'initiative, d'anticipation autre que de façade, semblent hors culture, hors de portée. Chacun se contente de flotter comme une méduse au gré des courants, tout en prenant soin de se couvrir par quelques appels et intervention minimales.

Les dirigeants n'entrent dans aucun questionnement, aucune dynamique stratégique, aucune prise en charge effective. Ils n'ont d'ailleurs pas grande connaissance des dispositifs qu'ils sont sensés engager (Chertoff); et, quand ils les connaissent, il arrive qu'ils y soient franchement hostiles (Brown). Il arrive même qu'ils (Chertoff) prennent des décisions étranges, comme celle de nommer (après un long délai, cependant) le directeur de la FEMA comme patron des opérations de Katrina, lui qui doit rester en mesure de jouer son rôle au niveau central, éventuellement même d'engager son organisation sur d'autres événements – et il y eut un (petit) séisme en Californie le 1^{er} septembre.

Fait particulier relevé par la Commission, le Secrétaire Chertoff, le samedi précédant le désastre, est chez lui, au travail sur d'autres dossiers. Certes, il a reçu une note sur une vidéoconférence du jour ; on ne saurait plaider qu'il s'agisse là d'une mobilisation à la hauteur des enjeux, lorsque l'on est dans l'attente d'un désastre certain et imminent comptant comme l'un des plus graves pour le pays.

Il faut inverser les raisonnements : tout fonctionne comme si la perception d'un événement hors-cadre insufflait une panique latente, conduisant à prendre une distance maximale, à tenter de recevoir des messages rassurants qui permettront de justifier la fuite. Et cet effet incapacitant frappe d'abord à haut niveau, l'ensemble du système se mettant au diapason, ou étant déjà sur ce registre d'attente passive.

Beaucoup plaideront qu'il ne faut pas se fixer sur les leaders, que ce sont les systèmes qui importent. Cette vue habituelle ne tient pas compte du fait, comme le dit un responsable interrogé par la Commission que, dans les milieux dirigeants, les niveaux hiérarchiques comptent énormément. S'il faut mobiliser le ministère de la Défense, par exemple, le rang de l'appelant est crucial. En outre, si l'on veut bien entrer dans les dynamiques particulières des crises (mais c'est effectivement là le pas souvent impossible), il faut bien reconnaître que l'impulsion donnée par le chef d'orchestre n'est pas un mince paramètre dans une dynamique chaotique. Bien sûr, on peut se passer de leader, quelqu'un d'autres peut prendre les rênes, mais cela a un coût considérable en termes de délais, de puissance, de cohérence.

Bien au contraire, il est vital aujourd'hui, plutôt que de dénigrer avec superbe la fonction de leader, de rappeler à tout leader que, s'il ne se prépare pas à exercer ses responsabilités pendant les tempêtes, il n'est en rien légitime pour continuer à occuper son poste.

La charge de la Commission à l'endroit du patron du DHS est certes cinglante, mais elle est fondée. Quand l'homme-clé-de-voûte de la sécurité du pays le plus puissant du monde peut rester tranquillement chez lui à la veille d'un évenement qui va – sans grande incertitude

- noyer une ville entière, raser la superficie de la Grande-Bretagne, on est bien loin de l'optimum.

Défaillance dans les préparations globales et spécifiques

"In the critical days before landfall, DHS leadership mostly <u>watched from the sidelines</u>, allowed FEMA to take the lead, and missed critical opportunities to help prepare the entire federal government for the response." (Chapter 12-1, je souligne)

"DHS and its leaders failed to prepare the nation adequately for the unprecedented devastation of Hurricane Katrina. DHS failed to fully adapt and appropriately train to meet the requirements of the NRP in the nine months between its promulgation and Hurricane Katrina. Nor did the Department address FEMA's deficiencies such as staffing shortage, weaknesses in commodities tracking, and insufficient plans for post-disaster communications. (Chapter 12-1)

As Katrina was bearing down on the Gulf Coast, they [DHS leaders] failed to take reasonable steps during that period to create a full awareness and a sense of urgency across the federal government about the impending catastrophe. DHS's actions and inactions during the days immediately prior to landfall had consequences in the days that followed. (Chapter 12-2)

Leaderhip défaillant

The job of leading the federal response to a catastrophe rests with the Secretary of DHS. In the days before Katrina made landfall, DHS Secretary Michael Chertoff's efforts in this regard fell short of what was reasonably expected of him.

On the Saturday before landfall, Secretary Chertoff was at home working on unrelated matters, and his only apparent Katrina-related activity was to receive a briefing about that day's FEMA video teleconference (VTC).

On Sunday, Secretary Chertoff participated in the FEMA VTC. He heard assurances from former FEMA Director Michael Brown and others that preparations were well in hand. (Chapter 12-2)

Secretary Chertoff testified that he did not second-guess statements he heard on the Sunday VTC – including those by state emergency managers and state National Guard officials who, as he termed it, "express[ed] very clearly their satisfaction with the state of affairs." [...] Secretary Chertoff thought the emergency-management officials on that call had hundreds of years of combined professional experience managing hurricanes. Secretary Chertoff also spoke with Governors Barbour of Mississippi, Blanco of Louisiana, and Riley of Alabama that day.

The Secretary and other senior leaders did not take affirmative steps prior to landfall, beyond his statements on the Sunday VTC, to ensure that DHS components with operational responsibilities under the NRP were prepared to respond. Instead, the evidence suggests that Secretary Chertoff and DHS responded to Katrina as if DHS headquarters had no special responsibilities outside the normal course of operations.

Despite assurances and lack of affirmative requests from the Governors of the Gulf states, the Secretary still should have taken additional steps to better prepare his Department for the coming storm. (Chapter 12-3)

En dépit d'alertes précises, fortes, crédibles, répétées

From all corners, the message throughout the weekend, especially at the Saturday and Sunday VTCs, was that a catastrophe was about to strike the Gulf Coast, and the greater New Orleans area in particular.

The head of the National Hurricane Service, Max Mayfield, had been making calls to

leaders in parishes, cities, states and the federal government. The Hurricane Pam exercise in 2004 had predicted that flooding from a catastrophic storm – what had been known for years among meteorologists and government officials as the "New Orleans scenario" – might kill as many as 60,000. In the weekend conference call, Brown referred to the approaching storm as the "big one." As Mayfield said, "I think the wisest thing to do here is plan on a Category 5 hurricane...no matter where it hits it's going to have an impact over a very, very large area... (Chapter 12-3) I don't think any model can tell you with any confidence right now whether the levees will be topped or not, but that's obviously a very, very grave concern." (Chapter 12-4)

Un suivi mou, plutôt qu'une forte prise en charge, et un questionnement rigoureux

During the weekend, as Katrina neared New Orleans, there was a need for initiative, for recognition of the unprecedented threat and the equally unprecedented response it required. Leadership – direction, encouragement, a sense of purpose and urgency – was needed. Secretary Chertoff did not provide it.

For example, he did not ask specifically what preparations were under way, how much material was being pre-positioned, and whether it would be enough. And though the DHS Inspector General had issued a draft report in June 2005 stating that FEMA's logistics-management systems had performed poorly during the four Florida hurricanes in 2004, Secretary Chertoff did not inquire whether the system could handle the expected impact of Katrina. The Committee has found no evidence to suggest that anyone, including Secretary Chertoff, attempted to determine if the system could handle the expected impact of Katrina. [...](Chapter 12-4)

Un lien étonnamment ténu entre le Secrétaire du DHS et le Directeur de la FEMA

Although he has stated repeatedly that he relied on Brown as his "battlefield commander," aside from on the Sunday VTC, according to Brown, Secretary Chertoff did not talk to his "commander" directly over the weekend, either while Brown was in Washington or after he left for the Gulf Sunday afternoon. In view of Secretary Chertoff's testimony that he stayed in contact with "senior DHS and FEMA officials and [his] experienced advisors," this omission is particularly inexplicable. Because Secretary Chertoff was placing so much faith in Brown to lead the preparations and response, it was incumbent on the Secretary to do more than just have a brief conversation with him in front of dozens of state, local, and federal officials – including the President of the United States – on a VTC. Secretary Chertoff should have called Brown privately to discuss in more detail the status of preparations and the level of cooperation Brown was getting from DHS and other government departments. Conversely, Brown failed to inform the Secretary of the FEMA deficiencies that he has since claimed in testimony and media interviews to have known about at the time. These two key players' failure to communicate is evidence of the profound dysfunction then existing between DHS and FEMA leadership. (Chapter 12-4)

Pas d'activation du texte essentiel pour les catastrophes hors cadres

Secretary Chertoff did not activate the NRP-CIA [Catastrophic Incident Index], as he had the authority to do. [...] (Chapter 12-6)

Activating the NRP-CIA also could have accelerated the involvement of the Department of Defense. (Chapter 12-7)

Pas de nomination d'un représentant personnel, puis confusion des rôles pour Brown Secretary Chertoff did not appoint a Principal Federal Officer (PFO) until the evening of Tuesday, August 30, approximately 36 hours after landfall. The position is provided for in the NRP so that the Secretary will have an on-the-ground representative to oversee the federal response. It is designed to support the unified command structure and be the primary point of contact and situational awareness for the Secretary in a disaster area. The Secretary appointed a PFO months in advance for events such as the Super Bowl. Yet DHS waited until the day *after landfall* to appoint one for what many government officials – including Brown – feared was a potential catastrophe. Secretary Chertoff testified that he did not appoint a PFO on Saturday, when the President issued the emergency declaration for Louisiana, because the PFO "doesn't exercise command authority; it is a coordinating authority." He also stated that he believed Brown had all the authority he needed to coordinate the federal effort by virtue of his rank within DHS. [...]

The Committee disagrees that Brown's rank in DHS was a substitute for PFO designation. With other duties to perform, and with no way of knowing whether Katrina would be the only disaster in store, Brown was in no position to commit to the 100 percent on-scene focus required in a PFO. The Committee believes Secretary Chertoff should have appointed a PFO in conjunction with the President's declaration on Saturday August 27. Doing so could have laid the groundwork for a unified approach to preparation and signaled strongly that DHS and the federal government was stepping forward with all available assets. Appointment before landfall could have allowed the individual appointed to bring together state, local, and other federal officials in the region and to put in place coordinated plans for a response in advance of the storm rather than trying to establish control in the midst of the response. Deficiencies, such as the failure to evacuate special-needs individuals or the lack of planning for post-landfall evacuation of the general population, might have been identified earlier. None of this happened.

That said, it's unclear that appointing *Brown* PFO prior to landfall would have improved the response. Brown has made it very clear that he did not want to be appointed PFO. In fact, he thought the entire concept "silly," as he felt it added an unnecessary layer of bureaucracy. The choice of Brown as PFO – whether before landfall or after – was poor, even if for no other reason than his animosity toward the PFO concept, the NRP, and DHS, not to mention his lack of emergency-management training and experience. Perhaps Secretary Chertoff, who was in his position for less than seven months, wasn't aware of Brown's attitudes or was poorly advised. Or perhaps he chose Brown in the hope that he would rise above policy differences in the face of catastrophe. (Chapter 12-8)

One of the PFO's main responsibilities is to keep DHS leadership informed of the situation on the ground, but Brown, who has expressed disdain for this structure as inefficient, refused to communicate with the Secretary, circumventing the chain of command to communicate directly with the White House. His actions were inexcusable – not only insubordinate, but disruptive to DHS's awareness of the threats and problems that it was facing.

Brown was a poor choice for another reason. Even when appointed PFO, Brown remained the Director of FEMA, an apparent violation of the NRP's requirement that a PFO not be "'dual hatted' with any other roles or responsibilities that could detract from their overall incident management responsibilities." According to DHS Deputy Secretary Michael Jackson, "for the incident of a hurricane, PFO and Director of FEMA, 'macht Nichts' [German for 'amounts to nothing'] they both have the same capacities, capabilities, performance capabilities in managing the events." There is, however, a practical reason why a PFO should have no other responsibilities: the PFO has to befocused entirely on the catastrophe at hand. But just as DHS and Secretary Chertoff had responsibilities that were broader than Katrina, so, too, did FEMA and its Director. On Thursday, September 1, a minor earthquake occurred in California. Had this earthquake been more severe – or had

there been wildfires, flooding, or another disaster elsewhere – it remained FEMA's responsibility to respond, and the FEMA Director's job to see that it did so. Either Brown shouldn't have been appointed PFO or someone else should have become Acting Director of FEMA. Neither happened. (Chapter 12-9).

La cellule de conduite interministérielle activée deux jours trop tard

The Interagency Incident Management Group (IIMG) brings together senior-level officials from multiple agencies, in theory to assist the Secretary of Homeland Security in managing national incidents. The IIMG was formally activated at 11:30 a.m., Tuesday, August 30. Over the weekend, the Director of the IIMG, Robert Stephan, consulted twice with Matthew Broderick, who, as the Director of the Homeland Security Operations Center, the primary hub for domestic incident management, operational coordination and situational awareness, was charged with recommending activation to the Secretary. Stephan recalled asking Broderick whether there was "anything significant at this point in time that we need to be worried about and that would cause us to bring in the IMG [sic] this evening? And the answer was no..." It's unclear whether early activation of the IIMG may have resulted in a more effective federal response. Though the IIMG was designed to be a mechanism by which to share information, identify available resources, and coordinate government efforts, some witnesses criticized the IIMG as ineffective in practice. One witness derisively called it the "bright idea brigade." The FEMA designee to the IIMG said that it actually hindered response efforts after its activation in Hurricane Katrina by meddling in operational details. (Chapter 12-9). One emergency preparedness officer said that "It became a huge animal you have to feed information to."

Since the IIMG was not activated until recovery was under way, it's unclear whether response efforts would have improved if it had been activated pre-landfall. However, the decision not to activate the IIMG prior to landfall suggests that DHS leadership did not fully recognize the potential scope of the damage Katrina presented or its obligation to lead the federal response in accordance with the NRP. While the performance of the IIMG appears to have been mixed after landfall, things might have gone more smoothly if it had been activated sooner and been allowed before the height of the crisis to work through issues associated with its first use since the implementation of the NRP.

Alternatively, if activating the IIMG before landfall was not called for in an incident the magnitude of Katrina, this calls into the question the utility of the organization itself and suggests that consideration should be given to abolishing it and distributing its functions to operating elements. (Chapter 12-10)

Conclusion : une piètre performance

Secretary Chertoff testified that he believed his role as chief executive of the Department was to impart strategic guidance and deal with senior officials, not be a "hurricane operator." But Secretary Chertoff came up short by his own yardstick. A chief executive should understand the responsibilities of the organization he runs. In the days before Katrina, Secretary Chertoff appeared not to have fully understood the broader role of DHS under the NRP. A strategic leader chooses capable subordinates and provides those subordinates with guidance, works effectively with other key government officials, and, in DHS's case, cooperates effectively with states. Even judging the Secretary by his own criteria, his performance in the nation's worst domestic disaster fell short of reasonable expectations. (Chapter 12-10)

2. La FEMA : dépassée, avant même l'arrivée de Katrina

La FEMA était prévenue, et beaucoup étaient parfaitement conscients du décalage total entre la préparation et la mobilisation d'une part, et les enjeux d'autre part. Comme pour les grandes batailles perdues, les causes étaient profondément ancrées dans la texture du système : un personnel insuffisant, des équipes sous-équipées, des équipes d'intervention non préparées, un manque de protocoles opérationnels, des budgets insuffisants. La conviction était sans ambiguïté : "Si c'est le scénario Nouvelle Orléans, nous avons une guerre de retard". [Chapter 12-12]

Comme c'est alors souvent le cas lorsque l'on se trouve ainsi écartelé entre la mesure du défi et la conscience de son impréparation, un syndrome de tétanisation se met en place. Même si des actions sont posées, si des vidéo-conférences sont montées, si des alertes sont lancées, le système n'est pas véritablement mobilisé, les connections ne sont pas établies, le chef d'orchestre n'est pas au pupitre, tout se fait sur le mode trop tard-trop peu, et le tout est perlé de non-décisions ahurissantes, comme de laisser le responsable des services opérationnels de la FEMA partir pour un congrès en Alaska, le vendredi 27 août [Chapter 12-12]... Un brouillard d'effervescence qui cache mal l'incapacité à embrayer sur l'événement.

Le décalage est bien exprimé par la Commission : la FEMA suivait semble-t-il les pages de son manuel de base au lieu de se saisir du manuel propre au « big one ». [Chapter12-11]

La difficulté est que la viscosité dont fait alors preuve le système est en relation directe avec la gravité du sinistre attendu. Il est très difficile de faire exploser à temps la bulle d'impuissance dont se protège l'ensemble, anesthésié par sa propre perception d'impréparation. En quelque sorte, si une décision est tout de même prise, c'est que l'on s'est bien assuré qu'elle n'aurait pas de vertu de réarmemement de l'ensemble. Comme si le système se mettait en position d'échec, capitulant par avance. On fait des réunions, on lance même des alertes d'une précision extraordinaire, mais rien ne s'ensuit. Qui n'a pas travaillé en cellule de crise, en position d'analyste critique, ne peut comprendre ces phénomènes de désintégration. Et qui ne peut tolérer psychologiquement la confrontation au chaotique ne pourra même percevoir pareille perte globale de capacité : pour être vraiment une couche "protectrice", la fuite doit rester masquée. Et, dans un système non préparé, malheur à qui voudrait tout de même rendre explicites les comportements de fuite systématique dont fait montre le système. Celui-ci a un besoin vital d'aveuglement. Et l'on ne touche pas impunément à des protections vitales. M. Brown est probablement victime lui aussi de ce phénomène. En dépit de toutes les critiques qui seront émises à son égard, il se démène tout de même, mais rien n'y fait. Le système n'embraye pas...

La Commission examine dans son chapitre 14 les problèmes liés, sur le fond, à la FEMA. Elle pointe tout un ensemble de faiblesses structurelles : des leaders non qualifiés ; une désarticulation, le DHS ayant enlevé la fonction "Préparation" à la FEMA, quand il est capital de garder une solide intégration des compétences de la prévention, l'anticipation, l'intervention à la préparation ; des budgets insuffisants ; un personnel gravement insuffisant ; une pauvre capacité à acheter les matériels d'intervention. Bref, une organisation incapable de traiter une catastrophe de grande échelle. Les Sénateurs soulignent que la solution n'est pas de sortir la FEMA du DHS : la Coast Guard est bien au sein du DHS, ce qui ne l'a pas empêchée d'être compétente. C'est un problème de management et de leadership.

Au-delà du fait spécique à la FEMA, nous sommes confrontés à un problème de fond : comment consolider, aujourd'hui, des organisations en mesure de traiter les événements horscadres ? Avons-nous les moyens de le faire ? Avons-nous la volonté, l'état d'esprit qu'il faudrait avoir, vu le très faible intérêt suscité par les questions de vulnérabilités systémiques vitales ? Il est à craindre qu'un audit sérieux, sur tous les continents, donnerait des résultats très inquiétants. Or, comme l'a montré le cas de Katrina, pouvoir compter sur la compétence

d'un corps particulier (en l'espèce la Coast Guard) n'est vraiment pas suffisant. Et la glorification de quelques héros ne peut effacer un fiasco politico-humanitaire de grande échelle.

Tableau général: "I don't think w're thinking big enough"

Before landfall, Scott Wells, Deputy Federal Coordinating Officer for Katrina in New Orleans, called Edward Buikema, FEMA's Acting Director of Response. "I don't think we're thinking big enough," he told Buikema. "[Katrina] is bigger than how we normally do things."

Wells was exactly right. Despite knowing for years the catastrophic impact that a large hurricane could have on New Orleans, despite the predictions of the exercise known as Hurricane Pam, and despite FEMA's own internal slides showing projections that Katrina could be worse than Pam's predictions of 60,000 fatalities – FEMA just wasn't thinking big enough for Katrina.

FEMA officials knew the threat a large hurricane posed to New Orleans. Buikema testified that FEMA considered a large hurricane hitting New Orleans to be one of the worst catastrophes that could occur in the United States.74 Eric Tolbert, FEMA's Director of Response until February 2005, testified that while at FEMA, the hurricane threat to New Orleans was his top priority and that FEMA knew a hurricane Category 3 or stronger could breach or overtop the levees. Despite this knowledge, FEMA's leadership failed to ensure that the federal government's preparations for the response were adequate. Its leaders didn't compel the federal government to think bigger than usual. They failed to ask the right questions to make sure FEMA's response was big enough. They did not utilize all available resources. FEMA seemed to be following pages from its regular playbook instead of a playboo made for "the big one."

Some of FEMA's pre-landfall failures had to do with FEMA's systematic weaknesses [...]. They included insufficient staff; limited ability to track commodities; unexercised, untrained, under-equipped emergency-response teams; unprepared disaster-assistance workforce; lack of operating procedures; and lack of necessary funding. FEMA Director Michael Brown sought additional funding to address many of these problems, but DHS did not provide sufficient additional funding. The failure to address or solve these many problems cast the die even before Katrina moved towards the Gulf Coast.

As early as Saturday morning, August 27, Michael Lowder, FEMA Deputy Director of Response e-mailed several FEMA employees: "If [this] is the 'New Orleans' scenario, we are already way behind. Let's don't hold back. Let's make sure that all of our Emergency Support Functions are fully engaged and ramped up, everything turned on, etc. This may be IT!" Because of the inadequate preparations, even before landfall, the federal government was already behind in fighting Katrina's terrible wrath.

Alertes claires, viscosité générale

Thus, at least as early as Thursday evening, FEMA was aware of a dangerous hurricane forming in the Gulf of Mexico and by noon Friday was aware that Katrina was shifting west toward New Orleans. This awareness did not provoke action. On Friday, August 27, when asked, Brown permitted Acting Response Division Director Buikema to go to Alaska for a previously scheduled emergency-management conference even though "The predictions are now Katrina will turn into a Cat4. [Chapter 12-12]

FEMA's Sunday morning National Situation Report warned, "Katrina could be

especially devastating if it strikes New Orleans because the city sits below sea level and is dependent on levees and pumps to keep the water out. A direct hit could wind up submerging the city in several feel of water. Making matters worse, at least 100,000 people in the city lack the transportation to get out of town. Also on Sunday, DHS released a report, stating, "Any storm rated Category 4 or greater...will likely lead to severe flooding and/or levee breaching. This could leave the New Orleans area being submerged for weeks or months... The magnitude of this storm is expected to cause massive flooding." This report was circulated to the White House's situation room, throughout DHS, and to all agencies in DHS's HSOC. Brown testified that he spoke to White House officials at least 30 times during the weekend prior to landfall, repeatedly warning them about Katrina.

Brown said he spoke directly to the President on Saturday, August 27, and warned that Katrina could be catastrophic. Brown later called to ask that the President contact Governor Blanco and "do everything he could within his persuasive powers to convince [Louisiana officials] to do a mandatory evacuation." Brown testified that he told both former Chief of Staff Andy Card and Deputy Chief of Staff Joe Hagin prior to landfall that he was concerned about how bad Katrina could be, saying he thought Katrina could be the catastrophic "big one."

On the Sunday before landfall, President Bush and Hagin both participated in FEMA's noon video teleconference (VTC), where Max Mayfield, Director of the National Hurricane Center, predicted Katrina would be a "very dangerous hurricane" and warned, "I don't think any model can tell you with any confidence right now whether the levees will be topped or not, but that's obviously a very, very grave concern." Although the President appeared on the VTC, promised federal government assistance, and thanked Governor Blanco and Mississippi Governor Haley Barbour for heeding these warnings, and doing all they could possibly do to prepare for this storm, the President did not ask any substantive questions. On that call Colonel William Doran, operations division chief for LOHSEP, noted that the State of Louisiana was "way ahead of the game there" with catastrophic planning "thanks to the help of FEMA, when we did the Hurricane Pam exercises." Col. Smith said Louisiana's evacuations were going "much better than it did during Ivan."

After the Sunday noon VTC, Brown had another conversation with Hagin in which said he again raised his concerns about the storm and complained that he had never been allowed to do the catastrophic planning that was necessary for FEMA to be prepared for a storm like Katrina that he had pushed to be able to do. "I [was] just adamant that they understand my concern about New Orleans," Brown described the call. [Chapter 12-14]

Tableau globalement défaillant

FEMA's many failures in preparing for Katrina include: (1) multiple failures involving deployment of personnel; (2) not taking sufficient measures to deploy communications assets; (3) insufficient planning to be prepared to respond to catastrophic events, (4) not pre-staging enough commodities; (5) failures associated with deployment of disaster medical assistance teams and search and rescue teams; (6) failures involving evacuation; (7) failure to establish a joint field office quickly enough; and (8) failure to take measures prior to landfall to ensure proper security for emergency response teams. [Chapter 12-15]

Le cas des bateaux : double piège

On notera à quel point compte la première image formée sur une catastrophe. Chacun

sait que le problème crucial pour La Nouvelle-Orlans, c'est l'inondation. Les premières nouvelles sont « rassurantes ». On ne cherche pas à en savoir davantage. Affaire classée, tout va bien. La propension des systèmes à hisser le drapeau vert à la première information ou non information rassurante est toujours très prégnante. Une équipe de Réflexion stratégique devra ici, systématiquement, surveiller de près les premières informations, et les surdités qu'elles provoquent – à la mesure des peurs préalables.

Despite the expectation of flooding, FEMA did not pre-position boats for its USAR [Urban Search And Rescue] teams. One USAR team manager said later:

I don't recall that, that we were thinking about, gee, we're going to need a lot of boats down here. Actually, when the hurricane went through there, the news wassaying, it's not a big deal. It spared the city. That's kind of the impression we were getting from watching the news on there, so we were not thinking about massive amounts of boats and things like that at that time, that I can recall. I'm sure we had some discussions about it.

Finally, FEMA pre-staged the teams in Shreveport205 –approximately 340 miles from New Orleans. Lokey made this choice because he wanted to be sure they would be out of harm's way while the storm's path was uncertain. However, this distance meant that FEMA USAR teams did not reach New Orleans until Tuesday night, and did not begin rescue missions until Tuesday morning – 14 hours after the Coast Guard and state and local teams began rescuing people. FEMA's teams were too few, too late, and boatless. [Chapter 12-22]

Centre de coordination fédéral avancé : 12 jours de délais

A Joint Field Office (JFO) is a coordination center that FEMA sets up, where federal, state, and local organizations with primary responsibility for disaster response can work together and coordinate the response. FEMA did not take adequate steps to set up the JFO before landfall. While the preparatory step toward a JFO – an Initial Operating Facility (IOF) – was opened pre-landfall, the JFO was not fully operational until 12 days after landfall. [Chapter 12-22]

Valse-hésitation vis-à-vis de la Défense

C'est une illustration exceptionnellement claire de la viscosité des esprits, des comportements. On sait tout en ne faisant pas, on interroge tout en esquivant, le quiproquo fonctionne à plein.

Perhaps one of the most obvious consequences of FEMA not "thinking big enough" was its delay in asking the Department of Defense to apply its resources. Brown conceded that he should have spoken with DOD Secretary Donald Rumsfeld prior to landfall to request assets. So, too, should have Secretary Chertoff. Indeed, DOD was surprised by the early silence from FEMA.

The need for DOD assets pre-landfall, such as helicopters, boats, and communications equipment, was considered but not acted upon by FEMA or DHS leadership. On the August 28 VTC, Secretary Chertoff inquired, "[A]re there any DOD assets that might be available? Have we reached out to them, and have we, I guess, made any kind of arrangement in case we need some additional help from them?" Brown replied that "We have DOD assets over [here] at the EOC. They are fully engaged . . ." Apparently, Brown was referring to DOD liaisons to the EOC, known as Defense Coordinating Officers (DCOs); in this case, two individuals, rather than tangible resources that could be positioned or readied. Secretary Chertoff accepted this reply, telling Brown, "good job." Neither Brown nor Secretary Chertoff sought to ascertain or understand what specific

capabilities DOD might bring to the response, nor did they seek to call upon those capabilities before landfall. [Chapter 12-24]

L'audit de fond : un problème de leadership, et non de design organisationnel

The Committee's investigation found systemic and leadership failures, displayed in both the preparation for and response to Hurricane Katrina, at both the Department of Homeland Security (DHS) and FEMA. These failures contributed to human suffering and the loss of life. The causes of many of these failures were known long prior to Katrina and had been brought repeatedly brought to the attention to both the DHS and FEMA leadership. Despite warnings, leadership repeatedly failed to make vital changes. [Chapter 14-1]

Brown and most of his front office staff had little or no emergency-management experience prior to joining FEMA [Chapter 14-4]. Indeed, several FEMA leaders came from campaign rather than emergency management backgrounds. Additionnally, a review of the bibliographies by Committee staff of FEMA regional directors since 2001 show that many of them had little or no emergency-management experience as well. [Chapter 14-5]

Several FEMA Federal Coordinating Officers (FCOs), said that FEMA is capable of handling small and medium-size disasters, but is not organized for large response operations. As FCO Scott Wells said, "FEMA is not trained, FEMA is not equipped, FEMA is not organized to do very large response operations... If you want big capability, you got to make a big investment. And there is no investment in response operations for a catastrophic disaster." [Chapter 14-8]

Frank Cilluffo Associate Vice President for Homeland Security and Director of the Homeland Security Policy Institute at George Washington University, agreed and testified that moving FEMA out of DHS would simply obscure the real issues:

In my opinion, to re-create FEMA as an independent agency further obfuscates and bifurcates an already too complex systems-to-systems approach. ... To have state and local government and first responders plug into one system to respond to bad weat another system to respond to bad people is unrealistic. There is no reason to have competing systems in an environment of limited resources. The problem is not really of organizational design. The requisite policy in law exists. The challenge is one of management and leadership. [Chapter 14-15]

In short, the problems in DHS's response to Katrina must be fixed, not transferred [Chapter 14-16]

3. La Coast Guard: l'exception

Un facteur central résume la capacité de la Coast Guard : son « agressivité » dans sa prise en charge des situations difficiles. Aussi bien dans la préparation, l'intervention que dans les liens avec tous ses partenaires. Tel le dompteur en face du fauve, qui impose sa détermination, et ne se met pas en posture de capitulation molle.

Préparation rigoureuse

Rigorous planning, training, and exercising are key elements in the Coast Guard's approach to disaster response.

In the spring of 2005, as every spring, prior to the start of the hurricane season, the 8th Coast Guard District – which stretches from the Appalachians, to the Rockies, south of the Great Lakes, and excluding most of Florida – and all its subordinate units, including Sector New Orleans, exercised their hurricane plans.229 Because personnel turnover in the

New Orleans District runs about one-third each year, the exercise provides a good opportunity to bring new personnel into the Coast Guard's culture of operations on the Gulf Coast, including how to make hurricane plans for their own families. [Chapter 12-25]

Action et Lucidité

On August 27, the Coast Guard positioned its five search-and-rescue helicopters from Sector New Orleans in Houston, Texas, and Lake Charles, Louisiana, just out of the hurricane's path, so they could fly in behind the storm.243 As they flew out of New Orleans that day, Captain Bruce Jones, the Commander of Coast Guard Air Station New Orleans, told his flight crews to "take a last look folks, because when you come back, it will be under twenty feet of water." [Chapter 12-26]

Intervention immédiate

At 2:50 p.m. on Monday, August 29, Coast Guard helicopters made their first rescue in the New Orleans area. [Chapter 12-26]

Prise en charge déterminée

Several factors contributed to the Coast Guard's success in preparing for Hurricane Katrina. First, rigorous planning, training, and exercising are key elements in the Coast Guard's approach to disaster response. Second, the Coast Guard's plans and exercises help personnel develop and maintain close ties to state and local officials, with whom they coordinated closely during the Katrina response effort. Third, the Coast Guard has a clearly articulated response mission understood by all personnel. Fourth, the Coast Guard notifies public- and private-sector partners of storm risks and of necessary safety precautions. Fifth, the Coast Guard aggressively moves personnel and assets out of the storm's path, but positions them to maximize their utility in the response effort. Finally, the Coast Guard plans for and rapidly deploys additional assets from outside the affected area without significant bureaucratic hurdles, owing to an institutional commitment to providing assistance when possible. The Coast Guard's efforts – including the rescue of over 33,000 people – demonstrate the effectiveness of being proactive in planning for disaster response.

Unfortunately, DHS, which had extremely poor situational awareness of the storm's impact, failed to make use of the Coast Guard's early presence in the area. [Chapter 12—26-27]

4. Les mondes de la Défense : des questions à examiner

Les détails manquent dans le rapport, mais certaines lignes laissent entrevoir l'intérêt d'un regard sur l'engagement des armées en situation hors cadres. Katrina a montré aussi bien des initiatives fortes que des comportements singulièrement en retrait.

In the Navy, the Commander of the Second Fleet recognized that the *USS Bataan*, a helicopter-bearing ship in port in Texas, was well positioned to provide assistance and ordered the ship to get underway on August 28 and steam in behind the hurricane. [...]. As a result, once Katrina made landfall, *USS Bataan*'s helicopters were among the first active-duty aircraft to conduct search-and-rescue missions beginning on Tuesday. Nonetheless, DHS personnel questioned the admiral's forethought and authority, and were reportedly angered that the Navy had acted in advance of a request.

The preparations by the commanders were not always coordinated with DOD, and on at least one occasion, met with resistance from a DOD headquarters component. Lt. Gen. Honoré's [Commander of the US First Army based in Atlanta] request on the eve of landfall that certain assets be identified for immediate use was not answered by the Joint Staff, despite the fact that the NORTHCOM Director of Operations made the same request by personally contacting the Director of JDOMS [Joint Directorate of Military Support, within the Pentagon's Joint Staff]. Several witnesses explained that, traditionally, the Pentagon will only take disaster-assistance action with a specific request from FEMA and once the actual requirement has been verified, though [...] several commanders took the initiative to mobilize and alert assets in advance of FEMA requests.

Although DOD was prepared to receive and process requests, it received very few requests from FEMA prior to landfall. In addition to staging bases, FEMA requested that DOD provide helicopters for rapid needs assessment prior to landfall; JDOMS only approved this request 12 hours after landfall, a sign, according to some witnesses, of its initial reluctance to provide assistance without the conditions described above. And although the Department's preparations for Katrina were consistent with its procedures and prior practices in civil support missions, they were not sufficient for a storm of Katrina's magnitude. Additional preparations in advance of specific requests for support could have enabled a more rapid response. [Chapter 12-31]

Chapitre 10

LE PILOTAGE AU SOMMET : LA MAISON BLANCHE

Les événements majeurs exigent, à tous les niveaux, et particulièrement à l'échelon le plus élevé, une prise en main appropriée. La Commission examine l'intervention de la Maison Blanche sur Katrina: un leadership introuvable, jusque trop longtemps après l'impact. Le cas de La Nouvelle Orléans n'était pas pas un dossier inconnu pour la Maison Blanche. Les alertes furent innombrables. La réaction resta largement déficiente.

"De quoi s'agit-il?": la définition du problème ne fut pas suffisamment poussée, et la question du risque, puis de la réalité de la destruction des digues, ne fut pas explicitée.

"Quels pièges?": la Maison Blanche ne sut expliciter ni faire expliciter le fait que l'on était bien dans le scénario "Nouvelle Orléans" (l'un des 15 scénarios gravissimes pour le pays), ne sut pas expliciter ni faire expliciter la question de la rupture des digues, radicalement différente de celle du dépassement des digues.

"Quels acteurs ?": la Maison Blanche ne sut pas se représenter de façon claire que la FEMA n'était pas à la hauteur pour traiter un problème de cette envergure.

"Quelle initiative ?": la Maison Blanche resta dans une posture de réassurance, le Président resta dans son agenda, comme si la mesure de l'événement n'était pas prise.

Et ce qui peut apparaître comme de l'esquive prévalut, jusqu'au moment où, face au désastre politico-médiatique, il fallut bien se réveiller – au milieu d'une spirale devenue infernale.

Certes, ce sont des sujets d'une difficulté considérable. On ne peut pas constamment bouleverser les agendas – mais ici le doute n'était pas permis. Les esprits restent souvent sur l'idée que, pour ne pas inquiéter, le Président doit « faire comme si de rien n'était » – comme Kennedy sut le faire au début de la crise des missiles de Cuba, en maintenant un déplacement prévu à Chicago; mais, fin août 2005, nous n'étions pas du tout dans ce registre : le monstre Katrina était déjà là, et sur CNN.

1. Avant le désastre, l'hésitation

Le scénario de désastre à la Nouvelle Orléans était connu de la Maison Blanche

Katrina's devastation should not have been a surprise to the White House. In early 2004, White House Deputy National Security Adviser, General John A. Gordon, went to New Orleans to receive a briefing on catastrophic hurricane planning efforts for the region. The detailed briefing covered the catastrophic consequences of a Category 3 hurricane hitting New Orleans. Gen. Gordon reported this back to the White House, which may have influenced the funding that resulted in the Hurricane Pam exercise. In addition, another White House aide, Janet Benini, attended the Hurricane Pam exercise. Benini also chaired the group that developed the National Planning Scenarios, a set of 15 plausible, high consequence events used by the federal government to come up with preparedness goals and lists of emergency response capabilities that federal, state, and local responders should have. One event included among the scenarios is modeled on a hurricane hitting New Orleans. (Chapter 15-1)

La Maison Blanche avait été [probablement] informée de la faiblesse de la FEMA
The White House also may have received warnings that FEMA lacked the support and

capability to prepare for and respond to a Katrina-like catastrophe. Brown claims to have warned President Bush, White House Chief of Staff Andy Card, and White House Deputy Chief of Staff Joe Hagin as early as January 2005 that "[w]e [FEMA] weren't getting the money we needed [and] we weren't getting the personnel that we needed" and that, consequently, FEMA was not ready to handle a disaster like a tsunami. It is not clear what, if anything, the White House did to address these concerns and to help ensure that FEMA was ready when disaster struck. (Chapter 15-3)

Des alertes précises, multiples, convergentes, pressantes et répétées

There were also ample warnings specific to Hurricane Katrina. The National Weather Service, FEMA, other Department of Homeland Security components, such as the National Infrastructure Simulation and Analysis Center, and state officials warned the White House repeatedly over the weekend before landfall that Katrina was likely to be catastrophe. The documents the White House provided to this Committee show that prior to and after landfall, the White House Homeland Security Council (HSC) received large amounts of information from DHS' Homeland Security Operations Center (HSOC), as well as other federal agencies and departments, including the U.S. National Guard, the Department of Energy, and the National Oceanic and Atmospheric Administration concerning the situation that could develop. The American Red Cross and other organizations were also briefed. Moreover, as Secretary of Homeland Security Michael Chertoff said, the President was "acutely aware of Katrina and the risk it posed" during the weekend before landfall. "[W]e went into the weekend before," Chertoff said, "with an understanding and with warnings that this was potentially the nightmare scenario that I think people have talked about for years in terms of New Orleans."

On the Saturday before the storm, FEMA Director Michael Brown relayed to state local, and federal officials—including the White House—his fears of the devastation Katrina could cause. During FEMA's August 27,7 noon-time video-conference call, Brown voiced the following concerns:

I know I'm preaching to the choir on this one, but I've learned over the past four and a half, five years, to go with my gut on a lot of things, and I've got to tell you my gut hurts on this one. It hurts. I've got cramps. So, we need to take this one very, very seriously.

La difficulté de s'inscrire dans le jeu : on rassure

Joe Hagin, White House Deputy Chief of Staff, participated on the same conference call while in Crawford, Texas, and listened to the warnings presented by Brown and others. He asked no questions and offered only the following statement:

"we're here, and anything we can do, obviously, to support you, but it sounds like the planning, as usual, is in good shape, and good luck to the States and just know that we're watching, and we'll do the right thing as fast as we can."

Les alertes s'aiguisent ; le Président rassure, en repli

The warnings continued through the night: At 11:24 p.m., the White House received a National Weather Service—National Hurricane Center report, stating: "The bottom line is that Katrina is expected to be an intense and dangerous hurricane heading towards the North Central Gulf Coast and this has to be taken very seriously."

At noon on Sunday, August 28, President Bush participated from his ranch in

Crawford, Texas with FEMA, Department of Homeland Security, and state officials in a video conference call, in which Dr. Max Mayfield, Director of the National Hurricane Center, predicted Katrina would be a "very dangerous hurricane" and said (Chapter 15 – 3):

The problem that we're going to have here—remember, the winds go counterclockwise around the center of the hurricane. So if the really strong winds clip Lake Pontchartrain that's going to pile some of that water from Lake Pontchartrain over on the south side of the lake. I don't think any model can tell you with any confidence right now whether the levies will be topped or not, but that's obviously a very, very grave concern...And, quite frankly, for the folks in Louisiana, if you can't get people out, you know, if you're ever going to, you know, talk about vertical refuge, this is the time to do it.

During the same call, Brown stated: "My gut tells me—I told you guys my gut was that this (missing) is a bad one and a big one," and that Katrina could be "a catastrophe within a catastrophe." The State of Louisiana Office of Homeland Security and Emergency Preparedness' Chief of Operations, Bill Doran, also informed the President on the same call that the state was undergoing "catastrophic planning" for Katrina. The President asked no questions, but made the following statement:

I want to assure the folks at the state level that we are fully prepared to not only help you during the storm, but we will move in whatever resources and assets we have at our disposal after the storm to help you deal with the loss of property. And we pray for no loss of life, of course.

Unfortunately, we've had experience at this in recent years, and I—the FEMA folks have done great work in the past, and I'm confident, Mike, that you and your team will do all you can to help the good folks in these affected states.

Again, I want to thank Governor Blanco and Governor Riley and Governor [Barbour], Governor Bush of Florida, for heeding these warnings, and doing all you can possibly do with your state folks and local folks to prepare the citizenry for this storm.

In the meantime, I know the nation will be praying for the good folks in the affected areas, and we just hope for the very best.

In addition to the conference call, the White House continued to receive additional warnings of the storm's projected force and fury throughout the day.

Des actions, mais pas les impulsions décisives qui auraient été nécessaires

On Saturday evening, in response to a request Governor Blanco made earlier the same day, President Bush took the unusual step of issuing an emergency declaration for the State of Louisiana, which the White House described as being "indicative of the recognition that Katrina had the potential to be particularly devastating." The declaration effectively assured the state that the federal government would pay for costs associated with evacuating residents prior to the storm.

In addition to authorizing funds to help with the pre-storm evacuation, President Bush urged that an evacuation take place. On Sunday, August 28, President Bush spoke with Governor Blanco to encourage her to order a mandatory evacuation of New Orleans.

While these steps were important and commendable, the White House could have marshaled federal resources more proactively in advance of the storm. Katrina was a hurricane that the White House knew or should have known could cause massive devastation in and around New Orleans. The preparations simply were not proportionate to the likely imminent catastrophe. (Chapter 15-4)

2. Sur le désastre, l'évitement

Une information claire, sans ambiguité aucune

The record indicates that as early as 11:13 a.m. ET, on Monday, August 29, the White House Homeland Security Council circulated to, among others, Homeland Security Adviser Frances Townsend, Deputy White House Chief of Staff Joe Hagin, Deputy Homeland Security Adviser Ken Rapuano, and White House Counsel Harriet Miers, a report indicating the following:

- · A levee in New Orleans had broken;
- Through a report from the Homeland Security Operations Center, water was rising in the city's Lower Ninth Ward;
- Through a report from the State of Louisiana, water was rising at one foot per hour;
 and
- Through a report from Mayor C. Ray Nagin of New Orleans, problems with a pumping station were causing flooding in New Orleans.

Brown claims that, also on Monday, he reported to Deputy Chief of Staff Hagin on the developing catastrophe in New Orleans. Brown told the Committee that, by no later than 6 p.m. CT on the day of landfall, Hagin knew the 17th Street levee in New Orleans had broken, and that the city was flooding. (Chapter 15-5)

Une visualisation absente, le soulagement, la confusion

Still, the White House does not appear to have been cognizant that Katrina was flooding the streets, homes, and hospitals of New Orleans on Monday, the day of the storm. President Bush later characterized the mindset on Monday, August 29, after learning that Katrina did not hit New Orleans directly: "a sense of relaxation." In addition, as late as Friday, September 2, the President expressed the belief that the levees broke on Tuesday, the day after landfall, even though they broke on Monday, the day of landfall.

On Tuesday, August 30, the White House received confirmation that Katrina was an undeniable catastrophe.

At 12:02 a.m. ET, the White House received a report from the Homeland Security Operations Center that included the following statement by FEMA's lone official in New Orleans that day, Marty Bahamonde: "There is a quarter mile [breach] in the levee near the 17th Street Canal about 200 yards from Lake Pontchartrain allowing water to flow into the City—an estimated 2/3 to 75% of the city is under water."

At 6:33 a.m. ET, Tuesday morning, The White House received a Department of Homeland Security situation report confirming the extent of damage and flooding in New Orleans:

Widespread and significant flooding has occurred throughout the city of New Orleans, extending eastward, across the Mississippi gulf coast into coastal Alabama. The following flood reports have been received for the city of New Orleans:

• Industrial Canal at Tennessee St.: levee has been breached with water to a depth of 5 feet at Jackson Barracks;

- 17th St. at Canal Blvd.: levee has been breached—breach extends several 100 meters in length;
- Much of downtown and east New Orleans is underwater, depth unknown at this time.

The U.S. Army Corps of Engineers estimates are in progress and project that it could take months to dewater the City of New Orleans.

A report at 10:23 a.m. ET from the Homeland Security Operations Center detailed the location of the breached levees and noted specific concerns about the 17th Street Canal and Tennessee Street levees.

Brown also told the Committee of a secure telephone call he said was held on Tuesday afternoon with President Bush, Vice President Cheney, Secretary Chertoff, and Deputy Chief of Staff Karl Rove. Brown claims to have told them that at least 90 percent of the City's population had been displaced and he "needed military assets [because] this was the big one."

Brown also told them that he "needed the help of the entire cabinet...DOD and HHS and everybody else," and that there was a "discussion about convening the cabinet." 25 Brown opined that, up until that conversation took place, he believed that the White House had failed to comprehend fully the catastrophic nature of Hurricane Katrina. (Chapter 15–4,5)

Une réponse hésitante

Despite these reports of a catastrophe, the White House failed to grasp the gravity of the situation as it unfolded. As a result, the White House's initial response appeared halting and inadequate. Throughout Monday, the day of the storm, the President maintained his regular schedule. In the morning, he celebrated Senator John McCain's birthday at Luke Air Force Base near Phoenix, Arizona. Later that morning, the President had a "Conversation on Medicare" at the Pueblo El Mirage RV Resort and Country Club in nearby El Mirage, Arizona. He also spoke to the people in the Gulf region, offering that, "[w]hen the storm passes, the federal government has got assets and resources that we'll be deploying to help you."

Likewise, on Monday afternoon, the President flew to California and gave a speech in Rancho Cucamonga on Medicare and the new prescription drug benefit. There, he reassured his audience that the government was prepared to respond to Katrina.³⁰ But this did not turn out to be the case.

The hesitancy continued into the following day. Despite mounting reports on the extent of the catastrophe, no one from the White House participated in FEMA's intergovernmental conference call on Tuesday at noon.

At 12 noon ET that day, the President stood at a naval base in San Diego and offered a picture of a fully prepared federal government that was ready to respond to Katrina: "Our teams and equipment are in place and we're beginning to move in the help that people need."

On the same day, White House Press Secretary Scott McClellan announced the President would return to Washington, D.C. the following day in order to "oversee the response efforts from there."

Thereafter, the White House began to chart a more aggressive course of response to Katrina. At a 5:11 p.m. briefing Wednesday evening, President Bush, surrounded by his Cabinet, addressed the nation from the Rose Garden and announced that he had called the

Cabinet together, and that he "directed Secretary of Homeland Security Mike Chertoff to chair a Cabinet-level task force to coordinate all our assistance from Washington."

The task force demanded a list of available resources from each federal agency assigned responsibility under the National Response Plan. For example, the White House asked FEMA on Wednesday for "the inventory of all department agency operations/activity...are there any Federal powers or other processes that could be implemented to expedite the response or make it more efficient...[w]hat are the plans for providing housing to...displaced people..." Had these questions been asked and this sense of urgency imparted earlier, vital federal help might have arrived sooner.

The more vigorous response continued throughout the week. For example, despite reports of lawlessness in New Orleans and the need for federal assistance, there were only a handful of FBI and other Department of Justice law enforcement officers in the New Orleans area as of Thursday morning. As DOJ continued to formulate a response plan, President Bush discussed with the Attorney General the situation in New Orleans, and Justice Department officers began to deploy that day. Likewise, on Saturday, the President ordered thousands of active duty military forces to deploy to the region to assist in what he saw was an unacceptable response to the suffering of thousands of Katrina victims in various locations around the city. (Chapter 15–6,7)

Chapitre 11

LES ÉVACUATIONS PRÉ-IMPACT : DES AVANCÉES, MAIS DES RÉALITÉS ENCORE LOIN D'ÊTRE MAÎTRISÉES

Les observations de la Commission permettent de cerner un certain nombre de réflexions :

- Le grand enjeu, en matière de crises hors-cadres, est de parvenir à comprendre l'hyper-complexité du problème. Il ne s'agit pas d'un processus simple : alerte, ordre d'évacuation, évacuation, retour. Les données en matière de populations, de lieu, de durée, de coûts ne sont plus connues, circonscrites, planifiées. Le script ne suit plus le beau déroulement des plans-papier, comme lors de ces évacuations de référence en Floride. Ici encore, les règles du jeu sont bouleversées, nos repères rapidement explosés.
- A La Nouvelle Orléans, près d'un million de personnes ont été évacuées en prévision de l'arrivée de Katrina. C'est en soi un exploit. Mais il restait plus de 100 000 personnes, souvent vulnérables : personnes âgées et infirmes, pauvres, malades. Ou des gens qui refusaient tout simplement de partir.
- A La Nouvelle Orléans, il y eut une grande innovation : la mise à disposition de toutes les voies d'autoroute pour une sortie de la zone. Il y eut des progrès sur les traitements précédents : une meilleure coordination entre les zones, les états, de façon à ce que les flux s'opèrent au mieux, et que l'on évite les gigantesques embouteillages connus par le passé. Ce qui suppose, par exemple, que le nord de la zone ne bouge pas avant que le sud ait pu évacuer. Le succès n'a pas été dû au hasard : le processus avait été étudié très précisément avant l'événement en réunissant responsables de la police et de la circulation, juristes, élus locaux ; on avait même utilisé la démarche des « focus groups » pour mieux associer les populations à cette planification. Le plan prévoyait notamment une phase 1, débutant 50 heures avant l'impact pour un cyclone de catégorie 3 ou supérieur ; le dispositif du flux unique étant engagé 30 heures avant l'impact. Ce plan fut mis en œuvre le samedi 27 août à 16 heures, et la région put éviter des embouteillages de plus de deux à trois heures, à comparer aux 12 à 15 heures connus pour Ivan en septembre 2004.
- On nota pourtant des améliorations à apporter au dispositif, notamment comme on le voit de plus en plus sur tous les dossiers²⁴ la nécessité d'une information des conducteurs bien avant qu'ils n'abordent l'autoroute.
- La question de l'évacuation obligatoire ou non suscite beaucoup de discussions et de nombreux points sont évoqués : il ne s'agit plus seulement de mettre à l'abri un quartier, comme on peut le faire lors d'une opération déminage, limitée dans le temps, mais d'une très lourde opération aux effets économiques très importants ; il y a toujours la crainte d'être perçu comme criant au Loup à tort et à travers ; à l'opposé, certains sont sans états d'âme : "quand on sauve des vies, la question des coûts n'a pas à intervenir". Ces problèmes sont juste effleurés par la Commission qui, comme souvent, se contente de juxtaposer des faits, des avis, des prises de position.
- Entre autre avis, est reprise l'idée bien connue que le succès dépends bien plus de l'information préalable que du caractère obligatoire ou non d'une évacuation.
- La Commission souligne aussi un point que l'on négligerait aisément dans nos cultures-

²⁴ Par exemple à Londres, lors de la grande menace terroriste sur l'aérien en août 2006 : on s'aperçut qu'il était nécessaire d'informer les passagers dès leur départ du centre-ville, et pas seulement à leur arrivée à l'aéroport (Retour d'expérience conduit avec Jean-Pierre Roche, Aéroports de Paris, sur la gestion de la crise d'août 2006 par Bristish Airport Authority).

papier : lorsque le maire de la Nouvelle Orléans, le samedi 27 août à midi, a demandé à ses équipes de commencer à travailler sur un ordre d'évacuation obligatoire, il a fallu 24 heures pour émettre l'ordre en raison de divers problèmes légaux et logistiques. Sur les 36 heures qu'il restait, cela fait tout de même les 2/3 en délai de mise au point.

Il faudrait cependant aller beaucoup plus loin et accepter d'ouvrir des dossiers difficiles sur le fond :

- Les limites de la communication: nous avons désormais donné toute priorité aux questions de communication, d'information, etc. Cela est bien, mais il ne faut pas s'illusionner: les vrais obstacles ne se diluent pas aisément dans les éléments de langage. Même la communication la plus claire ne peut forcément avoir raison d'une difficulté. Nagin fut parfaitement clair sur la nécessité vitale pour chacun de partir au plus vite. D'autres furent encore plus brutaux dans la transparence: « Partez, je n'ai pas assez de sacs mortuaires pour tout le monde ». Et pourtant, cela ne suffira pas: il faut prendre en considération tout un ensemble de facteurs de fond qui ne se laissent pas dissoudre dans de la communication médiatique de dernière heure. Et même par de la « formation » préalable.
- La pauvreté: évacuer est hors de portée pour qui n'a pas sa carte de crédit, un matelas bancaire, la possibilité culturelle de naviguer dans un maillage social dépassant le quartier, etc. Nous sommes bien loin de la simple mise à disposition de bus de transfert qui n'est déjà pas simple d'un point de vue logistique.
- Le caractère contre-intuitif, contre-historique d'un événement : il prendra à revers toute la culture de désastre sur laquelle est fondée l'action de préparation.
- Le syndrome de paralysie et d'anesthésie mentale qui bloque dans un « business as usual » protecteur : il peut s'emparer de quiconque est confronté à une menace horscadres –même chez des personnes hautement éduquées.
- "L'ingérable", selon les normes habituelles : si la règle doit être désormais de s'apprêter à partir plusieurs jours à l'avance, avec probabilité non négligeable de devoir le faire à tort, de façon répétée, on ne voit pas très bien comment trouver ses marques.
- Le très faible intérêt porté à ces grandes questions de sécurité, la fuite viscérale devant ces problèmes: dans le cas de La Nouvelle Orléans, le problème était central, connu; on avait commencé, notamment, à envisager des dispositifs plus sérieux pour une évacuation des personnes incapables de s'évacuer elles-mêmes. Mais, comme toujours sur ces questions, les dossiers n'avançaient guère. Parce que c'était La Nouvelle Orléans, certes. Par incompétence, sans doute. Par manque de volonté, certainement. Mais aussi, et bien plus généralement, parce que les questions de vulnérabilité de grande échelle ne sont pas dans les priorités de nos sociétés. Plus profondément encore: parce que ces questions inquiètent à ce point que quiconque soulève le problème a toute chance de se voir biologiquement exclure des cercles influents.
- Le spectre de fiascos humanitaires de grande échelle : si les événements majeurs sont placés sous le signe du hors-cadres ; si les anticipations de risques et les probabilités ne sont plus des indicateurs fiables dans ces circonstances ; si les institutions ne sont pas configurées pour traiter des embardées de l'histoire, ou se révèlent intrinsèquement incapables de le faire ; si nos contextes deviennent de plus en plus imprévisibles et sujets à ces embardées.
- L'absence d'appui intellectuel à la hauteur de ces enjeux : contrairement à ce que l'on pourrait croire, les grandes questions de crise restent très peu explorées par la recherche ; et lorsqu'elles le sont, le travail reste largement marqué par des conceptions datant de plusieurs décennies, pour lesquelles on dispose d'outils consacrés, de littérature à citer autant de protections qui permettent de faire tourner une activité

académique, à défaut de faire avancer l'intelligence des enjeux réels. Nombre d'études sur Katrina sont d'ailleurs un révélateur de cette culture : elles consacrent l'essentiel de l'effort à expliquer pourquoi et comment Katrina entre dans les logiques connues et convenues ; les défis nouveaux sont le plus souvent passés sous silence. Certes, le premier point est justifié et précieux. Mais il peut être dangereux. Nous aurons fait un grand pas en avant lorsque nous verrons organisé un colloque organisé sur le thème : « En quoi Katrina a-t-il pu mettre en question certaines de nos hypothèses, de nos connaissances de base ? ».

Un succès, un problème résiduel pourtant colossal

Louisiana's successful evacuation of about one million people from greater New Orleans through phased movements and the one-way "contraflow" use of highways was a great improvement over the Hurricane Ivan evacuation a year earlier.

Still, officials expected that 100,000 to 150,000 persons would be unable or unwilling to evacuate the region before Hurricane Katrina struck. This included those with special needs, such as the elderly and infirm; the poor, those lacking means to leave; and those simply refusing to evacuate regardless of reason or means, and choosing to take their chances in "hurricane roulette. (Chapter 16-1)

Des progrès en matière d'évacuation : un très important travail préalable

Careful planning is essential to a successful pre-landfall evacuation because of the problems that traffic congestion and timing pose for the evacuees. Evacuation from the Greater New Orleans Area faces unique challenges for at least four reasons. First, evacuating the area requires at least a 45 to 80-mile trip (as compared to the 10 to 15-mile trip out of the affected areas in Mississippi). Second, there are only two or three ways out of the area. Third, one of those ways out of the area runs into Mississippi, requiring that state's cooperation. Fourth, because of the limited number of ways to exit the metropolitan area, the northernmost parishes within the area (e.g., Orleans and Jefferson) must wait patiently for the southernmost parishes within the area to evacuate first; otherwise, the northern parishes will choke off the southern parishes' ability to evacuate. When these problems go unaddressed, thousands of people might be precluded from evacuating or delayed in Hurricanes Ivan- or Rita-like traffic jams extending for hundreds of miles.

After the pre-landfall evacuation for Hurricane Georges first exposed these problems in September 1998, the 13-parish Southeast Louisiana Hurricane Task Force asked the Louisiana Office of Emergency Preparednesss to solve these problems by creating a "contraflow" plan. Generally speaking, contraflow turns all highway lanes in one direction, creating additional roadways for the execution of evacuation. [...]

Louisiana did not use its contraflow plan until the pre-storm evacuation for Hurricane Ivan in September 2004. In that initial experiment, the state and the parishes encountered serious problems with the execution of the contraflow plan, including disagreements among parishes as to which parishes should evacuate first and the emergence of traffic choke points in Baton Rouge and Slidell, Louisiana. These problems resulted in delays of 12-15 hours for people evacuating from the New Orleans metropolitan area, as well as the deaths of nursing home residents who died on the road in the heat and chaos of evacuating for Hurricane Ivan.

To address the problems with contraflow that arose before Hurricane Ivan made landfall, the Governor ordered the Louisiana State Police (LSP) and the Department of

Transportation and Development (DOTD) to develop a better evacuation plan. Those agencies assembled a task force and worked with private consultants, traffic engineers, parish leaders, and local lawenforcement organizations in the relevant communities and conducted focus groups with residents to revise the plan. What resulted from this effort was the state's 2005 contraflow plan, known as the Southeast Louisiana Emergency Evacuation Plan (LEEP). The plan resulted from cooperation between the governors and state police forces of Louisiana and Mississippi, as well as the state's successful brokering of an agreement signed in April 2005 by the 13 parishes of the Southeast Louisiana Hurricane Task Force.

The LEEP addressed the problems identified in Ivan by (a) directing as much traffic as possible away from what had been chokepoints at Baton Rouge and Slidell, (b) creating special procedures for coordination between Louisiana and Mississippi, and (c) requiring Jefferson and Orleans Parishes to wait to evacuate their residents until after their neighboring parishes announced the evacuation of their residents.

As to the last point, the LEEP seeks to manage the order in which parishes evacuate by establishing three phases for the pre-storm evacuation, based on geographic location and the time in which tropical storm force winds are forecasted to reach the affected area. Under the plan, Phase 1 of the evacuation begins at the 50-hour mark before landfall of a Category 3 or higher hurricane, but contraflow only begins in Phase 3, once Jefferson and Orleans Parishes have ordered evacuations, at around the 30-hour mark before landfall and after.

Once the Governor finalized the plan in the spring of 2005, the state initiated a media blitz and public education campaign, with media outlets, the American Red Cross, and businesses like Wal-Mart, Home Depot, and Lowe's all helping to distribute more than 1.5 million copies of the "Louisiana Citizen Awareness & Disaster Evacuation Guide."

Governor Blanco initiated contraflow at 4 p.m. on Saturday, August 27, and ended it at 5 p.m. on Sunday, August 28, with no vehicles waiting in queues to leave the potential impact area. By all accounts, Louisiana, Mississippi, and the Southeast Louisiana parishes successfully executed the 2005 LEEP, before Hurricane Katrina made landfall. With that plan, Louisiana evacuated approximately 1 million people before landfall. The post-Ivan revisions to the plan also contributed to the success of the pre-landfall evacuation, a traffic jams exceeded two to three hours at most before Katrina made landfall, compared to the 12 to 15-hour traffic jams evacuees experienced before Ivan made landfall.

There was also close consultation between Louisiana and Mississippi officials, including conversations between Governor Blanco and Governor Barbour, which resulted in coordination between the two states on the execution of the pre-landfall evacuation.

Despite the success of the revamped contraflow plan, some officials saw opportunities for more improvement. Major John Miller, from the Mississippi Department of Public Safety, said that he would have state troopers stand farther back from the road next time: "[E]very third or fourth carhas to stop and ask him a question," snarling traffic. Other suggestions included diverting some traffic to avoid the bottlenecks at the northern ends of I-55 and I-59, and working for better state-to-state communications interoperability. (Chapter 16-1 à 4)

Une communication vigoureuse

In St. Bernard Parish, Larry Ingargiola, the Director of Homeland Security and Emergency Preparedness for St. Bernard Parish [...] recalled mentioning on the news that

"we strongly recommend that you leave now because I don't believe I have enough body bags to cover the people that stay." (Chapter 16–4)

On Friday, August 26, Mayor Nagin held a press conference at City Hall to announce that city officials were monitoring Hurricane Katrina. On Saturday, August 27, Mayor Nagin joined Governor Blanco, and other officials for a press briefing at 1 p.m., during which the Mayor advised, according to talking points prepared for that briefing, that citizens should prepare for the storm, to include checking on neighbors and particularly the elderly, and announced the city would be calling for a voluntary evacuation later that afternoon or the morning of August 28 to coincide with the initiation of contraflow.

According to a press report, Mayor Nagin said, "This is not a test. This is the real deal. Things could change, but as of right now, New Orleans is definitely the target for this hurricane," later adding, "We want you to take this a little more seriously and start moving – right now, as a matter of fact." (Chapter 16–7)

Le problème de l'évacuation obligatoire

When Mayor Nagin issued a mandatory evacuation order on Sunday, August 28, at approximately 9:30 a.m. CT, it was the first time the City of New Orleans had ever issued a mandatory evacuation order, 58 even though state law has authorized any parish to issue a mandatory evacuation order. He had ordered his staff to begin working on the order on Saturday, August 27, at noon. According to witnesses, the city took nearly 24 hours to issue the order because it first needed to resolve legal and logistical questions. (Chapter 16–7)

Ingargiola [the Director of Homeland Security and Emergency Preparedness for St. Bernard Parish] described some of his parish's concern about issuing a mandatory evacuation as follows:

The big decision on mandatory evacuation is monetary, the businesses themselves. When you do a mandatory evacuation, the businesses are required to close down. The refineries are required to close down. We have three very large refineries down [here]...It takes them roughly 8 to 12 hours to close down the refinery. Every time they close it down, it's over a million dollars to close it down and another million to bring it up...It's not something you do easy.

Despite these challenges, Ingargiola noted that St. Bernard Parish was able to successfully evacuate 92 percent of its population of approximately 66,000. When asked whether he felt he called for the evacuation early enough (on Friday night), Ingargiola said it might have been wiser to do so on Thursday. But Thursday, he noted, was a sunny day – had he called for an evacuation then, "the people would have thought I was crying wolf. That is your biggest fear, believe me. [...](Chapter 16–4)

In Plaquemines Parish, Jesse St. Amant, Director of the Plaquemines Parish Homeland Security Office of Emergency Preparedness, described its pre-storm evacuation policy and results:

[P]eople like myself, as emergency managers, should not be thinking, if I make a mandatory declaration and I make that recommendation to the governor, that he hesitates to do that because it might cost too much, you're putting a dollar value on [a life]. And in my business, if you ask how much it costs to do something, you're in the wrong business cause you could in fact cost someone their life. You have to do what you must do to save life, and promise, and I take it very seriously. I'll give you an example.

By declaring a mandatory evacuation, it cost Philips Conoco millions of dollars to safely shut down a petrochemical facility, and then it cost millions of dollars to start it up. The two most dangerous kinds of petrochemical facilities is the shutdown and the start-up of that facility. Very dangerous; very costly. Yet I don't hesitate to advise parish presidents. He does not hesitate to support me. I have his ear. He has – since I've been here, he has – he hired me. And let me suggest this to you...I will relate success. We had a 93 percent evacuation rate, one [of] the highest in the area, probably in the whole state. But we know we're also the most vulnerable. So the options aren't that great. You have to be out of this high-risk area. (Chapter 16–5)

In Jefferson Parish, Walter Maestri, Ph.D., is the Director of Emergency Management and Homeland Security. Dr. Maestri recalls that Jefferson Parish President Aaron Broussard announced to the parish residents on late Friday afternoon, August 26, "that they should be ready to go [i.e., evacuate] Saturday morning." He believes that about 70 to 80 percent of the residents of Jefferson Parish evacuated prior to the storm, a "successful evacuation." Dr. Maestri noted that Broussard's call for a parish evacuation on Friday afternoon to take effect the following Saturday morning was not a call for a mandatory evacuation:

None of the Southeast Louisiana parishes, the larger ones, Orleans, Jefferson, St. Tammany, make mandatory evacuations. The reason for it, guys, is it's unenforceable. You can't do it...[N]ow as you know, Mayor Nagin later changed that. He went to mandatory, after first going to recommended. But the bottom line is that we did not and never will in Jefferson call mandatory because you can't do it. (Chapter 16–6)

Des moyens d'alerte réadaptés, une forte préparation du public

In St. Tammany Parish, Dexter Accordo has been the Director of Emergency Management and Homeland Security for St. Tammany Parish since July 18, 2004. He said that St. Tammany used the *EarthCall* notification system – a "reverse 911 [system] where you can dial up people by geographic area, and you can broadcast an audio message to them, giving them directions of what's going on" – to warn residents to leave. When you order a mandatory evacuation, Accordo said, "*At no point for the most part is it logistically feasible to go and knock on everybody's door, reach in and grab that person and yank them out of their house.*" So a broader program of education is called for:

We reinforce it with the brochure [of evacuation maps], we reinforce it with the phone calls, we reinforce it with the outreach program training, we reinforce it with other forms of media...If I tell you, you need to do this, you're going to probably hesitate, but if you know why because we educate you why you need to do it, then there's a stronger probability you're going to do it. (Chapter 16–5)

Le transport des personnes incapables d'évacuer d'elles-mêmes : des initiatives, tuées par le système

Although the city's emergency plans anticipated at least 100,000 people without the means to evacuate after a catastrophic natural disaster, the city's top officials failed to plan and prepar adequately for the pre-landfall evacuation of this less-mobile segment of the population.

When Terry Tullier, the former Director of the New Orleans Office of Emergency Preparedness, who served in that position from May 2001 to his retirement in 2004,

realized "that the city did not have the resources and at the time ... perhaps not even the political will" to move this segment of the population, he began exploring other transportation options. One was a volunteer program called Operation Brother's Keeper, which would enlist private citizens to help those who lacked transportation to evacuate. A second involved informal discussions with the Regional Transportation Authority (RTA), the Orleans Parish School Board, and Amtrak to determine whether they would agree to provide transportation for a pre-landfall evacuation of New Orleans.

Operation Brother's Keeper (OBK) was a faith-based initiative developed in collaboration with Kay Wilkins, the area's local Chapter Director of the American Red Cross. Through the program, churches would identify those within their congregations who did not have the means or ability to leave the city and match them with those who could help. Tullier recalled briefing

Mayor Ray Nagin and Col. Ebbert, with Wilkins, about the initiative: "Mayor Nagin said in no uncertain terms, anything that the city can do to support you, I'm all for this initiative." There was apparent financial support for OBK, including a grant of \$216,000 from a private organization.

Although Operation Brother's Keeper was in place before landfall, it was not fully developed as logistical issues such as rally points and destinations had not been determined.

The second of these initiatives, seeking alternative transportation from a variety of providers, was developed in late 2004, when Dr. Kevin Stephens, Director of the New Orleans Health Department, resumed Tullier's work after he stepped down as the City's Director of Emergency Preparedness (OEP), leaving the post vacant for almost six months. Between Tullier's retirement in December 2004 and the appointment of Chief Joseph Matthews in March 2005, the OEP director's position was vacant. During this time, Dr. Stephens entered the breach and went to work on securing transportation for an evacuation of the city. Dr. Stephens explained why he saw the need to contract for transportation and shelters:

All of our plans had primarily been [to] evacuate [to] the Superdome. And so I just thought that maybe as a general shelter, refuge of last resort, we should probably try to get some places outside the city and not at the Superdome because of the limitations of the Superdome.... So I called Amtrak and I called the school board and RTA and other guys...and asked them would they be willing to transport people out of the city, and they said sure, we'd be happy to.

Dr. Stephens prepared draft memoranda of understanding (MOUs) among the City of New Orleans and Amtrak, the RTA, the Orleans Parish School Board, and the Cities of Baton Rouge and Hammond, Louisiana contemplating use of various transportation resources to evacuate people from New Orleans prior to a hurricane.

Responsibility for the MOUs returned to the City's Office of Emergency Preparedness, shortly after the Mayor appointed Chief Joseph Matthews to replace Tullier as Director in March 2005. Throughout the spring and summer of 2005, logistical obstacles dogged planning for the MOUs. Once people were evacuated from the city, was there enough shelter space to accommodate them? Once Amtrak delivered them to the Hammond train station, how would they be moved to state shelters? Most importantly, in the view of Chief Joseph Matthews, there was a shortage of drivers qualified to participate in an evacuation.

However, the City's Office of Emergency Preparedness, part of the City's Office of Homeland Security and Public Safety, did not follow through sufficiently to ensure the execution on a single one of those agreements. Shortly thereafter in June 2005 – three months before Katrina made landfall – the City's Director of Homeland Security and Public Safety, Col. Ebbert, effectively decided to halt the negotiations on these MOUs, based on the following rationale: "June starts the hurricane season. You can't go to war still drafting you[r] plan, so you have to make decisions of what you're going to do this season." With that decision, Col. Ebbert lost opportunities to push his subordinate, Chief Matthews, to close these deals, and to ask the Mayor, the state, and the federal government for assistance in brokering these agreements. The Committee disagrees with Col. Ebbert that the city would be incapable of continuing work on long-term preparations for a catastrophic storm in the midst of hurricane season, as was evidenced by the city's participation in a July 2005 workshop on transportation staging and distribution of commodities. (Chapter 16-8 et 9)

La question des conducteurs de bus : l'impuissance publique en majesté

Although the New Orleans Office of Emergency Preparedness Director, Chief Matthews, informed state and federal officials – over a month before Katrina hit – that New Orleans lacked bus drivers for a pre-landfall evacuation, that need went unaddressed before landfall.

Informed of this need for drivers for over a month before Katrina hit, state and federal officials failed to explain why they did not take steps to recruit and retain drivers to participate in the prelandfall evacuation. This inertia on the part of the state and federal government, which had been on notice of the city's inability to muster drivers on their own, added to the city's failures and resulted in a paucity of drivers available to participate in the pre-landfall evacuation – indeed, only 100 RTA [Regional Transport Authority] drivers volunteered for duty.

The state failed to provide any transportation to New Orleans for the pre-landfall evacuation mainly because the Secretary of the Louisiana Department of Transportation and Development (LA DOTD) chose to ignore the Department's responsibility under ESF-1 (transportation) of the April 2005 Louisiana Emergency Operations Plan to take the lead for coordinating transportation for the evacuation of at-risk populations.

[...] the LA DOTD Secretary Johnny Bradberry and his Department took no steps to fulfill its responsibility. Secretary Bradberry erroneously assumed that the National Guard would handle mass bus transportation.

Testifying before the Committee, Secretary Bradberry attempted to defend his agency by saying that the plan was "in transition," and that he signed the plan to "keep things moving," meaning he did not want to hold up the state's overall emergency operations planning process because of this issue. Nevertheless, he didn't "necessarily agree with the idea that the Department of Transportation needs to have this transportation function."

In a letter to the U.S. Senate Homeland Security and Governmental Affairs Committee, Secretary Bradberry commented on his Department's lack of ESF-1 planning:

To criticize the Louisiana Department of Transportation for failure to have a plan in place for transportation assets which were never requested is wholly unfair and unjust. Yes, DOTD should have acted sooner transitioning into the new responsibilities under the 2005 State Emergency Operations Plan, but the fact remains that DOTD did not

receive any requests for transportation prior to Hurricane Katrina.111

Secretary Bradberry's defense that there were no requests for transportation prior to Katrina rings hollow. The city discussed their lack of buses and drivers needed for a successful evacuation with state and federal officials at the July 2005 transportation, staging and commodities distribution workshop. Had LA DOTD taken meaningful steps to develop a plan, they would quickly have seen the inability of local government to manage its evacuation needs as a potentially catastrophic hurricane approached. Second, the state was not required to wait – and should not have waited – for a request from the city before offering assistance, particularly when a catastrophe was imminent.

As Katrina approached, some state officials were "[l]eaning forward in the foxhole with [their] finger on the trigger." Secretary Bradberry was not one of those officials.

100 000 personnes à l'abandon : perdues de vue

On trouve ici un enseignement important pour toutes les cellules de crise : la pression des événements, le fait qu'ils ne s'inscrivent pas dans les cadres habituels, l'impossibilité d'avoir tout prévu, doivent faire inscrire une fonction de sécurité de pilotage, avec cette question centrale : « Mais quel paramètre décisif, voire incroyablement central, évident, pourrions-nous avoir oublié ? ». C'est là une fonction clé pour les Forces de Réflexion Rapide. En l'espèce, on a tout simplement « oublié » les 100 000 personnes, dont on n'a pourtant cessé de parler depuis des années, et notamment à travers l'exercice Pam – mais la Gouverneure, le Maire, participaient-ils à cet exercice ?

Although it is unclear precisely what transportation assets the state could have mobilized over the weekend to assist the city with the pre-landfall evacuation, neither the Governor nor any other state official offered to provide transportation to assist with the pre-landfall evacuation or requested federal assistance.

On August 27, the Governor sent President Bush a letter, requesting \$9 million for assistance for emergency protective measures under the Stafford Act, the federal law that coordinates federal disaster assistance to states. 120 Although the Governor, in this letter, requested that \$2.5 million be directed to evacuation needs, she did not specify a need for transportation. The President issued an emergency declaration the same day, effectively granting the Governor's request.

During video teleconferences with local, state, and federal officials on Saturday, Augus 27, and Sunday, August 28, state officials discussed the success of contraflow,122 but did not raise the issue of additional transportation assets, despite the long-standing realization that 100,000 people in New Orleans lacked transportation. Although LOHSEP Acting Deputy Director Colonel Jeff Smith noted on that call that the Governor "is very appreciative of the federal resources that have come into the state and the willingness to give us everything you've got because, again, we're very concerned with this," neither he nor the Governor made a specific request of the federal government for transportation resources before landfall.

This lamentable failure by the Governor to request transportation resources shows not only a lack of initiative, but also a failure of leadership. (Chapter 16-14)

La défaillance de l'échelon fédéral : un problème connu, un manque d'initiative

In public-hearing testimony, Department of Homeland Security (DHS) Secretary Michael Chertoff acknowledged the critical importance of pre-landfall evacuation: "In a

situation like a flood in Katrina or an earthquake, the critical, the number one most important thing is to get people out of the area in advance. Once the event has occurred, it's going to be very difficult to rescue people." [...]

The federal government played no role in providing transportation for pre-landfall evacuation. Both in the run-up to Katrina and subsequent interviews, federal officials provided the same explanation: they were accustomed to the longstanding practice of generally deferring to the primary emergency response to state and local governments. [...]

Throughout the weekend of August 27 and 28 it had become increasingly clear to federal, state, and local officials that Hurricane Katrina would be a catastrophe. Mayor Nagin took the unprecedented step (albeit with some hesitation) of calling for a mandatory evacuation of New Orleans. Both President Bush and Governor Blanco actively encouraged that step. There was no question that evacuation before landfall was the highest priority.

While the widespread support for mandatory evacuation is laudable, it is unfortunate that the federal government did not take a greater interest in the practicality of that evacuation in a city widely known to have made no arrangements for evacuation of the thousands of its citizens lacking personal transportation. Federal officials had participated actively in the Hurricane Pam exercise, which predicted that some 100,000 New Orleanians would lack means of evacuation. Federal officials did not need to wait for a request before offering help.

Federal officials were both aware of state and local shortfalls, and had both the capacity and opportunities to help. But in the absence of adequate plans and policies, federal officials were paralyzed to act. (Chapter 16-18,19,20)

Pour en finir avec les arguments spécieux sur l'impossibilité du fédéral d'intervenir

La Commission, encore une fois, clarifie que les bureaucraties fédérales ne peuvent s'en tenir au principe selon lequel elles n'interviennent qu'après épuisement des ressources locales, qu'après demande express des autorités locales. La loi, si on la connaît, et le bon sens, réduisent en pièces ces esquives trop faciles. En d'autres termes, les textes sont là pour stimuler la responsabilité, non pour lui donner des terrains sans fin de controverses permettant de justifier l'inaction, la réserve, l'irresponsabilité, le manque de leaderdship.

Due to disagreement among officials as to whether, when, and to what extent the federal government could assist with a pre-landfall evacuation, it is helpful to examine the law and policy directing the way in which federal officials could have assisted with the pre-landfall evacuation.

Federal law imposes no requirement for the federal government to aid pre-landfal evacuations. Such a requirement would be inconsistent with the principle that local and state authorities have primary responsibility for emergencies, only receiving federal assistance when their own resources are overwhelmed. However, federal law does not prohibit the federal government from extending assistance, even without a request from the state, when preparing for or responding to an imminent catastrophe such as Hurricane Katrina.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (the "Stafford Act") gives the federal government the authority to assist the state and local governments with an evacuation. Congress made clear in the Stafford Act that its purpose was to "vest responsibility for emergency preparedness jointly in the Federal government and the states and their political subdivisions." Included within the Stafford Act's definition of

"emergency preparedness" is any measure "undertaken in preparation for anticipated hazards," such as "the non-military evacuation of the civilian population."

The Stafford Act also authorizes the President – and, through Executive Orders, the Secretary of Homeland Security – to direct federal agencies to "provide assistance essential to meeting immediate threats to life and property resulting from a major disaster," including but not limited to the "movement of supplies or persons" and the "reduction of immediate threats to life, property, and public health and safety." 189 A common-sense reading of this language would indicate that the Stafford Act authorized the President to direct a federal agency to help state and local governments move people out of New Orleans both before and after landfall to meet the "immediate threat" of Katrina.

The Homeland Security Act of 2002 enumerates FEMA's functions which include assistance with evacuations. Under the Act, FEMA's mission is "to reduce the loss of life and property and protect the Nation from all hazards by leading and supporting the Nation in a comprehensive, risk-based emergency management program," including the responsibility for mitigation of risk to people and property, planning, and responding "to save lives ... through evacuating potential victims."

FEMA's mission under the Homeland Security Act was to take steps to mitigate the risks to people that could arise from Katrina; plan to help officials prepare for Katrina and similar catastrophic storms; plan for an evacuation in the event of a catastrophic storm; respond to Katrina by "evacuating potential victims"; and coordinate efforts by other officials.

The Catastrophic Incident Annex (CIA) to the National Response Plan delineates federal policy on a more proactive response to catastrophes. (Chapter 16-21,22)

Un casse-tête supplémentaire : les animaux de compagnie, critiques dans l'évacuation

More than 50 percent of U.S. households have pets. 194 In the aftermath of Katrina, the media brought to light many stories of individuals who refused to evacuate without their animals. One study revealed that childless households with pets were twice as likely to fail to evacuate as households with children. In other words, in childless households, owners "were apparently willing to jeopardize their lives to stay with their pets." In his afteraction report on Hurricane Katrina, Captain Mark Willow of the Homeland Security Division of the New Orleans Police Department wrote that "Some of the fatalities in New Orleans and surrounding areas may be attributable to the fact victims would not leave their pets at home or would not consider leaving without them."

Evacuation with pets before the storm was difficult for many since emergency shelters usually prohibit animals. The American Red Cross did not allow animals in its shelters. 198 Animals can cause allergic reactions for some residents of the shelter, increase hygiene problems, and may become dangerous or unruly in the stressful setting of a shelter. 199 Even after the storm passed, the media reported on many individuals unwilling to leave their homes despite dangerous conditions unless rescuers agreed to rescue their pets as well. 200

The national organization of the American Red Cross works cooperatively with animal welfare organizations to develop procedures for stationing animal shelters close to its own shelters. In this way, owners are able to evacuate with their pets and maintain contact after arrival at the shelter. The American Red Cross implements this policy by encouraging local chapters to work with animal organizations to establish local agreements. However, Gulf Coast victims did not have pet accommodations inside or in close proximity to many of the

available shelters. In particular, the New Orleans Superdome, the city's refuge of last resort, had no pet shelter facilities inside or close by, and the Committee has seen no evidence of formal arrangements for Superdome refugees' pets.

During Katrina, the Lamar-Dixon Expo Center in Gonzales, Louisiana, (approximately 30 miles from Baton Rouge) was designated as an animal shelter. [...] During Katrina, the Lamar-Dixon Expo Center handled approximately 8,500 rescued animals.

For Katrina, FEMA activated all four of its Veterinary Medical Assistance Teams ("VMAT") to the Gulf Coast. This involved more than 200 veterinarians and was FEMA's largest simultaneous deployment of veterinary relief.208 The National Guard and Louisiana State police assisted in collecting stray dogs. On September 2, 2005, the American Society for the Prevention of Cruelty to Animals (ASPCA) and the Humane Society of the United States (HSUS) began a coordinated campaign with a dozen local organizations and volunteers from across the country to rescue animals from the aftermath of Katrina.

For Katrina, no standardized system for tracking rescued animals was in place. The website Petfinder.com came to play an important role in allowing owners to find rescued pets. (Chapter 16-23, 23)

Chapitre 12

LES MOYENS DE COMMUNICATION : BLACKOUT QUASI TOTAL, DÉFAILLANCES DE PILOTAGE

La Commission présente un tableau touffu de la défaillance quasi totale des moyens de communication. Si l'on prend un peu distance avec l'amas de détails fourni, on peut sans doute poser les quelques repères suivants :

- Le niveau des destructions fut tel que toutes les organisations clés qu'il s'agisse des centres de crise, des agences support essentielles, des centres d'hébergement perdirent quasiment tous leur moyens de liaison. Même les liaisons satellite n'apportèrent pas ce qu'on attendait d'elles, probablement, indique la Commission, parce que les utilisateurs n'avaient pas été formés à utiliser ces moyens, ou parce que les bâtiments faisaient écran.
- Certains, et notamment dans le secteur privé, furent moins touchés. Par exemple, le groupe hôtelier Starwood mit en place un système de liaison qui résista (satellite et Internet) et qui permit à quelque 2 100 personnes collaborateurs et clients de continuer à communiquer. Pour y parvenir, deux employés spécialistes des liaisons avaient été envoyés sur place, avec des batteries de secours pour les ordinateurs. Ce système privé fut aussi utilisé par des personnels de secours et des journalistes. Mississippi Power put s'appuyer sur un système maison qui se montra très résilient, en dépit de destructions majeures ; en trois jours, il fonctionnait à nouveau à 100%. Mais le secteur privé eut quelque difficulté à obtenir des appuis en termes de sécurité. Et il connut des préemptions non négligeables : la FEMA n'hésita pas à détourner, par exemple, des camions de fuel engagés sur la maintance d'équipements importants. Certains personnels des opérateurs furent aussi bloqués à des points de contrôle de sécurité.
- Il aurait été possible d'injecter des moyens fédéraux mais, ici encore, le manque de réactivité conduisit à des délais très pénalisants.

On prolongera les développements de la Commission par quelques observations :

- Le point essentiel de l'épisode fut la surprise : l'inondation, la durée de l'inondation, l'impossibilité de réparer, les problèmes majeurs posés par l'humidité, la boue, la pourriture, etc. Nous n'étions pas du tout dans le registre de la rupture d'un câble, et de la réparation d'urgence.
- La faible réactivité est une nouvelle manifestation de l'absence générale de capacité des institutions en charge des crises pour faire face à une situation hors-cadres.
- On peut se demander si la dimension Liaisons-Communication ne souffre pas d'être encore mal positionnée dans le tableau des priorités. Dans un monde hyper-complexe, marqué par la vitesse et la connectivité, nos organisations n'ont sans doute pas encore perçu à quel point les liaisons étaient devenues vitales. Cela reste un moyen d'appui, quand il devrait être considéré comme une ressource absolument critique. Ce n'est pas là une question technique, mais de vision du monde tel qu'il est devenu.
- Dans la mesure où ce type de problème est récurrent, et qu'on ne semble pas en mesure de le traiter (le point avait été clairement établi après le premier attentat contre les Tours Jumelles en 1993, puis à nouveau souligné en 2001, et toujours mentionné depuis), on peut se demander si les organisations ont véritablement le souhait de voir des avancées dans le domaine. Une stratégie agressive de communication très nettement améliorée supposerait une détermination à s'ouvrir, à coopérer, à partager, à s'exposer, ce qui

n'est pas du tout dans nos références culturelles les plus ancrées.

L'importance critique des communications

The inability of government officials and first responders to communicate during a response to an emergency, results in the loss of lives during terrorist attacks, natural disasters, and every-day operations. The problems of operability and interoperability of communications were a central part of the failures in the governments' response to Hurricane Katrina. (Chapter 18-1)

The storm and flooding severely damaged both the commercial and public safety communications infrastructure.22 This created chaos for every aspect of the governments' response – search and rescue, medical care, law enforcement, and the provision of commodities. (Chapter 18-3)

Exemple : le Maire, totalement isolé

In New Orleans, Mayor Nagin's command center at the Hyatt Regency Hotel lost all communications.³ Before the flooding, but after landfall, Mayor Nagin had to walk across the street to City Hall in order to speak to city emergency managers. One phone line in the Mayor's room in the Hyatt would sometimes connect a call out but could not receive incoming calls.⁵ It was not until Thursday, September 1, three days after landfall, that the Mayor's command center began to receive e-mails. On Friday, September 2, the White House provided the Mayor with a mobile phone but he had to lean out of stormdamaged rooms at the hotel in hopes of getting a signal on it. (Chapter 18-1)

Contre-exemple : certains opérateurs privés remarquables

In its testimony before the Committee, the Starwood hotel company discussed how it managed events on the ground in New Orleans, backed up by its corporate headquarters, which enabled the company to help approximately 2,100 guests, employees and their families weather the storm at two hotels in safety. Through effective planning and prepositioning of phones, Starwood never lost contact with areas outside the affected region. Satellite phones were deployed to the hotels, and Starwood maintained its Internet connection, which permitted employees and guests to communicate with the outside world. One of its New Orleans hotels had two IT employees onsite and battery back-ups for their computer systems, which enabled the Internet connection. Through media reports received via the Internet, managers on the ground knew what was going on around them when all other forms of communications had failed. Local responders and journalists sometimes relied on Starwood's communications capabilities since the city's communications system was largely lost.

Wal-Mart stressed the importance of "efficient" communication, and described it as "absolutely the key to success at a higher level." Flowing timely, accurate information is another essential element for success. Wal-mart developed situational awareness at the local level and passed quickly to its emergency operations center, which compiled a big picture for the company. The business unit representatives in the emergency operations center made decisions on tactics and strategies based upon the "big picture" information and then moved aggressively to disseminate objectives back to company response teams and field teams for further dissemination. Wal-Mart determined that the "face-to-face communication at the Emergency Operations Center level, where the decision-makers

congregate, is the most efficient method of communication."

Mississippi Power recognized the criticality of communications to an effective response, and especially, the ability to communicate with thousands of additional workers brought in from outside the region to help with restoration and repairs. Mississippi Power relied on its only viable form of communication – its internal system – Southern Linc Wireless. This system was designed with considerable redundancy and proved reliable despite suffering catastrophic damage. Within three days, the system was functioning at nearly 100 percent. Mississippi Power told the Committee that it "also installed its own microwave capability to 12 remote staging areas in order to transmit material inventory data into our automated procurement process." When communication circuits of another company were down, our information technology group would find a way to bypass those circuits and restore critical communications." (Chapter 18-2,3)

Les rapports Public/Privé : le gouffre

The generators supplying power to the central offices had limited fuel supply,30 and needed to be replenished about every three days. BellSouth obtained fuel trucks to top off its generators, proceeding into New Orleans with an armed convoy. Other companies had problems obtaining fuel for their generators. For example, Cox Louisiana Telecom LLC, which serves 85,000 customers, had fuel trucks that were destined for switch facilities intercepted by FEMA and turned away. FEMA also took fuel away from technicians with service trucks in the field. In addition, FEMA commandeered a fuel tanker from BellSouth in order to refuel helicopters.

The commercial sector also had to negotiate security concerns. At BellSouth's main central office on Poydras St. in New Orleans, which serves as a regional hub for multiple telecommunications carriers, reports of violence and looting caused the New Orleans Police Department (NOPD) and Louisiana State Police to advise employees to evacuate the building. Two days after the evacuation, the FBI and the U.S. Marshal's Service provided security so that BellSouth workers could return to the Poydras St. building and bring fuel to the generators in the building, which were running low but never went out of service.35 In an effort to obtain security for all telecommunications providers, the National Communications System (NCS), the federal government's lead agency for the response to communications problems, sought assistance from the Department of Defense (DOD), which forwarded the request to the Louisiana National Guard. In the end, however, security arrangements with the Louisiana National Guard fell through. Ultimately, telecommunications providers hired private security to protect their workers and supplies.

Repair workers also had difficulty gaining access to their equipment and facilities in the field because police and National Guard in some cases refused to let them enter the disaster area. MCI sought a letter from Governor Blanco to access parts of New Orleans based on a requirement from the Louisiana State Police, and Verizon Wireless wanted access and security for technicians restoring cellular service in New Orleans. Industry representatives said that their technicians would benefit from having uniform credentialing that is recognized by the multiple law-enforcement agencies operating in a disaster area. (Chapter 18-4)

L'appui national : décalage stratégique, retard systématique

Under the National Response Plan (NRP), Emergency Support Function-2 (ESF-2,

Communications) ensures the provision of federal communications support to federal, state, local, tribal, and private-sector response efforts during an Incident of National Significance. The coordinator for ESF-2 activities is the National Communications System (NCS), an interagency consortium managed within the Department of Homeland Security (DHS). The Deputy Manager and Director of NCS is Dr. Peter Fonash.

Before Hurricane Katrina, NCS never had to repair the land mobile radio (LMR) systems that are operated by local governments and used by first responders.61 In fact, the organization did not have an operational plan to systematically assess an incident's impact on the LMR systems and respond to local governments' communications needs for operability, or interoperability, during emergencies. Fonash did not know what communications assets were even available across the federal government, nor what communications assets DHS, DOD, or other agencies may have been deploying. "Even the federal agencies themselves, DOD, for example ... didn't even have the control within DOD of all the assets being deployed by DOD because different parts of DOD were deploying assets and there was no central control," he said. Without knowledge of what communications assets federal agencies were bringing into the area, NCS could not effectively prioritize the use of those assets.

Fonash acknowledged that NCS had inadequate information about the communication situation in the New Orleans area. According to NCS protocol, its headquarters receives such information only when its personnel on the ground have run into "problems [they] can't fix." The magnitude of the damage in Louisiana proved this system to be inadequate. Fonash said that NCS staff was "so busy handling the crisis that they were probably not giving us the situational awareness that we should have been getting.... We just didn't have enough people down there." Eventually, Fonash sent additional staff to the region and placed a contact at the Louisiana state EOC.

There were several communications assets were not deployed at all, or could have been deployed sooner:

- The U.S. Forest Service maintains over 5,000 radios, the largest civilian cache of radios in the United States, but many remained unused.67
- FEMA Mobile Emergency Response Support (MERS) units, which include trucks with satellite capabilities, were at Barksdale Air Force Base in Shreveport, Louisiana outside the disaster area during landfall, and did not travel to the State EOC in Baton Rouge until the day after landfall.
- DOD had communications assets, including radio systems, which could have been deployed sooner.
- DHS's Prepositioned Equipment Program (PEP) pods that contained communications equipment did not start deploying until a week after landfall.

The NCS did identify and provide satellite communications vans to the New Orleans City Hall, Louisiana State Police in Baton Rouge, Mobile Army Surgical Hospital at the New Orleans Airport, and to the National Guard in Jefferson Parish.71 NCS also provided a cellular unit on a truck to the Louisiana state EOC.72 In addition, NCS identified the need to provide a temporary LMR communications solution to the eight-parish area around New Orleans, working with FEMA to initiate the contract.73 But most of these NCS assets were not provided until days after the storm struck or were only provided to select locations. Indeed, satellite vans were not en route to the Louisiana State Police in Baton Rouge until September 1, and high water kept one satellite van from reaching New Orleans City Hall

until three days after landfall.

It appears that some requests for the NCS to provide communications capabilities to local governments were not made until a few days after landfall. For example, Colonel Jeff Smith, Louisiana's Acting Deputy Director for Emergency Preparedness, did not submit a form requesting "communications with the affected parish EOCs" until 5 p.m. on September 1 – more than three days after landfall. In fact, Dr. Fonash said that he wasn't aware that the State EOC had communications problems until the state made its request on September 1. An e-mail indicates that Governor Blanco did not ask for assistance with communications until the evening of August 31, two days after landfall; in that case, the federal ESF-2 representative in Baton Rouge met with a state official the next day. Under the NRP, though, the NCS could have offered assistance even before the state made an official request for help. (Chapter 18-6,7)

Téléphone-satellite : de l'utilité de la formation des dirigeants

Ce n'est pas là une préoccupation anecdotique. On note souvent, dans un même ordre d'idée, l'impossibilité de faire venir des dirigeants en salle de crise avant les événements pour découvrir un peu l'environnement technique qui serait le leur. Dès lors, cet environnement leur apparaît plus inquiétant qu'utile le jour J, et ils trouvent toutes les bonnes raisons pour ne pas y venir ; ou bien ils y viennent mais ne savent pas utiliser les ressources du lieu. Le problème ne fait que s'accentuer avec l'explosion de l'innovation technique. On a ainsi remarqué, lors de Katrina²⁵, que les jeunes communiquaient bien mieux que les adultes, via les SMS, qui peuvent passer encore quand la voix ne passe plus.

Satellite phones don't rely on the terrestrial (ground-based) infrastructure that is necessary for land mobile radio, land-line, and cellular communications. But there is anecdotal evidence that satellite communications experienced their own problems: New Orleans Mayor Ray Nagin said that he had "a huge box of satellite phones that did not work." [...]

The problems with satellite phones do not appear to have been caused by the phones themselves or the satellite networks; rather, a combination of user error and buildings or other objects obstructing satellite signals are the more likely culprits. In fact, NCS was not aware of any problems with the satellite phone networks. And Walt Gorman, a vice-president at Globalstar, which supplied many satellite phones to the federal government, Louisiana, and Mississippi, said that users with difficulty operating satellite phones probably did not know how to use them properly because they had not received training. Therefore, users may have had problems putting them in the correct mode, directing the antennae, or dialing the correct numbers. (Chapter 18-9)

Une double difficulté : une guerre de retard, des guerres bureaucratiques

Les télécommunications sont devenues vitales dans des systèmes désormais foisonnants, interdépendants, qui ne peuvent plus fonctionner sans une très forte capacité d'interconnexion généralisée. Mais la dimension télécommunication n'est pas encore perçue comme à ce point vitale. On se souvient de ce ministre français des PTT qui, avec une morgue inimitable, à la fin des années 1960, avait raillé le téléphone, comme « simple gadget permettant aux femmes esseulées d'appeler leurs amants ». Il faudrait se demander si nous ne sommes pas aujourd'hui également en retard d'une guerre alors que les télécommunications sont devenues essentielles à

.

²⁵ Témoignage de Julie Hernandez, étudiante normalienne, présente sur place.

la résilience de nos systèmes de vie.

Mais, autre front, la question de la tenue de nos sociétés face aux grands risques de rupture semble une préoccupation souvent très secondaire quand ce qui compte véritablement est en jeu : la sauvegarde des territoires d'influence bureaucratique.

Much of the communications in southeastern Louisiana is outdated and has been at various stages of disrepair for several years. In Orleans Parish the communications system is an 800 MHz system, which supports police, fire, EMS and the Office of Emergency Preparedness. (MHz (Megahertz) denotes the frequency on which the equipment operates and public safety radio equipment often can only operate on a specific frequency.) The age of the equipment created problems in getting technical support. In St. Bernard Parish, the communications system – 400 MHz – is so old that it must be maintained by purchasing repair parts through the eBay auction site on the Internet. [...](Chapter 18-10).

Well before Katrina struck, Louisiana agencies encountered funding problems as they sought to enhance communications interoperability. In 2004 and again in January 2005, the Louisiana State Police attempted to secure \$105 million to upgrade its communications infrastructure from an outdated, 800 MHz analog system which is no longer supported by the vendor to a modern 700 MHz digital interoperable network. That amount was considered an "inexpensive" way to connect existing operating systems in the state to a common, statewide network. The State Police sought funding from Congress, via earmark requests to Louisiana's Congressional delegation, through Louisiana's state budget process, and explored grant opportunities with the Office of Domestic Preparedness within DHS but was not successful.

The greater New Orleans area analyzed options for creating a region-wide, modern 800 MHz system, also well before Katrina struck. However, estimates ranged as high at \$45 million, which local officials considered "cost prohibitive." [...](Chapter 18-11).

In addition to funding, interoperability also always raises technical and policy issues. As Colonel Joseph Booth of the Louisiana State Police put it, "there's always issues about who's going to control it, who's making decisions, what technology to go with, what capabilities, what kind of local control there is." (Chapter 18-12).

Chapitre 13

LE CENTRE NATIONAL DE CRISE : SOUS L'EMPIRE DE LA CRISE

La Commission examine avec une assez grande précision le fonctionnement du centre de crise national, le Homeland Security Operations Center (HSOC). Il en ressort l'image d'un centre de crise dépassé, incapable de traiter l'information qu'il reçoit, incapable de détecter tout problème grave, incapable de passer l'information, d'une lenteur stupéfiante, peu articulé aux responsables clés. Bref, une « usine à gaz » qui sert finalement à « lisser » l'information : en dégageant cette dernière de tout ce qui pose problème ; en imposant un rythme d'une lenteur qui dépasse l'entendement.

Les analyses de la Commission restent plus marquées par la stupéfaction que par la maîtrise profonde du sujet. En vérité, dans ce fonctionnemement de la cellule de crise nationale, on voit à l'œuvre des pathologies bien connues :

- Le centre national de crise est davantage une couche organisationnelle supplémentaire qui stocke de l'information dans l'attente de confirmations générales et définitives, qu'un outil stratégique au service des dirigeants.
- Les dirigeants semblent coupés de cette instance : on ne sait pas ce qu'ils attendent, ils n'impriment pas leur marque, ils ne sont pas bien branchés sur le système ; comme des chefs d'orchestre restés dans leur loge ;
- Le centre national de crise est dans une posture d'attente : que l'information lui arrive est la pente naturelle retenue, on ne va pas la chercher ;
- Le centre national de crise est branché sur les sorties naturelles de tout un empilement administratif, il ne va pas chercher en direct de l'information sur le terrain ;
- Le centre national de crise n'a pas de vision claire de ce que pourrait être la situation, pas de questionnement, pas de clarification des éléments d'informations critiques, discriminants, qu'il faudrait s'acharner à rechercher;
- Dès lors, le centre national de crise se met lui-même à la merci du « fog of war », notion qui sera utilisée ensuite pour expliquer l'impuissance. Il attend que son écran radar soit illisible, au lieu de piloter sa propre recherche d'information ; il attend qu'il redevienne lisible, après la bataille ;
- Surtout, et c'est de loin le plus important, il prend pour validée une information rassurante, et « attend confirmation » si d'aventure une information arrive qui ne cadre pas avec les bonnes nouvelles ;
- Si les informations non-optimistes s'accumulent, le centre national de crise fonctionne en mettant à l'écart ces informations, et en retardant de plus en plus leur diffusion interne.

En d'autres termes, un tel dispostifi est, de par culture fondamentale, mis sous anesthésie par toute crise non conventionnelle.

La réponse n'est pas d'édicter des normes du type : « Un rapport tous les ¼ d'heures » – le système trouverait d'autres voies efficaces pour ne pas avoir à s'approcher du non conventionnel. La réponse est de former les membres du dispositif aux situations de grande surprise. Et aux pathologies habituelles qui gèlent les cellules de crise. ²⁶ Sinon, ne surnagera

²⁶ Je me souviens notamment, à l'inverse, de la grande leçon de pilotage de crise que donna Claude Frantzen, alors responsable à la Direction Générale de l'Aviation Civile, le jour d'un accident aérien. Une nouvelle « réconfortante » arriva qui aurait dû contenter tout le monde. Claude Frantzen intervint et dit en substance au messager (que bien d'autres auraient loué pour son message si « rassurant ») : « Vous savez très bien que c'est ce que nous voudrions tous entendre. Alors, maintenant, vous allez reprendre contact avec le terrain et vérifier cette

qu'une instance écran, qui continuera à jouer le rôle de tête de pont de la crise, au sommet du système.

Quiconque ne s'est pas formé, personnellement, en équipe et en réseau, aura peu de chance d'échapper au joug de la crise, dont le premier « objectif » est de mettre sous sa coupe les cellules de crises les plus essentielles. Une cellule de crise n'est pas un lieu où l'on tente de se rassurer, pour pouvoir envoyer des messages rassurants à la couche supérieure, et obtenir ainsi la bénédiction de qui s'apprêtait déjà à être terrorisé.

Le centre clé de voûte du pays, tête de pont de la crise

Having an ability to "connect the dots" was a main goal during the creation of the Department of Homeland Security. The Homeland Security Operations Center (HSOC) is a key element and was designed to be "the nation's nerve center for information sharing and domestic incident management." Hurricane Katrina was the HSOC's first major, public test, and it failed. At the federal level, there was a startling lack of situational awareness as Katrina came ashore. On the day of landfall, DHS ignored, disregarded, or simply failed to obtain readily available reports that would have – and should have – led to an understanding of the increasingly dire situation in New Orleans and the remainder of the Gulf Coast. DHS witnesses have offered essentially two explanations for the lack of situational awareness on Monday, August 29. First, they fault Federal Emergency Management Agency's (FEMA) former Director Michael Brown and his agency for failing to provide the HSOC with crucial information. Second, they invoke the "fog of war" metaphor and assert that conflicting reports rendered the HSOC unable to develop any sense of the "ground truth."

But these are at best only partial explanations for the HSOC's failure to understand the scope of the unfolding disaster. Brown did fail to forward critical information in his possession, which is inexcusable. However, the HSOC's failure to obtain reports of breaches and massive flooding issued by the National Weather Service (NWS), the Army Corps of Engineers, and the media, was unrelated to anything Brown or FEMA did or did not do. Indeed, throughout the day of landfall the HSOC received reports – including from two DHS Protective Security Advisors (PSAs) stationed in the region – that uniformly reflected a growing catastrophe. To the extent these reports "conflicted," it was only in terms of the scope of the catastrophe described, not the existence of the catastrophe itself. (Chapter 19-1)

Des points de situation trompeurs

The failure to "connect the dots" is best captured by the situation report ("sitrep") issued by the HSOC at 5 p.m. CT on Monday. During hurricanes and other significant incidents, the HSOC issues sitreps at 5 a.m. and 5 p.m. to many customers, including DHS leadership and the White House. In crucial areas this sitrep was both incorrect and incomplete. It was incorrect in stating that "Preliminary reports indicate the levees in New Orleans have not been breached; however, an assessment is still pending." In fact, most preliminary reports stated just the opposite. It was incomplete in stating generically that "Flooding is reported in New Orleans," but failing to provide any detail about the widely reported scope of the flooding or the devastating results – for example, that residents were

seeking refuge from rising water in their attics and on rooftops.

In a dynamic situation such as Katrina, time was of the essence, as people were in desperate circumstances. We will never know for certain how the lack of awareness contributed to the overall failure of the federal government to respond adequately in a timely manner. We do know, however, that the 5 p.m. sitrep was the last report Secretary Chertoff received on the day of landfall, and he went to bed Monday night with the incorrect belief that the levees had not been breached and that Katrina had not done the worst that had been predicted. This incorrect sitrep was also forwarded to the White House. Several days later President Bush later remarked that "I myself, thought we had dodged a bullet." (Chapter 19-1,2)

Une vigilance sur les grands événements bien notés à l'agenda, pas sur l'impromptu

C'est là une règle générale : un grand événement annoncé longtemps à l'avance, bien cadré, dispose de tous les tampons administratifs voulus pour mobiliser les instances idoines. Une coupe du monde de football, la venue du Pape, peuvent réserver plusieurs mois à l'avance les cases voulues dans l'appareillage. Par contre, une canicule, jusqu'à ce que l'on dispose d'un plan ad hoc, ne sortira pas du registre des événements aberrants, donc non habilités à déranger de façon impropre le fonctionnement des hautes instances.

The HSOC's failure to maintain situational awareness during Katrina grew out of a lack of planning and flawed analysis. Though plans for obtaining situational awareness are developed for events like the Superbowl and for the national political conventions, HSOC Director Matthew Broderick acknowledged that "there was no plan developed" for maintaining situational awareness during Katrina. (Chapter 19-2)

Le centre national de crise coupé de ses propres bases sur le terrain : faille verticale

Neither HSOC Director Broderick nor HSOC Deputy Director Frank DiFalco knew that DHS had a representative in New Orleans and another in the Louisiana State Police Emergency Operations Center in Baton Rouge sending reports to the HSOC. Indeed, on the day of landfall, the HSOC failed to recognize, or disregarded as unconfirmed, many of the reports that it did receive. The HSOC similarly failed to obtain reports and information that it should have gotten. As the week progressed, situational awareness improved little if at all, evidenced most pointedly by DHS's late awareness of the thousands gathering at the Convention Center. (Chapter 19-2)

Le centre national de crise coupé du terrain : aucune attention prêtée aux bureaux locaux de la météo

Pathologie également classique. Les intances nationales ont déjà tellement de difficultés à trouver leurs marques quand on les convoquent ainsi à l'improviste qu'il ne leur reste plus énormément d'énergie et de disponibilité pour aller rechercher de l'information auprès des mieux renseignés. Surtout : ces mieux renseignés, directement au front, risquent d'exposer à des données qui n'auront pas subi le processus voulu de dénaturation, filtration, édulcoration, que garantissent les circuits administratifs de référence.

The apparent failure to obtain the NWS reports issued by the local offices is a particularly troubling example of how the HSOC's failure to plan for Katrina manifested itself. These reports contained some of the earliest indications of levee breaches and catastrophic flooding and were readily available – NWS's parent agency, the National Oceanic and Atmospheric Administration ("NOAA"), maintains a desk in the HSOC.

When asked about these reports, Broderick [HSOC Director] suggested that they may not have been obtained because they were issued by local NWS stations. He did not know whether anyone at the HSOC was responsible for monitoring local weather stations during a major weather event. Common sense steps such as identifying and monitoring local sources of information – particularly ones run by the federal government – would seem an obvious course of action for the HSOC in the days before landfall. And yet, no one within the HSOC appears to have given this any thought. (Chapter 19-5)

Le centre national de crise coupé des autres instances nationales : faille horizontale, lenteur de la transmission de l'information

There were also structural flaws in the way the HSOC obtained information from other federal agencies and other sources. The twice-a-day HSOC sitreps contained information that in most cases, was at least three and, often, five or more hours old. During Katrina, FEMA input to the HSOC sitrep were due three hours before a sitrep was issued. FEMA's internal deadline for submissions to the HSOC was, in turn, two hours earlier. Thus, by design a 5 p.m. sitrep reflects information that was, at a minimum, five hours old. (Chapter 19-2)

Une attitude paradoxale vis-à-vis des informations médiatiques : prudence quand elles sont alarmantes, suivi aveugle lorsqu'elles sont rassurantes

Même les sources les plus villipendées sont vénérées si elles se font rassurantes. Les médias deviennent crédibles dès lors qu'ils disent que tout va bien. Or, précisément, lorsque les situations sortent de l'ordinaire on voit souvent les médias, eux aussi, se recroquevillier dans un premier temps sur les références habituelles et « rassurer ». Ce qui, bien sûr, va les mettre rapidement, eux aussi, en situation délicate. Avec pour conséquence des changements de cap radicaux et expéditifs, dès l'instant où le média commence à percevoir que son audience « décroche ». Et quiconque les aura suivi dans les premiers instants d'aveuglement deviendra l'instance à abattre – à la mesure des dangers courus par les médias à qui on pourrait reprocher leur couverture à l'origine.

The attitude of the HSOC and DHS leadership toward media reports was, at best, contradictory. On one hand, HSOC witnesses expressed an understandable reluctance to rely on media reports, which often carry outdated or preliminary information during an evolving event. On the other hand, Broderick relied on media reports in concluding that the situation in New Orleans was not catastrophic on Monday night: "The only one data point that I really had, personally, visually, was the celebration in the streets of New Orleans of people drinking beer and partying." It is difficult to understand why DHS officials would find the credibility of alarming news reports suspect but had no such hesitation taking comfort in media stories that, superficially at least, suggested that the situation was stable. (Chapter 19-6)

Des informations flashs, mais personne ne les consulte

Between sitreps, HSOC issued Spot Reports when "breaking news" came in, and starting at approximately 6:35 p.m. CT, the HSOC generated numerous Spot Reports accurately detailing the devastation in New Orleans. However, many of those who were on the e-mail distribution list for these Spot Reports, issued late into the night on Monday, appear not to have read them when they were received. Witnesses also explained that, as a general matter, they viewed the sitreps as more authoritative than the Spot Reports. They

testified almost universally that they were not aware of the inundation of New Orleans until after the 5 a.m. CT sitrep Tuesday morning – 12 or more hours after the HSOC began issuing the grave Spot Reports detailed below. (Chapter 19-2)

Le premier jour : une avalanche de rapports alarmants, des postures résolument aveugles et aveuglantes

Nous avons ici un exemple parfait de mise sous anesthésie d'un système global de gestion de crise. Les rapports alarmants s'enchaînent, rien ne parvient à réveiller les instances en charge. Au contraire sans doute : la multiplication des informations préoccupantes, ne fait qu'aggraver la surdité générale. Et si d'aventure tel point du système fait montre un bref instant de lucidité, cette lucidité est rapidement désintégrée par le système dans son ensemble. Le moteur essentiel est que les dirigeants puissent à tout moment assurer que « tout est sous contrôle », même si ces affirmations sont sans fondement. La crise les tient solidement sous son joug : quelle que soit l'avancée de l'ennemi, la posture reste la même – le pire n'est pas survenu, « les digues tiennent ».

Il suffirait de se pencher avec un minimum de liberté d'esprit sur les multiples informations qui circulent dans le système pour sonner le tocsin. Mais, précisément, personne n'a plus cette liberté de jugement. Et la seule préoccupation devient de trouver des raisons justifiant le fait que l'on n'ait pas besoin de sonner le tocsin.

Pathologie normale : lors de la canicule en France, le mot essentiel était de la même façon : « Les services de secours font face ». Avant d'en arriver au pathétique : « Nous comptabilisons le nombre des morts ».

Comme si, accroché à sa passerelle, le Commandant du Titanic, sous la dictée de la crise, continuait à proclamer : « Le Titanic est insubmersible ».

Prior to issuing the flawed 5 p.m. sitrep, the HSOC issued two Spot Reports during the morning of landfall. One, at 8:25 a.m. CT, was based on a press conference by Mayor Nagin and stated in part that water was coming over the levees in the Ninth Ward. Almost two hours later, at 10:22 a.m. CT, the HSOC issued another Spot Report, including reports that water was rising at the National Guard's Jackson Barracks in the Ninth Ward, but adding that it was unknown whether this was the result of breaching or overtopping. It also stated that the 911 call centers in St. Bernard and Orleans parishes had been shut down and evacuated. Ten minutes later, the information in this second Spot Report was also distributed in an e-mail to, among others, Chief of Staff John Wood and Deputy Secretary Michael Jackson.

The Committee has discovered no other communications out of the HSOC prior to the 5 p.m. sitrep. Both before and after the two morning Spot Reports, however, the HSOC received reports of levee breaches, levee overtopping, flooding, and people trapped on roofs. Equally troubling are the reports the HSOC apparently never got. As discussed below, some of this information was received by FEMA, but not forwarded timely to the HSOC. However, the majority of this information was available from other sources, including government agencies that have desks within the HSOC, and major media outlets. These reports are described below, with the ones that the HSOC received highlighted in bold:

- At 8:14 a.m. CT, the New Orleans National Weather Service office reported a levee breach along the Industrial Canal.13
- At 9 a.m. CT on the morning of landfall, the HSOC received an e-mail from

- Louis Dabdoub, the PSA on the ground in New Orleans. Dabdoub's report stated in part: "It is getting bad. Major flooding in some parts of the city. People are calling in for rescue saying they are trapped in attics, etc. That means water is 10 feet high there already. Trees are blowing down. Flooding is worsening every minute... The bad part has not hit here yet."
- At 9 a.m. CT the New Orleans NWS office reported overtopping in Orleans and St. Bernard Parishes and "[e]xtensive and life threatening storm surge flooding occurring along the Louisiana and Mississippi coast."
- At 9:36 a.m. CT, Dabdoub sent another e-mail to the HSOC, reporting that "[t]he lower parishes of La [Louisiana], Plaq[emines] and St Bernard parish's [sic] are under water."
- At 10:13 a.m. CT, the White House Homeland Security Council issued a spot report which appears not to have been sent to the HSOC reporting that "Flooding is significant throughout the region and a levee in New Orleans has reportedly been breached sending 6-8 feet of water throughout the 9th Ward area of the city. Per the Governor, water is rising at 1 foot per hour and the New Orleans Mayor reports problems with a pumping station, causing flooding."
- At 10:17 a.m. CT, PSA David Hunter, who was in the Louisiana State Police Emergency Operations Center (EOC), reported "continued heavy flooding in area of New Orleans just east of the Industrial Canal (9th Ward) . . . Calls coming into state EOC from citizens trapped in their houses, some in the attics or on the roof. State National Guard HQs at Jackson Barracks has 5 feet of water in some of its buildings."
- At 10:41 a.m. CT, the HSOC received a copy of a 8:00 a.m. "Katrina Brief" created by the Transportation Security Administration, which stated in part that "The National Weather Service has reported that a levee broke on the Industrial Canal near the St. Bernard-Orleans parish line, and 3 to 8 feet of flooding was possible... In the uptown area of New Orleans on the south shore of Lake Pontchartrain, floodwaters by have [sic] already intruded on the first stories of some houses and some roads are impassable... There is heavy street flooding throughout Orleans, St. Bernard, and Jefferson parishes."
- At 11 a.m. CT, the Louisiana State Police Emergency Operations Center issued a situation report which reported a breach of the levee on 17th Street Canal.
- At 11:40 p.m. CT, the New Orleans NWS office issued one of the most stark warnings of the day: "Widespread flooding will continue across the parishes along the south shore of Lake Pontchartrain in the greater New Orleans area...This continues to be an extremely life threatening situation...Those seeking refuge in attics and rooftops are strongly urged to take the necessary tools for survival. For example. . . those going into attics should try to take an axe or hatchet with them so they can cut their way onto the roof to avoid drowning should rising flood waters continue to rise into the attic." (emphasis added).
- At 12:51 p.m. CT, the HSOC received a Coast Guard "Status Update" which
 reported that "[a] levee in New Orleans has been breached sending 3 to 8 feet
 of water into the 9th Ward area of the city."
- At 1:14 p.m. CT, PSA Hunter reported a "levee breach on the 17th St. Canal (the border between Orleans and Jefferson Parishes) reported by the New

Orleans Fire Dept."

- At 3:05 p.m. CT, and then again at 3:10, 4:20, and 8:13, the New Orleans NWS office issued a report stating that "extensive and life threatening storm surge flooding remains in progress at this time...especially in the New Orleans area...Widespread flooding has occurred and storm water runoff will exacerbate the problem..."24
- A 4 p.m. CT Situation Report issued by the NWS Southern Region Headquarters stating that "[v]ery widespread and significant flooding has occurred throughout the city of New Orleans . . . Industrial Canal at Tennessee Street: levee has been breached . . . 17th Street at Canal Blvd: levee has been breached breach extends several 100 meters in length[;] Much of downtown and east New Orleans is underwater; depth unknown at this time."
- At 4 p.m. CT, LOHSEP issued a situation report detailing three levee breaches: "St. Bernard & 9thWard Levee breach (reported by Sewage & Water Board) . . . Haynes Blvd Pump Station Levee Breach (reported by Jackson Barracks) . . . 17th Street Canal levee breach, flooding Lakeview area."
- During the 4 p.m. hour, Fox News interviewed Ivor Van Heerden, Director, Louisiana State University's Center For Study Of Public Health Impacts Of Hurricane, who stated that "the National Weather Service are reporting that one of the levees was breached, and obviously, as the reporters have said, there's very, very significant areas of New Orleans that did flood from the levee overtopping. In some areas we have about 11 feet of standing water. People have been forced out onto the roofs of their homes."

In addition to these reports, at 11 a.m. CT, Brown, Rhode, Secretary Chertoff, Deputy Secretary Jackson, White House Deputy Chief of Staff Joe Hagin, representatives of the affected states, and individuals from numerous federal agencies attended the video teleconference (VTC) that FEMA hosted daily during Katrina. During this call, which was monitored by a Senior Watch Officer at the HSOC, a National Hurricane Center Hydrologist stated that [w]e have significant flooding occurring right now, beyond the storm surge flooding." Colonel Jeff Smith, Acting Deputy Director of the Louisiana Office of Homeland Security and Emergency Preparedness, stated "we are truly experiencing some devastation here." William Lokey, FEMA's Federal Coordinating Officer (FCO), then the lead federal official in Louisiana, echoed this:

[t]o give you an idea of what's going on down there, there is eight to ten feet of water in St. Bernard Parish. In New Orleans Parish, we have got water in the eastern part. And down in the Ninth Ward that borders St. Bernard Parish, we're going to have serious search and rescue efforts that are going to need to take place once we can get back in... We are pretty much inundated right now, and our next priorities are going to be search and rescue and saving lives.

During the call, Hagin asked about the status of the levees. Governor Blanco responded, We keep getting reports in some places that maybe water is coming over the levees. We heard a report unconfirmed. I think we have not breached the levee. We have not breached the levee at this point in time. That could change, but in some places we have floodwaters coming in New Orleans East and the line St. Bernard parish where we have waters that are eight to ten feet deep, and we have people swimming in there, that's got a considerable amount of water itself.

Blanco also reported "maybe as many as 30 or more calls from people who are trapped." It appears that neither Mayor Nagin nor anyone else in New Orleans was on this call

It is difficult to understand why the 5 p.m. sitrep reflected few of the facts – and none of the urgency – conveyed by these reports. It is inexcusable that it included no mention of the reports of levee breaches that the HSOC received. On the contrary, the sitrep conveyed a false impression that there were multiple and uncontradicted reports that the levees had held. In fact, extensive investigation has uncovered nothing beyond Governor Blanco's qualified statement on the noon VTC stating that the levees had held. All other reports received by the HSOC pointed to the contrary. (Chapter 19 – 2-5)

L'avalanche de rapports négatifs continue, l'aveuglement est solidement installé, le système n'embraye pas

Les rapports se font pressants ? La protection-défensive se fait de plus en plus rigide : « Les rapports sont non confirmés, contradictoires, peu sûrs ». En clair, pour être considéré, un rapport doit être confirmé dans tous les sens, il ne doit y avoir qu'une seule interprétation possible, le tout doit être dûment certifié – et fondamentalement rassurant. En d'autres termes, pour les responsables interrogés par la Commission, une cellule de crise nationale ne peut réellement fonctionner que s'il n'y a pas de crise. La défense elle-même est plus préoccupante que l'erreur commise. Elle manifeste de façon éclatante le décalage culturel qui ne permet pas de gérer une crise non conventionnelle.

On voit aussi se manifester au travers des témoignages une pathologie étonnante liée aux situations de crise : la capacité à retourner toute réalité. Les témoins osent parler de situation parfaitement typique, normale, à propos de Katrina. Tout est lu dans le registre : « L'explosion d'une bombe n'est qu'une inflammation un peu rapide ». Ou encore : « Une bombe au phosphore, c'est juste une grosse allumette ». On voit à l'œuvre une formidable mobilisation psychique pour protéger l'individu de l'inconfort lié à la crise, inconfort qui le met en péril vital, l'obligeant donc à des travestissements vitaux. L'absurde arrive à mettre la rationalité à son service, à des degrés stupéfiants.

On voit aussi une étonnante carence de vérification du fonctionnement du système. La Commission juxtapose par exemple deux éléments qui auraient dû poser question – si du moins on avait examiné les vulnérabilités basiques du système : les points flash d'alerte sont envoyés par mails ; "le Secrétaire Chertoff n'utilise pas le mail".

De façon générale, le fonctionnement du système est plus marqué par une culture de dossiers administratifs que par une culture d'urgence à la hauteur des enjeux de sécurité nationale – ce qui manifestement pose question pour le centre de crise essentiel du pays. Des informations critiques sont envoyées, mais la plupart des destinataires semblent bien loin de percevoir la gravité de la situation. Que ceux qui sont en charge de la sécurité du pays semblent aussi loin des informations données par le système DHS, auquel ils appartiennent, alors que l'on est clairement en situation connue pour être potentiellement gravissime, défie l'entendement. C'est un nouveau signal indiquant que toute la culture de référence est à revoir.

After the 5 p.m. CT Sitrep, the HSOC Issued Three Reports Reflecting the Growing Catastrophe But DHS Leadership Did Not Read or Did Not Understand Them

After the 5 p.m. sitrep, reports of the increasingly dire situation in New Orleans

continued. Many were received by the HSOC, and, indeed, the HSOC issued three Spot Reports that detailed levee breaches and extensive flooding. These reports included:

- At 5:08 p.m. CT, an American Red Cross Situation Report, received by the HSOC, which stated in part, "Reports of flooding vary based on region with some levees in new Orleans reportedly breeched [sic]. Extensive flooding in the Lower 9th Board [sic] and St. Bernard Parish may be a result of water going over the tops of the levees."
 - At 6 p.m. CT, CNN's Jean Meserve reported "a scene of utter devastation. In an entire neighborhood, water has come up to the eaves of the houses and [I] am told this is not the worst of it. That beyond this, part of the upper Ninth Ward, I'm told the main part of the ward further down is even worse. The water is over the houses. This is a life and death situation. I think by the end of the night we're going to find a lot more death than we ever imagined."
 - A 6:35 p.m. CT Spot Report issued by the HSOC was based on information received at some earlier time from the Corps of Engineers. It stated in part, "A small breach reported at 17 Street Canal by local firemen...Report that Duncan Pumping Station and Bonnebelle Pumping Station suffered roof damage, inundation of pumps, and are not operating at this time. Reported overtoppings of levee near Arabi and Inner Harbor Navigation Canal. Some level of widespread flooding has occurred. Report there has been a breach of the levee in the east of Harvey Canal, west bank area."38
 - A Situation Report issued at 7:34 p.m. CT by the Corps of Engineers described major flooding in New Orleans and stated, "All Jefferson and Orleans Parish Pumping Stations are inoperable as of 29 Aug."
 - At 8 p.m. CT on CNN's Larry King Live, Brown said, "This is a catastrophic disaster. I've just started getting reconnaissance reports from my folks in the field and I'm anticipating now that I'm going to have to prepare for housing at least tens of thousands of victims that are going to be without homes for literally months on end ... FEMA folks who have been with the agency for, you know, 15 or 20 years, ... call in and talk about how this is the worst flooding they've ever seen in their entire lives and talking about just neighborhoods after neighborhoods gone."
 - At 8:30 p.m. CT, PSA Hunter reported "[w]idespread flooding, and some suspected fatalities (bodies spotted floating in water) in an area of town near the Industrial Canal. The flooding cannot be alleviated due to the large water pumps which normally keep the city dry being out of service."
 - A 9:30 p.m. CT Spot Report based on two overflights of New Orleans by Marty Bahamonde, the only FEMA official in the city, said in part, "There is a quarter-mile breech in the levee near the 17th Street Canal about 200 yards from Lake Ponchartrain allowing water to flow into the City...Only one of the main pumps is reported to still be working but cannot keep up with the demand and its longevity is doubtful...an estimated 2/3 to 75% of the city is under water...Hundreds of people were observed on the balconies and roofs of a major apartment complex in the city...A few bodies were seen floating in the water and Coast Guard pilots also reported seeing bodies but there are no details on locations or numbers."
 - At 10 p.m. CT, MSNBC interviewed Lt. Kevin Cowan, Louisiana Office of Emergency Preparedness, who said, "There's a lot of heavy rain. There was some breaching of the levee system that pushed the water into St. Bernard Parish and into New Orleans proper itself, flooding neighborhoods. Streets are completely flooded...

- . There were some breaches where water was pushed over the top. I am sure there were areas that the levee did fail. We haven't gotten complete reports."
- At 10:47 p.m. CT, a Spot Report reporting that "According to Remote Sensing Imagery and available Census data, approximately 136,000 housing units in New Orleans have been impacted by flooding."

Though the three Spot Reports listed above were widely distributed by e-mail,45 few DHS witnesses recalled seeing them. Despite the fact that it was late at night and that Secretary Chertoff did not use e-mail, the HSOC made no effort to ensure that DHS leadership or the White House actually reviewed and understood the messages, or that they received this critical information in another form.

Nearly all DHS witnesses, including those who were on the distribution list for the Spot Reports, testified that they did not know that the levees failed or that New Orleans was suffering catastrophic flooding until Tuesday morning. Many still did not know that the levees had breached and the city flooded on Monday as Katrina came ashore. When shown these three Spot Reports, DHS witnesses consistently attempted to minimize their import, claiming that they were unconfirmed, conflicting, or unreliable.48

The attitude of DHS witnesses toward reports of flooding was also surprising. From the time Friday afternoon when forecasts put New Orleans in the bull's-eye, every indication was that Katrina could cause horrific devastation.⁴⁹ Yet time and again, DHS witnesses suggested that the reports of flooding received during the day were "typical," "expected," "standard," and the "normal, typical hurricane background stuff." While such a reaction might be understandable in a "typical" hurricane, in light of all that was known about Katrina's power and the risks peculiar to New Orleans, these reports warranted a greater level of concern.

Moreover, in addition to these widely distributed reports, on Monday evening FEMA's Acting Deputy Director, Patrick Rhode, spoke with Deputy Secretary Michael Jackson to update him on the deteriorating situation.51 Later that night, both Wood and Deputy Secretary Jackson received e-mails about Bahamonde's overflight of New Orleans. At 8:29 p.m. CT, Wood received an email from a DHS public-affairs official, which related that "The first (unconfirmed) reports they are getting from aerial surveys in New Orleans are far more serious than media reports are currently reflecting. Finding extensive flooding and more stranded people than they had originally thought – also a number of fires."

At 10:05 p.m. CT, Jackson received an e-mail from Rhode summarizing many of the same observations from Bahamonde's overflight that had already been reported to the HSOC, including that there was a 200-yard-long failure of one levee and that most of the city was flooded. Neither recalled seeing the e-mails that night. In sum, there is no evidence that overnight Monday into Tuesday any senior DHS official saw the reports that would have informed them that Katrina was a catastrophe of unprecedented dimensions. (Chapter 19–6-8)

La Situational Awareness ne s'améliore pas au long de la semaine, le décrochage est manifeste dans l'épisode du Convention Center

On trouve ici une illustration claire d'un constat de fond : quand une organisation décroche, elle ne parvient pas à reprendre la main. Les responsables apparaissent de ce fait systématiquement en retard sur l'événement, ce qui leur fait rapidement perdre toute crédibilité. Et toute capacité de pilotage. Mais il ne faudrait pas prendre ce constat pour une

donnée définitive. Il reste à inventer des capacités pour « reprendre la main », à partir du principe que ce type de situation risque d'être fréquent. Cela suppose une capacité forte de prise de recul, de remise en mouvement sur de nouvelles bases. La simple réaffirmation des références énoncées en début de crise serait encore plus pénalisante.

Et l'on voit ici à quel point les pathologies peuvent jouer : même quelqu'un envoyé pour rechercher de l'information remonte de l'information fausse, fausse sur les chiffres, fausse sur les moyens dont on dispose au Convention Center. L'important est de pouvoir s'arracher aux visions qui se sont imposées, et qui s'imposent de façon d'autant plus impérieuse qu'une autre vision serait extrêmement perturbante. Certes, comme le soulignent les Sénateurs, il ne faut pas se jeter dans les bras de médias, mais on ne peut non plus rejeter purement et simplement ce qu'ils mettent à l'écran.

In many regards, DHS's situational awareness did not improve as the week went on. The situation at the Convention Center in New Orleans provided the most striking illustration of this. Despite media reports on Wednesday night and video Thursday morning of thousands of people at the Convention Center,53 and no later than shortly after noon CT, images of two dead bodies, HSOC reports do not even mention the situation until *Friday* morning. Secretary Chertoff himself learned about the Convention Center from an NPR reporter at 1 p.m. CT on Thursday. During that interview, the Secretary initially tried to dismiss the reporter's questions about the Convention Center as "a rumor or you get someone's anecdotal version of something."

Witnesses have offered no satisfactory explanation of how this breakdown occurred. Broderick testified first hearing reports of thousands at the Convention Center on Wednesday evening. However, "we actually and initially were confusing the Superdome with the convention center.

We didn't realize that it was a separate entity. Even on Thursday, we were sorting it out." On Thursday, he dispatched Wendell Shingler, the Director of the Federal Protective Services (FPS), to investigate. Broderick testified that Shingler arrived that evening and reported that there were approximately a thousand people gathered at the Convention Center; that food and water was available; and that New Orleans police were present. Broderick believes that Shingler failed to appreciate the true size of the Convention Center. Because media reports persisted, Broderick sent Shingler back Friday morning, at which point the accurate report of thousands stranded came back. The failure of DHS, and the HSOC in particular, to take note of ubiquitous media reports of the situation at the Convention Center is disturbing. Skepticism toward media reports in a crisis situation makes sense, but these reports were backed up by video. If there was some hesitation about relying on media report, reports to DHS leadership and the White House based on them could have included appropriate caveats. Instead, DHS and the HSOC did not forward mediabased reports, which left the country's leadership woefully uninformed. (Chapter 19–8-9)

Les ruptures d'information : au moins éviter les énormités. Les failles FEMA/DHS

Il est illusoire de demander une information parfaite en situation aussi complexe. Ce serait d'ailleurs une voie de réflexion irréaliste et très dangereuse, grosse de faillites assurées. Mais on peut au moins se centrer sur deux questions : est-ce que les principaux dirigeants peuvent se parler ? Est-ce que les informations cruciales circulent ? La pathologie courante est de saturer les réseaux avec de l'information peu utile, l'information cruciale restant bloquée. Le

rapport du Sénat est édifiant : le patron de la FEMA estime que ce serait du temps perdu de parler au patron du DHS ; les informations critiques ne remontent pas au DHS – qui ne va pas les chercher. Le rapport juxtapose deux interprétations : ou une volonté de ne pas informer l'autre bureaucratie, ou un problème de système. Les deux problèmes peuvent se rencontrer dans toute situation.

[...] the FEMA leadership appears to have failed to send critical information to DHS and the HSOC. Though Brown testified that he provided reports to the White House at several points during the day of landfall, he did not call Secretary Chertoff because in his view "it would have wasted my time." He appears not to have communicated with the HSOC at all about the ground conditions. It also appears that several significant e-mails were not forwarded to the HSOC. These included a series of e-mails between 8:36 and 9:19 a.m. CT containing reports, from a member of FEMA's liaison team at the National Hurricane Center, that the Industrial Canal levee had failed. They also include a summary of a report from Bahamonde that detailed severe flooding, people trapped in attics, and failing pumps; and an 10:51 a.m. CT e-mail to FEMA's Deputy Director of Response with Bahamonde's news that the New Orleans Fire Department was reporting a 20-foot-wide breach in the 17th Street levee.

Brown's testimony made clear that he purposely refused to provide updates to the HSOC and to Secretary Chertoff. Though Broderick testified that he believed that FEMA intentionally limited its reports, investigation found no independent evidence to support this, and it does not appear that Lokey, Rhode, or others in FEMA did so. To the contrary, Lokey testified that "Michael Brown did not tell me to any way, shape, or form stop any flow of information" and that he was not aware of any other limitation on the transmission of information to the HSOC. Rhode sent several e-mails to, and had at least one phone conversation with, Deputy Secretary Jackson on Monday. Finally, nine of the Spot Reports issued by the HSOC on Monday were ascribed to FEMA, a clear indication that there was a steady information flow from FEMA's National Response Coordination Center into the HSOC.

Conclusion

The HSOC did not devise and implement a system to ensure access to all significant, relevant information that became available as Katrina neared and then landed on the Gulf Coast. Compounding the problem, even though the HSOC had enough information by late Monday afternoon to conclude that the levees had failed, it issued a key situation report that reflected and propagated incorrectly optimistic information about the state of New Orleans. (Chapter 19-9)

Quand l'ampleur de l'événement fait exploser les références habituelles : des documents de synthèse de 75 pages...

Les consignes sont bien connues : faire remonter l'information, tenir une main courante, tenir des points de situation, bien informer les décideurs. L'expérience de Katrina semble montrer qu'au-delà d'un seuil de complexité les bons principes de base ne suffisent plus. On peut certes s'offusquer et demander plus d'information, plus de synthèses, etc. Mais il faut dépasser les vœux pieux de ce type. La seule solution, semble-t-il, est de disposer d'une force d'observation capable de faire de la discrimination en temps réel, de revoir les architectures, les principes, afin de donner toujours au système la possibilité de rester en phase avec le défi à traiter. C'est le principe d'action de la Force de Réflexion Rapide. Le problème à éviter est que

bientôt les informations cruciales ne remontent plus que par inadvertance, ou plus du tout. Ou, pour inverser le raisonnement, la Force de Réflexion Rapide doit s'interroger en permanence sur ces informations bloquées. Et bien sûr, toute expression minorante du type : « Oh, à tout hasard, on a vu..." sont des marqueurs fréquents d'informations explosives, qui ne peuvent prendre place sur les écrans radars du système.

The Louisiana Office of Homeland Security and Emergency Preparedness (LOHSEP) addressed situational awareness in its Standard Operating Procedures (SOP). The SOP identified guiding principles for information handling, including that "[t]he prompt capture, assessment and rapid dissemination of information within the EOC contributes markedly to quick response and effective decision making during an emergency..." It also required "all personnel involved in the emergency" to "aggressively seek the status of these items as quickly as possible... before during and after an event" and to report it to the organization's EOC.

In fact, first responders and others in the area affected by Katrina needed little encouragement to pass on information to the state EOC, since they relied heavily on the EOC to process their requests for assistance. But information came from numerous other sources as well, including National Guard on-the ground and fly-over reports, Louisiana State Police reports, and media coverage. Some information even came from callers in other states. LOHSEP compiled the data flow into situation reports (sitreps) that were updated several times a day. Topics included weather; status and staffing of the emergency operations center; data on injuries and fatalities; shelter populations; status of nursing homes and hospitals; road closures; utility and communications outages; and status of response missions. Naturally, the length of these sitreps grew dramatically as the response progressed. For example, a LOHSEP situation report at 10 a.m. CT on Sunday, the day before landfall, ran just nine pages; by Wednesday evening, the report was 75 pages. Senior officials at LOHSEP did not have to rely solely on sitreps, as they also received a steady stream of information "firsthand" from emergency management officials on the ground.

And LOHSEP was not alone in having an information-gathering strategy in the state. The Louisiana National Guard, which supplied information to LOHSEP, also had an information network to meet its own needs. The senior Guard official in Louisiana, Major General Bennett Landreneau, was stationed with the Governor in the LOHSEP command room. As the hurricane approached, the command staff directed 10 air-squadron operations-support teams and troops on the ground to report to the Joint Operations Command at the Superdome every two hours. In addition, they stationed liaison officers with radio equipment at local parish offices, and held their own series of conference calls with parish emergency support officials throughout the night before landfall to monitor the hurricane's effects.

However, these elaborate information-gathering systems did not prevent serious breakdowns in the state's situational awareness. One notable example was Governor Blanco herself, who evidently was unaware of earlier reports of levee breaches when she made the statement (quoted in the above discussion of federal government situational awareness) to state and federal officials in the noon video teleconference on the day before landfall that "[w]e have not breached the levee at this point in time." This was a particularly unfortunate misstatement, as it may have contributed to the federal government's confusion about the status of the levees. The record does not indicate when she learned her statement was inaccurate or whether she made any attempt to inform the

state and federal officials on the video teleconference, including the White House deputy chief of staff, of her mistake.

The state's response was also hampered by lack of information about the locations of people in distress. For example, the state was slow to learn about people brought by search and rescue teams to the major highway intersection in west New Orleans known as the Cloverleaf. Similarly, LOHSEP did not learn about people assembling at the Convention Center until well after crowds amassed there. Mayor Nagin bears some of the blame for the delay, as he apparently failed to inform other officials when he decided on Tuesday, August 30th to open the Convention Center as a shelter when the Superdome became overcrowded. Just the same, it was striking to hear the LOHSEP operations manager, Colonel William Doran, testify that his information on that situation was limited to what he saw on TV and occasional reports from security officers.

The National Guard, which took charge of the Convention Center on Friday September 2, initially learned about the Convention Center situation through <u>inadvertence</u>. Brigadier General Gary Jones of Louisiana, Joint Force Commander of all National Guard troops involved in the Katrina operation, said, "We had no knowledge of [the people there] until we sent out reconnaissance patrols [on August 31], and those reconnaissance patrols came back and said, 'Oh, <u>by the way</u>, it looks like you've got another group of about 15,000 sitting over there.""

[...] As Col. Doran testified, LOHSEP was simply not equipped for the volume of information it needed to assess [...]

(Chapter 19–10-12)

Chapitre 14

PROTECTION DES INFRASTRUCTURES CRITIQUES, COMMUNICATION AVEC LE PUBLIC, RÔLE DES MÉDIAS

Effets dominos

La question des infrastructures critiques est désormais bien reconnue. L'épisode Katrina montre à quel point un événement peut déclencher des effets dominos majeurs. En l'espèce, pour leur approvisionnement énergétique, 12 états de l'Est des Etats-Unis étaient dépendants des installations de la zone, et du fonctionnement d'un pipeline majeur. De même, l'inondation d'une usine chimique produisant 31% de l'hydrogène produite aux Etats-Unis obligea à des réorganisations importantes dans le partage des stocks entre parternaires essentiels à l'échelon national.

Because of the lack of coordinated restoration plans, significant infrastructure problems were left to be addressed in ad hoc manner:

- Immediately after landfall, the Colonial Pipeline, a 5,519-mile system that transports fuel from Texas, Louisiana, Mississippi, and Alabama to distribution points throughout 12 states and the District of Columbia, reported that two major lines were shut down due to power outages. The company dispatched generation equipment, but FEMA regional representatives understandably diverted the generators to hospitals. However, additional planning would have readied enough generators for both purposes. It was not until a full week after the storm that the Colonial Pipeline was restored to full capacity. The Colonial pipeline is one of two key pipelines that carries up to 100 million gallons of gas, heating oil, and other petroleum products to the Southeast and the East Coast. A sustained shut-down could have a serious impact on our nation's energy supply.
- A flooded chemical plant that manufactured liquid hydrogen used by NASA and Force and in the finishing process of some steel parts did not receive dewatering assistance from the Army Corps of Engineers until September 5. This plant alone responsible for 31 percent of North America's industrial hydrogen production, and consequently NASA agreed to share its stored supply of hydrogen with the Department of Defense to compensate for this lost production. (Chapter 20-1)

La question des rumeurs : lorsque les défaillances de tous se combinent

Les situations de turbulences sont propices aux rumeurs. Si l'on conjugue les défaillances des responsables et la précipitation du sytème médiatique, on aboutit rapidement à des situations où les rumeurs dominent, deviennent de véritables événements, qui en arrivent à bloquer directement et la représentation du problème, et le déroulement de l'intervention. Le rapport mentionne le cas de la dissémination de rumeurs dans le drame du Titanic et souligne que le problème n'a fait que s'aggraver avec la puissance du système de transmission. Dans le cas de Katrina, on a vu successivement une sous-estimation de la gravité de la situation (« les levées ont tenu »), puis une sur-estimation ("dizaines de cadavres cachés dans des réfrigérateurs, viols de bébés") qui, l'une comme l'autre, ont eu des effets très dommageables.

Sous-estimations médiatiques

It is essential that the news media receive accurate disaster information to circulate to

the public. News media can also help inform the public by reporting on rumors and soliciting evidence and comment on their plausibility, if any. They may inadvertently do damage by reporting on rumors without seeking context or confirmation, or by presenting them as established facts. The *Evening Sun* newspaper of New York City announced this news atop its front page on April 15, 1912:

ALL SAVED FROM TITANIC AFTER COLLISION RESCUE BY CARPATHIA AND PARISIAN; LINER IS BEING TOWED TO HALIFAX AFTER SMASHING INTO A ICEBERG.

The factual deficiencies of those headlines – based, if readers dove deeply enough into the article's text, on a passing reference to an unquoted report by parents of a ship's unnamed telegrapher – are now apparent, but they remind us that there is nothing new about the phenomenon of news media reporting rumor.

Nearly a century later, the proliferation of news outlets, the competition to be first with a powerful story, the technologies that make broad reach and rapid reporting possible, and the 24-hour cycle of Web and broadcast news can increase the chance that rumors will creep unlabelled or unchallenged into news stories. And when public officials fail to provide timely, accurate, and credible public information – or stand before microphones and cameras to spread rumors themselves – rumor can become a serious threat to civil order and to relief efforts.

For example, on August 29, the day of landfall, ABC's "World News Tonight" reported: "In New Orleans, entire neighborhoods are underwater, but the levees held. The nightmare scenario of an entire city underwater did not happen." Other broadcasters said: "New Orleans dodged the big bullet" (NBC's "Today" show, August 29) and "They dodged the bullet, but they still got a sound bruising" (National Public Radio's "Talk of the Nation," August 29). As the public learned later, on-the-scene reports by emergency officials, residents, and the press had already described fl ooding from levee breaches and overtopping several hours earlier. For example, Ivor van Heerden, the Director of Louisiana State University's Center for the Study of Public Health Impacts of Hurricanes, relayed that "the National Weather Service [is] reporting that one of the levees was breached ... as the reporters have said, there's very, very significant areas of New Orleans that did fl ood from the levee overtopping. In some areas we have about 11 feet of standing water. People have been forced out onto the roofs of their homes." Yet as late as the next morning, August 30, there were still news items like this Washington Post report:

Some experts predicted the storm could become one of the worst catastrophes in U.S. history. But the city managed to avoid the worst of the worst. The Mississippi River did not breach New Orleans's famed levees to any serious degree.

Others issued conflicting reports, even within their own stories. Accurate reporting was at a premium, not only concerning the damage to the levees, but also with respect to security and law-enforcement issues, as discussed below.

Getting news from the field, through the editing process, and to the public, all under time pressure, is a challenge. While modern technology makes correction of mistaken reports easier and faster than in the days of the *Titanic*, thanks to the same technology, news travels that much more quickly in the fi rst place, magnifying the potential damage of erroneous reports. (Chapter 20 –3-4)

Défaillances des responsables

Accurate information is never as critical as during an emergency. It's also never more difficult to obtain. Emergency-response planning – in this case, the NRP and the State of Louisiana's Emergency Operations Plan (LA EOP) – tasks federal and state agencies with delivering reliable information to the public and the media in the event of a disaster.

During Hurricane Katrina, however, officials at all levels of government either failed to comprehend these roles or ignored these obligations, though there were times when officials understood and carried out their duties.

The NRP's Public Aff airs Support Annex directs DHS, in coordination with its component FEMA, to "mobilize" federal assets to deliver information to the public regarding emergencies as well as "use media monitoring... and other techniques to identify rumors, misinformation, inaccurate reports..." and rapidly correct them. The NRP also calls for establishing a federal Joint Information Center (JIC) to support the Joint Field Office (JFO) with public-affairs matters and information dissemination during an emergency, at the location of the disaster, depending on the incident's requirements. However, the DHS reported that its federal JIC was not established until September 6 – over a week after Hurricane Katrina made landfall.

[...] A DHS/FEMA after-action report attributed some of the difficulty and, ultimately, the failure of federal and state officials to ensure a flow of accurate, timely information to factors including the overwhelming damage to communication infrastructure, the early lack of co-location between federal (DHS/FEMA) and state public-information centers, reliance on field staff to relay information on sporadically functional equipment, and the pressure on public-information staff to react to media queries as opposed to pushing out new information. [...](Chapter 20 –4-5)

Exagérations médiatiques ; envolées officielles débridées

As for the media, some of the rumor traffic in Katrina derived from the reliance of reporters on dubious sources. A New Orleans *Times-Picayune* reporter later chastised himself for passing along unconfirmed a National Guardsman's comment that a freezer at the city's Convention Center held "30 or 40" bodies, and another soldier's comment that the dead included a "7-year-old with her throat cut." As Brian Thevenot, the *Times-Picayune* reporter, went on to note, "Neither the mass of bodies nor the allegedly expired child would ever be found," but the rumor was eventually traced to gossip in the food line at a nearby casino where military and police personnel were staging.

The impact of rumors – sharks swimming in downtown New Orleans, dead babies in trash cans, and stacks of bodies at the Superdome and the Convention Center – was compounded by misinformation from officials. New Orleans Mayor Ray Nagin told a nationwide TV audience about people "in that frickin' Superdome for fi ve days watching dead bodies, watching hooligans killing people, raping people." New Orleans Police Superintendent Eddie Compass reported that babies were being raped there. Both statements were unfounded.

Inaccurate rumors reported without caveats, particularly with respect to law enforcement, included: "Violent gangs are roaming the streets at night, hidden by the cover of darkness" (Fox News), troops on rooftops looking for snipers as "gunfire crackled in the distance" (Los Angeles Times), "a young man run down and then shot by a New Orleans police officer" (Ottawa Sun), and "Girls and boys were raped in the dark and had their throats cut and bodies were stuffed in the kitchens while looters and madmen exchanged fi re with weapons they had looted" (Financial Times of London).

The frequency and apparent authority of rumor-based reporting during Hurricane Katrina added to public confusion about events along the Gulf Coast. As two *Washington Post* investigators concluded:

The sensational accounts delayed rescue and evacuation eff orts already hampered by poor planning and a lack of coordination among local, state, and federal agencies. People rushing to the Gulf Coast to fl y rescue helicopters or to distribute food, water, and other aid steeled themselves for battle. (Chapter 20 –5-6)

Conséquences de la mauvaise information sur l'effort de secours

At 9:15 p.m. CT on Thursday, September 1, DHS issued a report that FEMA's search and rescue forces "ceased operations until National Guard can assist TF's [Urban Search and Rescue Task Forces] with security." James Strickland, a member of FEMA's Urban Search and Rescue team, explained that throughout the day there had been reports of shootings and rioting in the streets.

And at that point, we said, okay, we're not sending out any of our teams unless they have some type of force protection with them, which at the time was kind of scarce... So that day, by the time we got force protection kegged up with everybody, we had really lost most of the day, the daylight gone...If any went out, it was very limited as to what went out because we didn't have a sufficient protection plan.

Many private-sector telecommunications were delayed by similar anxieties. Jeff Glick, the Division Chief for Critical Infrastructure Protection at the National Communications System, said "[B]e they true or not, the perception that the [communications sector] crews felt that they weren't safe, and the companies would not let them go into the area because of lack of being able to get enough security, slowed initial response and reconstitution of the communications net." Christopher Guttman-McCabe, the Vice President for Regulatory Affairs at Cellular Telecommunications and Internet Association, agreed: workers feared they would be "assaulted, stripped of whatever they had with them" when they entered the disaster area to conduct repairs. Ultimately some companies hired private security guards to protect their employees. (Chapter 20 –6)

Des officiels aux idées très étranges sur leurs responsabilités en matière d'information

Federal, state, and local governments must also disseminate information critical to the health, safety, and security of the public, which includes evacuation or decontamination instructions and warnings. The NRP ascribes primary responsibility for this to state and local governments; when catastrophic events have overwhelmed state and local authorities, the federal government must step in. However, no level of government provided adequate safety information to the public during Hurricane Katrina.

For example, neither DHS, through its component FEMA, nor Louisiana, nor New Orleans issued warnings about levee breaches or rising flood waters, though DHS/FEMA issued several other warnings, including one cautioning evacuees not to return to disaster areas prematurely. Nicol Andrews, FEMA's Deputy Strategic Director for Public Aff airs, testified that she did not consider warning the public about the flooding nor even discuss it with colleagues, other than FEMA Director Michael Brown and one other FEMA official:

That is not an action that FEMA has traditionally taken in the past; nor would I ever assume that it would be appropriate in this case... Public safety is not in the National Response Plan. It is not a FEMA responsibility... I'm not sure what good it would do to notify the public that the levees had been breached, even if it were a FEMA responsibility – which it's not.

When Ms. Andrews, one of only five individuals who accompanied Director Brown to Louisiana as staff support, was asked why she thought it would do no good to notify the public of the levee failures she said:

Where are they going to go? I mean, the city had been evacuated and the roads Closed... And again, evacuation and sheltering – also not roles that FEMA can take care of. It would not have helped the situation at all... And it certainly, again, wouldn't come from FEMA.

These comments are inconsistent with responsibilities assigned under the NRP. FEMA's Deputy Director of Legislative Aff airs, Thomas Bossert, has acknowledged that

communicating information to the public is "crucial."

The state also failed to effectively notify its citizens of levee failures. Louisiana never activated the Emergency Alert System that could have disseminated both audible and visual warnings to the public through radio and TV stations. The New Orleans Emergency Operation Plan's Hurricane Annex indicates that the city intended to rely on the Emergency Alert System as "the primary means of advising the public of a localized emergency."

The failure of government officials on all levels contributed to rumor mongering and circulation of inaccurate and confusing information, significantly impeding response efforts. This was one of the greatest repercussions of the failure to grasp federal and state emergency-response planning. (Chapter 20 –7)

Chapitre 15

RECHERCHE ET SAUVETAGE UNE AUTRE GUERRE, UN SYSTÈME DÉPASSÉ

Ce chapitre est exemplaire dans son rendu de la confusion qui a marqué la catastrophe. Ne surnagent finalement que ceux qui étaient très bien préparés. Tout le reste n'est que confusion généralisée, y compris au sein des armées. Les hypothèses fondamentales, implicites, des dispositifs sont toutes anéanties et l'on se retrouve dans une situation non pensée où l'on fait juste ce que l'on peut, en ne comprenant pas grand chose au théâtre d'opérations.

- En principe, la recherche et le sauvetage, c'est pour quelques victimes ensevelies dans un bâtiment effondré pas pour une ville entière, un territoire entier.
- En principe, la recherche et le sauvetage, c'est en milieu sec : on envisage pas un accident grave, dans un environnment lui-même déstructuré. Ici, le problème est que l'on est en milieu inondé ce qui annihile la quasi-totalité des moyens, qui n'ont pas été prévus pour cela
- En principe, ce sont les sauveteurs locaux qui sont en première ligne ils sont tous au nombre des victimes.
- L'exercice Pam avait indiqué qu'il faudrait 20 000 bateaux et 1000 hélicoptères on en a cent fois moins, ils n'arriveront que très tard. Et quand il y a des moyens, soit on ne les mobilise pas, soit on les prépositionne beaucoup trop loin, soit on les prépositionne dans un campement militaire qui se trouve être un point bas de la zone, avec des conséquences bien prévisibles lorsque l'inondation survient.
- Un bateau est providentiel sur le papier mais il y a bateau et bateau. S'il a un tirant d'eau trop important, il seras difficile à utiliser en environnement aussi accidenté. S'il est de type Zodiac, il risque de crever rapidement. Mais il ne faut pas se bloquer trop aisément dans les raisonnements : ainsi, un organisme refuse l'utilisation de bateaux de ce type ; d'autres responsables contestent cette appréciation et soulignent qu'on aurait pu utiliser ce type de bateaux. Il y a aussi de nombreux volontaires bénévoles : mais ils peuvent être dramatiquement sous-équipés, et certains décideront de les écarter, par sécurité ; mais pas toujours.
- Un hélicoptère est une merveille mais tous ne sont pas équipés pour le sauvetage ; ils peuvent être trop petits, ou trop lourds et, dans ce dernier cas, font tout simplement couler ceux que l'on voudrait sauver.
- En principe, on dispose d'un contrôle aérien là, on travaille en visuel, en prenant des risques énormes.
- En principe, on dispose de moyens de liaison, permettant notamment à chaque base de suivre ses engins; là, il n'y a plus de communication, les hélicoptères et avions communiquent juste entre eux, et s'arrangent entre eux comme ils peuvent, sachant qu'ils relèvent tous d'organismes différents, non reliés entre eux.
- En principe, l'action de sauvetage s'intègre dans une chaîne générale de régulation là, c'est au petit bonheur la chance (on reçoit par exemple l'ordre d'aller déposer une victime à deux heures de vol, ce qui gèle un hélicoptère).
- En principe, il y a un système de pilotage là, chaque organisme se juxtapose aux autres, sans communication ; et chaque organisme est en mutation constante au fur et à mesure de la montée en puissance.
- En principe, on dispose de cartes de la zone là, il n'y pas de cartes pour les intervenants

- extérieurs, qui ne connaissent pas l'environnement; on en trouve dans les répertoires téléphoniques, on les arrache et on en donne aux équipes. Plus délicat : la zone n'est plus dans son état initial, tout est bouleversé, et pas seulement le chantier spécifique, comme on peut le connaître dans un sauvetage-déblaiement classique et limité.
- En principe, on vient aider des gens et on s'attend à être accueilli comme des sauveteurs héroïques : on se heurte parfois à des refus de quitter les lieux. Et on n'a aucune base juridique pour faire évacuer des gens en danger de mort les textes viendront le 10 septembre. Plus stupéfiant, on se retrouve en milieu hostile, ou rapporté comme tel (ce qui n'est pas certain, mais qui peut lever le doute?). Certains décident de se retirer. D'autres non. On parlera de coups de feu. Mais est-ce un acte hostile, ou un signal de détresse d'un genre un peu spécial, pour se faire repérer?

Une difficulté spécifique pourrait être aisément absorbée par le système. Mais le système se trouve fondamentalement sujet à un tsunami de complexités. Il est totalement hors de ses repères. Ceux qui sont les mieux préparés pourront être efficaces, sauront s'adapter, inventer, tisser des relations nouvelles. Les autres feront comme ils peuvent, en se recroquevillant le plus souvent sur ce qui marche d'ordinaire, c'est à dire plus grand chose – ce qui justifie l'attente d'un environnement correspondant aux plans prévus. Le coût est considérable.

La Commission souligne que les plans étaient déficients. Certes, mais ce n'est sans doute pas là le plus préoccupant. La faille, une fois de plus, est intellectuelle, culturelle. Pour engager une action efficace, nos organisations ont besoin d'une planification. Une planification est fondée sur une vision établie, qui permet de fixer un script de référence, et, sur ce sript de base, tout un échaffaudage d'organisations et de moyens. Le problème est qu'il faut désormais penser des fonctionnements organisationnels alors que le script de base ne tient plus. Il y a là, dans nos cultures, et tout particulièrement nos cultures d'urgence, un impensable souvent indépassable. Dès lors, nos crises émergentes ont le champ libre. « Attaquer la stratégie de l'ennemi », souligne Sun Tzu. Mais il n'y a là aucune fatalité : seulement une exigence de mutation

Recherche et sauvetage hors des grilles habituelles

Un immeuble effondré ? Quelques personnes ou dizaines de personnes ? Un chantier bien identifié ? Un environnement habituel ? Non, toutes les références ont sauté.

On the day of Hurricane Katrina's landfall, rescuers from Louisiana's Department of Wildlife and Fisheries (W&F) didn't need their standard grid system for searches. From every direction, thousands of people on rooftops were calling for help in the dark – that evening, lights from the search-and-rescue boats and helicopters were the city's only source of illumination. [...] Federal, state, and local officials combined to rescue over 60,000 people after landfall. (Chapter 21-1)

Prior to Katrina, the NRP [National Response Plan] considered SAR [Search And Rescue] to be primarily, if not only, search and rescue of collapsed structures. The NRP reflects this belief by titling the mission as Urban Search and Rescue (USAR) and by requiring FEMA, rather than some other agency, to act as the lead agency for ESF-9. However, Katrina required search and rescue efforts not only in urban collapsed structures but also in a water environment. U.S. Coast Guard Admiral Vivean Crea acknowledged that the federal response plan should be capable of covering more than one type of search and rescue. (Chapter 21–4).

"Water rescue is not part of the USAR mission," Lokey [FEMA Federal Coordinating

Officer (FCO)] testified before the Committee. Indeed, when FEMA search and rescue teams arrived in New Orleans, they did not have boats. Instead, the FEMA teams joined boats operated by volunteers or other agencies. (Chapter 21–5).

Sauveteurs locaux : paralysés

Le rapport souligne que l'hypothèse de l'exercice Pam se vérifia : les sauveteurs locaux étaient eux-mêmes victimes. Mais ce message ne fut pas entendu, et ce fut la consternation de découvrir cela au moment de l'événement.

Cependant, la commission souligne aussi que pareille vision est sans doute liée au fait que, localement, on n'était pas du tout préparé à ce type de situation. Il n'est donc pas évident qu'il faille établir la règle selon laquelle les forces locales seraient par hypothèse hors-jeu. Le problème de fond est l'incapacité à prendre acte des réalités.

Hurricane Katrina confirmed what Pam predicted: many local first responders had been incapacitated and thrown into disarray by the severe hurricane. The section on search and rescue in the plan that grew out of Hurricane Pam stated: "Parish resources in the most severely impacted areas will not be available for several weeks or even months, as they were not removed from the area prior to the storm." But even if Pam predicted tha Parish resources would not be available, FEMA's Federal Coordinating Officer, the organization's lead officer in Louisiana, who was stationed in Baton Rouge before landfall, pointed out that Pam "did not envision the number of first responders in New Orleans that would become disaster victims and would not be available to take part in that plan."

Pam's conclusion that parish resources wouldn't be available for weeks, if not months, may have derived from the city's inadequate preparedness for search and rescue. For example, the NOFD owned no boats; the NOPD owned only five. Although the NOFD was well trained in USAR and incident command, it had no training in water SAR The NOFD had applied in 2005 to DHS for water USAR training, even lining up an instructor, but DHS denied its application. In the absence of boats and water SAR training, NOFD and NOPD officers had to commandeer and hotwire boats to improvise rescue missions.

Finally, the Hurricane Pam exercise predicted that a similar hurricane in real life would "result in flooding of many roads, limiting access into many areas until flood waters subside." Such a warning required readiness for air and water rescue; specifically, Pam called for 20,000 boat-based rescues and about 1,000 helicopter rescues. Emergency planners at all levels of government should have realized that large-scale search and rescue operations would be likely if a major hurricane struck New Orleans.(Chapter 21–2-3)

Les raisons du succès de la Coast Guard

Une excellente préparation, une capacité de cohérence de pilotage, ont permis à l'US Coast Guard de faire un travail exceptionnel.

Cependant, au-delà de ce que dit la Commission, il faut souligner que la Coast Guard n'eut pas à conduire le système global, mais seulement ses missions spécifiques. C'est certes déjà beaucoup, mais le problème le plus complexe – là où se mesurent nos décalages intellectuels et stratégiques – est bien celui de la conduite générale des opérations.

In general, the Coast Guard performed exemplary work in its search and rescue missions. Several factors may explain why: (1) pre-positioning of assets close enough to be useful on Monday, August 29, the day of landfall, but still out of harm's way; (2) training and equipment for water missions; (3) an organizational culture that encourages personnel to respond proactively; (4) a familiarity with incident response generally and the Incident

Command System specifically throughout the entire organization; and (5) a long-term presence in the affected areas, promoting familiarity with the region and working relationships with state and local agencies. [...]

A key factor in the Coast Guard's rapid reaction is that, unlike FEMA, the Coast Guard sees itself as a first-responder. Prior to landfall, based on the forecasted intensity of the storm, the Coast Guard decided to move its headquarters to its alternate site in St. Louis, Missouri, and to use its alternate incident command post in Alexandria, Louisiana, approximately 200 miles away. The Coast Guard evacuated personnel and their family members from the direct path of the storm and pre-positioned personnel and assets north, east, and west of the predicted track, but close enough to maintain its ability to return to the affected area.

As a result, the Coast Guard was able to begin search and rescue missions by 2:50 p.m. on the day of landfall. The winds were still consistently 45-50 knots strong³⁹ when a rescue swimmer named Laurence Nettles was lowered by helicopter and navigated his way between tree limbs to rescue a four-month-old infant, her mother, and grandmother and their pet dog in Plaquemines Parish. Of the more than 33,000 rescues the Coast Guard completed, 12,500 were completed using helicopters.⁴¹ This was far more than the Hurricane Pam prediction of 21,000 total rescues, of which 1,000 would be helicopter rescues. Within the first few days, about 40 percent of the Coast Guard's national helicopter fleet converged on the Gulf Coast to assist in search and rescue and the air delivery of food and water. (Chapter 21–3-4)

L'aveuglement : prépositionnement dans les zones inondables

Il faudrait investiguer davantage que ne le fait la Commission pour mieux comprendre comment des responsables de secours peuvent en arriver à placer leurs moyens dans les zones qui seront inondées. Probablement parce que l'hypothèse de l'inondation est effacée du théâtre d'opération, alors que c'est bien l'hypothèse à prendre en compte. Nous sommes probablement là sur un exemple idéal-typique des pathologies déclenchées par la crise hors-cadres.

Although W&F pre-positioned search and rescue assets both within and on the outskirts of the affected areas, the Louisiana National Guard pre-positioned its boats and high water vehicles primarily at Jackson Barracks, which flooded when the Industrial Canal levee broke and flooded the Lower Ninth Ward. The floodwaters rendered many of the boats and high water vehicles unusable on the day of landfall. As many witnesses said, a hurricane's precise landfall and impact are difficult to predict. Nonetheless, placing a key element of local first response at Jackson Barracks, one of the lowest points in the city, was not an exercise in prudent planning. (Chapter 21–5)

Anticiper la perte totale de communication, même chez les meilleurs

The Coast Guard should have been better prepared for an anticipated breakdown in communications infrastructure. While not initially deployed for that purpose, aircraft such as C-130s and P-3 AWACs provided useful in relaying communications. More thought should be given to determining whether this or other temporary means of communication should be used in other large scale incidents like Katrina. (Chapter 21–7)

La perte de tout repère géographique : pas de cartes, zone bouleversée

Officials from nearly every search and rescue agency told Committee staff that they

lacked basic maps of the area. At one point, state and local officials tore maps out of telephone books, so that out-of-state search and rescue teams could have some sense of where they were going. However, high floodwaters in New Orleans hid street signs from view, complicating their efforts. (Chapter 21–8)

La perte de toute coordination

The lack of coordination had several significant consequences. Agencies searched areas without knowing whether those areas already had been searched by others. The agencies in boats were mostly unable to coordinate with the National Guard or the Coast Guard to request helicopters if victims needed to be airlifted. Finally, the lack of coordination prevented food, water, and other critical needs from reaching the rescuees gathered at the search and rescue collection sites. (Chapter 21–8)

Des outils inadaptés, dans un contexte de confusion

And although the total number of military helicopters – active-duty and National Guard – reached 293 on September 8, the number does not accurately reflect the number of assets devoted to SAR. Many of the helicopters in the region were not equipped with the hoist necessary for SAR, and many were light utility helicopters, without the necessary lift capacity. Others, such as the MH-53s from *USS Bataan*, are so large that the down-wash from their rotors would push a victim underwater, and thus can also not be used for SAR. While these aircraft served essential roles in medical evacuation, personnel transport, and logistical missions, hoist-equipped aircraft were a highly valuable asset, and far less numerous. Furthermore, the available SAR-capable aircraft were, at times, tasked with support missions more appropriate to the utility aircraft, detracting from the more urgent life-saving mission. (Chapter 21–16)

La confusion organisationnelle, l'absence de contrôle aérien

The hundreds of aircraft that arrived on the Gulf Coast faced an overwhelming task. From throughout the miles upon miles of destruction, the number of distress calls built by the day, and as SAR crews would fly to respond to calls, they would often pass by many more victims in need of rescue. The aircraft and crews flew long and difficult hours to the point of exhaustion, and at the same time, flew in extraordinarily dangerous and confusing conditions in congested skies, rescuing thousands of victims from rooftops, attics, apartments, and overpasses. The participants included not just the DOD, National Guard, and Coast Guard, but numerous civilian elements such as the DOI, state and local law enforcement agencies, and commercial entities. Yet in the chaos of Katrina's aftermath, no network of coordination linked these resources; even the DOD assets remained under separate and changing commands for many days. No common strategy to a thorough and expeditious search existed, and no unified air traffic control system ensured safety of flight. At the root of these problems is the fact that the United States lacks an appropriate national plan for SAR in large scale disasters. (Chapter 21–16-17)

Because the storm had incapacitated military and civilian air traffic control radar systems throughout the Gulf Coast, much of the airspace was uncontrolled, creating a hazardous and inefficient situation, with pilots relying simply on a "see-and-avoid" system, without the essential tracking or separation normally provided by an Air Traffic Controller. "I am amazed at the volume of traffic that was in that [Area of Responsibility]

and there was not a mid-air collision," Rear Admiral Dan Lloyd, a Coast Guard representative at U.S. Northern Command (NORTHCOM), said. Coordination was poor because no overarching command existed to assign search sectors, communicate with all assets, or direct aircraft to respond to distress calls. Second Fleet recommended, "Centralized Command and Control, with subordinate sector command and control of air, land, and water-borne assets, in place as soon as possible, will maximize safety and capabilities." The different services each directed their own aircraft, with the structure changing continuously due to the rapid buildup of assets in the operating area throughout the first week.

From Tuesday, August 30 to Wednesday, August 31, DOD air assets operated with Coast Guard aircraft under the coordination of Coast Guard District Eight. Beginning Wednesday, August 31, all DOD air assets were controlled by Rear Adm. Kilkenny, based on *USS Bataan*. Beginning Wednesday, August 31, Army SAR assets reported to the Louisiana National Guard, stationed at Eagle Base at the Superdome. Beginning late in the week, Air Force and other shore-based SAR assets reported to the Joint Force Air Component Commander, who arrived at Camp Shelby, Mississippi on Thursday, September 1. On Saturday, September 3, Air Force Brigadier General Harold Moulton arrived from NORTHCOM to consolidate Command and Control of all Title 10 SAR units from a mobile headquarters unit at Naval Air Station Joint Reserve Base in Belle Chasse. Meanwhile, the National Guard established their SAR coordination headquarters at Zephyr Field, the New Orleans Saints' practice field in Jefferson Parish. (Chapter 21–18)

Chapitre 16

LOGISTIQUE UN MONDE PUBLIC SUBMERGÉ, UN MONDE PRIVÉ PRÉPARÉ

Le système d'appui – déjà connu pour ses limites en matière de logistique – a explosé sous les coups de boutoirs d'un événement d'une puissance radicalement hors des limites habituelles :

- On a bien acheminé des moyens, mais en proportion très insuffisante.
- On était encore dans l'idée que l'on recevrait des commandes précises de la part des états, mais ce fut le silence, ou des demandes totalement disparates.
- On aurait pu faire davantage avant l'arrivée du cyclone, mais on attendit, et après ce fut trop tard.
- On ne mit pas en place un centre de crise avancé sur la zone (il fallut 12 jours pour cela), et il fallut passer par des PC beaucoup trop éloignés, qui ne connaissaient pas la zone.
- On savait envoyer des moyens, mais pas suivre ces envois.
- On pouvait faire des livraisons, mais pas dans un environnement pareil, avec des barrages de sécurité qui ne laissaient pas passer des livraisons de biens même essentiels ;
- On dût finir par tout transférer au ministère de la Défense sous la forme d'un contrat d'un milliard de dollars, une mission un peu brutale pour la Défense.
- On sait à peu près livrer des marchandises à un point planifié, mais pas à un nuage de points non planifiés; et encore, lorsque les plans ont retenu pour point d'arrivée des matériels une zone inondable, même le schéma connu ne fonctionne pas.
- Et le tout avec des moyens en personnels incroyablement pauvres : un seul agent pour établir les listes de demande pour toute la Louisiane.

En regard, la Commission fait l'éloge des grandes entreprises qui apparaissent habiter un autre siècle : une forte anticipation, des contrats préalables, des stocks pré-équipés, une mobilisation sur l'ensemble des Etats-Unis, et même du Canada, une réactivité professionnelle.

En résumé : d'un côté, on a des plans, qui explosent dès lors que les hypothèses de situation nominale ne sont plus satisfaites ; de l'autre, on a une compétence. Deux mondes, si l'on prolonge quelque peu la réflexion de la Commission, qui s'opposent radicalement dans leur esprit : d'un côté, on pense hiérarchie, formulaire, tuyaux, et il ne faut pas soulever à l'avance un problème qui révélerait une faille ; de l'autre, on pense adaptation stratégique, vitesse, opportunité, et la faille stimule l'envie de relever le défi.

On pourrait sans doute penser que la Commission, à ce point consternée par ce qu'elle a observé, adopte des lentilles un peu trop favorables pour examiner les exploits du privé – l'examen met surtout en exergue quelques cas, sans doute les meilleurs. Mais le défi est bel et bien posé. Et nul ne pourrait prétendre que nos exercices échappent totalement à ces tendances de fond – malheur à qui ose mettre en avant une question pour laquelle la puissance publique n'aurait pas la réponse dans ses plans. Quant au secteur privé, il est tenu le plus souvent comme un auxilliaire qu'il faut tout de même convoquer pour une participation à la marge, mais pas encore véritablement comme acteur majeur et à certains égards central.

Effondrement

Although when interviewed by the Committee staff some FEMA witnesses testified that FEMA pre-positioned more commodities before Hurricane Katrina made landfall than

before any other previous storm, it was not enough to sustain the tens of thousands of people left stranded by the hurricane. FEMA's logistics system became critical to providing additional food, water, ice, portable toilets, fuel, generators, and other necessary supplies to the impacted areas. However, as Secretary of Homeland Security Michael Chertoff testified: "FEMA's logistics systems simply were not up to the task." Former FEMA Director Michael Brown agreed: "FEMA has a logistics problem."

In some cases, state and local officials faced such overwhelming circumstances that they could not assess or communicate their needs accurately to FEMA. At other times, the system itself revealed flaws, as red tape prevented the prompt and complete acquisition and distribution of assets. To some degree, each level of government shares some of the responsibility for the failure of the FEMA commodities system after landfall. Ordinary people forced to endure inhuman circumstances were the victims of these failures. Without generators, plumbing, or portable toilets, the Superdome became a stadium of human waste rotting in extreme heat. In Mississippi, victims who took refuge in public shelters found shortages of food and water, sanitation problems, and lack of electricity. (Chapter 23-1)

Un problème récurrent

FEMA's logistics failure during the Katrina crisis was no surprise. FEMA already knew it lacked staff and systems needed to respond to a large disaster. William Lokey, Federal Coordinating Officer (FCO) in Louisiana, told Committee investigators that FEMA regularly fails to track supplies: "It has been a problem at every disaster I'm aware of." (Chapter 23-1)

Un décalage de compétence avec le privé

Unlike many large private shippers, FEMA could not track assets en route to destinations, as Moore explained: "I can tell you today when they leave someplace and I can tell you when they arrive someplace because they're manually counted when they got through the gate. In the middle of that, I don't know where they are." (Chapter 23-2)

Une posture statique totalement en décalage

FEMA's decision to wait to determine whether pre-positioned assets were sufficient – instead of maintaining a constant stream of supplies – compounded the problem, as admitted by FEMA Director Brown: "We pre-positioned and then tried to see what was going to happen and then started it back up again. We should have just kept pushing." (Chapter 23-2)

La FEMA submergée passe le tout au DOD : pour 1 milliard de \$

FEMA recognized that it had failed.40 Perceiving an overwhelmed logistics system, FEMA Director Brown "reached back to headquarters and had discussions about [how he] wanted all logistics turned over to DOD."41 On September 1, FEMA headquarters contacted the Department of Defense, requesting that DOD take over full logistics operations in Louisiana and Mississippi,42 thus proposing the transfer of one of its most important functions to another entity.

Considerable attention has been paid to this attempt to turn over FEMA's troubled logistical efforts to the Department of Defense. After discussions among FEMA and DOD officials, on September 2 FEMA issued a \$1 billion mission assignment to DOD to plan

and execute the procurement, transportation, and distribution of commodities in Louisiana and Mississippi. FEMA officials authorized spending up to \$1 billion on this mission, an estimate, as one FEMA official said, that was large enough to give DOD the authority to "cover the eventualities" that might arise in accomplishing this mission.

Assistant Secretary of Defense Paul McHale testified of this mission that DOD "got the largest request for assistance in the history of the United States. And it wasn't anything other than . . . 'full logistics support throughout the entire area of responsibility.'" McHale continued that he felt that this was a "very broad, fairly loosely defined mission requirement" but since it was a "crisis circumstance, we felt that we should take that on, and we did."

DOD's performance under this mission assignment was ultimately considerably less than full logistical support. DOD appears to have identified certain areas of FEMA's logistics system that required immediate attention – namely sourcing, tracking, and transportation – and restored the flow and distribution of commodities to both Louisiana and Mississippi. Hence, FEMA retained control over many of its traditional tasks. Of the billion dollars authorized, DOD has sought reimbursement from FEMA for approximately \$100 million of work. Billing records compiled by FEMA indicate DOD has sought reimbursement from FEMA partly for substantial costs for ship leases, fuel, airlift support, personnel travel, and some food. (Chapter 23-4)

Trois problèmes : l'eau, les communications, la sécurité

Comme toujours, on plaide que tout irait bien si les conditions n'étaient pas ce qu'elles sont. On a tout prévu, mais pas l'inondation. La plaidoirie du Secrétaire Chertoff est d'un grand clacissisme.

The day before the mission assignment to DOD, despite FEMA leaders' acknowledgement of the logistics problems, DHS Secretary Chertoff was publically claiming otherwise:

The limiting factor here has not been that we don't have enough supplies... We not only had a hurricane; we had a second catastrophe, which was a flood. That flood made parts of the city very difficult to get through. If you can't get through the city you can't deliver supplies...I'm telling you that we are getting food and water to areas where people are staging... The limitation here on getting food and water to people is the condition on the ground.

Other factors contributed to the logistics struggle. For example, communications between officials within Louisiana and with FEMA headquarters were almost nonexistent. As Scott Wells, the Deputy FCO in Louisiana said, "There was just a big communications void" in Baton Rouge. FEMA had done little before landfall to ensure communications capabilities after landfall. The FEMA team leader at the Superdome had very limited communication capabilities with superiors in Baton Rouge an elsewhere and estimated that this lowered his operational effectiveness by 90 percent. Additionally [...] both FEMA and state officials cited security issues as a principal reason for delayed delivery of commodities. (Chapter 23–4-5).

Le filtrage des demandes par des bureaucrates plus ou moins bien inspirés

Le terrain demande des matériels en appui, à partir de ce qu'il observe. Par réflexe, la bureaucratie coupe dans ces demandes, en fonction des idées qu'elle croit pouvoir se faire à distance : on refuse des zodiac, on enlève quelques % dans le nombre de cars demandés, par

exemple. Comme si la compétence d'un service résidait dans sa capacité à rogner sur les demandes. Qu'il y ait des arbitrages à faire, des économies à envisager, n'est pas discuté par la Commission, mais elle critique le caractère discrétionnaire de ces mesures, prises sans discussion avec le terrain, et probablement par des ignorants.

FEMA personnel admitted that there was a chance that an approved request would be denied at FEMA's Regional or National Headquarters. For example, FEMA denied a state request for 1,000 small rubber rafts because the boats would not be useful for rescues in debris-filled water. A state official disagreed and testified that the boats would have been valuable for towing behind motorboats and picking up victims in shallow water. LOHSEP's Colonel Jeff Smith felt that reasonable requests were being "filtered," probably because not all levels of authority recognized the severity of the situation. (Chapter 23-7).

Un exemple encore plus clair avait été donné au chapitre 22 – "vous demandez 500 bus, vous en aurez 455" :

On the day of landfall, Governor Blanco had asked then FEMA Director Brown for 500 buses. Brown agreed, but no buses arrived Tuesday morning. Governor Blanco asked Brown again. Once again, Brown agreed, but no buses arrived in New Orleans Wednesday morning either. The Governor turned to the White House. When former White House Chief of Staff Andrew Card called Governor Blanco later that morning, she requested his help in obtaining the promised 500 FEMA buses, adding that she may need as many as 5,000. The Governor reiterated her frustration about FEMA's failure to deliver buses in a phone call to the President later that afternoon.

FEMA did not ask the U.S. DOT to send buses to New Orleans until 1:45 a.m. on Wednesday, August 31, two days after landfall and 36 hours after Brown's agreement to provide them. Brown could not explain why it took so long.

Notably, when FEMA finally tasked U.S. DOT, FEMA requested 455 buses – not 500. According to LOHSEP Acting Deputy Director Colonel Jeff Smith, a FEMA official at headquarters had overridden the state's request because that individual had found the request excessive in view of the "number of people" thought to have been left in the city. Col. Smith, a Certified Public Accountant, cited this episode as an example of how FEMA's bureaucracy failed the state: "I'll talk despairingly against one of my previous occupations; some bean counter looked at it and figured that, you know, we didn't need this. And I mean, the situations when you're going and it literally, it's life or death issues, it's no time to be quibbling about, you know, what you have there." (Chapter 22-5)

Le défi de répondre à des nuages de cibles

On conçoit de livrer de gros matériels à de gros pôles. Comme on l'avait vu lors des tempêtes de 1999 en France, le défi est aussi de pouvoir répondre à des myriades de demandes, en apportant du petit matériel, et sur des cibles disséminées.

The Louisiana Emergency Operations Plan designates LOHSEP as the lead state agency for coordinating the distribution of commodities. In Katrina's aftermath, emergency managers in Louisiana faced two distinct logistical challenges after landfall: (1) providing massive quantities of commodities to the enormous numbers of victims in the Superdome and Convention Center, and (2) disbursing relatively smaller amounts to the thousands of victims scattered across southeast Louisiana and the greater New Orleans metropolitan area – chiefly, the collection sites for rescuees along highway overpasses. Not surprisingly, they

performed best in delivering to locations where the need was rapidly identified and supply lines could be established. But LOHSEP failed to coordinate and establish supply lines to the ad-hoc, unplanned distribution points. (Chapter 23-8).

Une cascade de défaillances, depuis l'impréparation jusqu'au choix de sites sous l'eau

Some of the parishes' needs could have been met through better long-term planning and preparation. First, had FEMA and the state had executed more contracts with vendors before the storm for critical supplies, that would have saved time during the post-storm crisis. Second, key commodities were not sent until two days after landfall from Zephyr Field, FEMA's post-landfall operational staging area in Jefferson Parish, to the Superdome. Third, high-water vehicles were needed to deliver commodities to flooded areas (like the Superdome). The Louisiana National Guard failed to anticipate needing to use its highwater vehicles to distribute commodities and failed to anticipate the manpower and equipment needs of a large-scale commodities distribution. Fourth planners failed to ensure that all supply PODs in affected areas would be set up on high ground. Many parishdesignated PODs were flooded.99 LOHSEP and the parishes had to establish alternative drop points. Fifth, although Hurricane Pam working groups had discussed establishing Search and Rescue Bases of Operations (SARBOOs), temporary collection sites for rescuees on highway overpasses, neither FEMA nor the state had planned or prepared for a coordinated system of commodities distribution to the SARBOOs, where the situation became critical as transportation to evacuate the rescuees was delayed. (Chapter 23-9).

Entre grains de sables et impuissance : les check-points achèvent de bloquer le système

On Tuesday, the New Orleans Police Department and the Louisiana National Guard requested portable toilets for the Superdome. A FEMA representative at the Superdome promised to have toilets delivered the next day, Wednesday. But law enforcement agencies had checkpoints set up on major highways and prevented individuals without credentials from getting past some checkpoints. According to one portable toilets vendor, he was turned away twice at security checkpoints in Plaquemines Parish (where his supply yard was located) when he tried to fulfill the order. Eventually, the National Guard provided an armed escort which enabled him to make the delivery onSaturday. By that time, the Superdome evacuation was nearly complete. (Chapter 23-9).

Confusion: lorsque les responsables confondent Superdome et Convention Center

Further complicating the response to the developing situation at the Convention Center was confusion by Department of Homeland Security HSOC officials, who were tasked with gathering and disseminating critical information, and who believed the Convention Center and the Superdome were the same location. (Chapter 23-11).

Loin de l'amateurisme du secteur public, le professionnalisme du privé

The companies that testified at the Committee's private sector hearing all had in place deliberate plans for deploying and tracking materiel and personnel. From batteries, fuel, and generators to food and water, Wal-Mart, Starwood, IBM, and Mississippi Power knew what they would need, had those commodities either in place or at staging areas outside the storm's path, and had a plan for moving them in immediately after the storm. These companies also had employees from unaffected regions at the ready, to assist in the region

once the storm passed, and they responded proactively. Within seven days of Katrina making landfall, Mississippi Power had 11,000 workers on the ground from 23 states and Canada. They utilized mutual assistance agreements, in place prior to the storm, to "borrow" employees from other utility companies. IBM knew their services would be needed after the storm and deployed a Crisis Response Team to Baton Rouge to immediately begin working with government and nongovernmental organizations to address critical needs. Starwood also had a corporate response team staged at a safe distance, but ready to move in once the storm had passed.

Wal-Mart managed logistics effectively and delivered commodities quickly when responding to Katrina. Wal-Mart has it own fleet of trucks, 100 distribution centers, and stores located all over the country. Of the 100 distribution centers, 8 have reserved "disaster merchandise" square footage, with approximately \$4.7 million in "disaster merchandise" stockpiled for emergencies, including more than 250,000 gallons of drinking water. Wal-Mart also has relationships with vendors that help with surge requests during times of emergency. The company has a specific protocol for responding to disasters, and operates an emergency operations center year-round to coordinate crises around the country.

With Hurricane Katrina, Wal-Mart used its expertise to move in supplies and operate effectively. In the first three weeks after landfall, the company "delivered approximately 2,500 trailers of emergency supplies...including trucks of water and supplies that flowed into the New Orleans metropolitan area beginning on Saturday, September 3 for emergency service workers, shelters, and hospitals. A total of three temporary mobile pharmacies [were] provided to support communities, and a 16,000- square foot 'tent store' was erected to serve a community where the store had been all but demolished." Based on past experience with major storms and hurricanes, Wal-Mart knew what supplies would be sought prior to the hurricane making landfall and what would be needed for the recovery phase after the storm. (Chapter 23–14-15)

Chapitre 17

LE SYSTÈME MÉDICAL CONFRONTÉ À UN AUTRE MONDE

Au-delà des éléments factuels, qui sont connus, ce chapitre apporte des réflexions montrant comment le système de santé, notamment les hôpitaux, glisse vers des territoires hors références habituelles.

- Les principes qui fondent habituellement les analyses coûts-bénéfices ne fonctionnent plus : une évacuation est certes un acte à haut risque, mais on se retrouve bien vite dans une impasse léthale quand l'institution de santé part à la dérive.
- Les visions habituelles ne tiennent plus : on ne travaille pas sur des évacués extraits de la zone rouge, c'est l'ensemble du dispositif qui est en zone rouge.
- Il est normal d'attendre une aide extérieure pour sauver des hôpitaux : mais, en la circonstance, cette aide n'est pas disponible, et il faut éventuellement aussi (on n'a pas de certitudes sur ce point, mais il n'est pas facile d'attendre une preuve convaincante avant de déterminer une ligne d'action) compter avec des paramètres inimaginables comme celui de snipers prenant les hélicoptères pour cibles.
- La question d'une aide extérieure massive se pose, mais avec un problème d'accréditation qui relève rapidement du casse-tête. On ne saurait oublier toute sécurité dans l'embauche de volontaires, mais le processus d'accréditation, non préparé, se révèle impossible à établir (à noter que le risque, pour l'avenir, est une décision de centralisation bureaucratique interdisant toute flexibilité²⁷).

25 hôpitaux, 12 000 patients

Hundreds of special-needs patients were cared for at the Superdome and eventually evacuated. In the end, 19 nursing homes evacuated pre-landfall, and leaving 34 to do so after the hurricane. Moreover, a total of 12,000 patients and caregivers were evacuated from hospitals before and after Katrina with 25 hospitals evacuating in the first five days post-landfall. (Chapter 24-9)

Une analyse bénéfice-risque, mais sur hypothèses conventionnelles, donc fausses

L'habitude, les difficultés, et aussi des références solides – mais non fondées en l'espèce – conduisent à construire peu à peu une impasse. On tient qu'il y a moins de risques à rester sur place qu'à évacuer – mais toute l'analyse est faussée par le fait que les paramères habituels ne sont plus valides.

In both Mississippi and Louisiana, the onset of Hurricane Katrina found significant populations of acutely ill patients in hospitals and patients in nursing homes who were not evacuated. In the case of acutely ill hospital patients, most hospitals decided that the medical risk of moving these patients outweighed the benefit, and chose to shelter-inplace.

²⁷ Michel Nesterenko m'a notamment signalé l'article suivant : *ID Would Control Access to Disaster Sites*, by Devlin Barrett, Associated Press, Tuesday, September 4, 2007, washingtonpost.com, http://www.washingtonpost.com/wp-dyn/content/article/2007/09/03/AR2007090301229 pf.html

Le système de badge permettrait toute la rationnalisation voulue pour trier les volontaires ; aux détails près qu'il faudrait être en mesure d'établir les badges, de préparer une classification adéquate, et de pouvoir les lire sur site, ce qui supposerait bien évidemment de disposer du bureau voulu, et d'électricité. Entre l'avancée informatique remarquable et le labyrinthe kafkaïen, la limite peut être étroite.

Unfortunately, the majority were not adequately equipped to carry out this function in the face of a storm the magnitude of Katrina. Some nursing homes made similar decisions based on difficulties they encountered in previous evacuations or for other reasons. All told, some 235 deaths occurred in 28 of Louisiana's hospitals and nursing homes. Special-needs patients transported themselves or were evacuated to the Superdome and to other shelters. Although an estimated 450 special-needs patients were evacuated from the Superdome prior to landfall and transferred to a state-supported shelter in Baton Rouge, many more remained in the city. (Chapter 24-1)

Un système qui va au fiasco, en le sachant

La gravité des faits, la hauteur des contraintes, les règles du jeu qu'il faudrait avoir développé, font que l'on sait quelque part que le fiasco est au bout du chemin. Comme une tragédie qui se déroule, en toute connaissance de cause. Se mêlent ainsi des phénomènes tout à la fois d'aveuglement et de lucidité impuissante.

So on the eve of Katrina's landfall, federal, state, and local medical emergency managers found themselves confronted with the need to evacuate and care for thousands of medically compromised individuals – a circumstance forewarned in the Hurricane Pam exercise a year before Katrina.6 Even more telling is the fact that these officials were apparently well aware of the situation that they would face. For example, a U.S. Department of Health and Human Services (HHS) e-mail describes information communicated on a FEMA-arranged conference call on Sunday night, August 28, just hours before landfall. The e-mail stated that 40 to 50 patients at the Superdome special needs shelter were critical-care medical patients and that there were approximately 2,500 hospital patients still in New Orleans. The e-mail goes on to say, "Advanced planning was never completed on how the patients left in the hospitals will be evacuated after the event," and later noted, "it is assumed that many of the hospital generators will lose power given the expected height of the water." (Chapter 24-1)

L'inverse du schéma de référence : non plus un "ground zero", et un contexte préservé qui vient aider, mais un univers entièrement affecté

All of this had to be done in areas where major portions of the health-care system had been damaged or destroyed. All but three hospitals in the New Orleans area were incapacitated and essentially all hospitals in the Mississippi Gulf Coast area sustained some level of physical damage and operational disruption (from loss of power, evacuation of staff, disruption of their supply systems, etc.). Charity Hospital in New Orleans, which was rendered inoperable by flood water, was one of only two major trauma centers located in the entire state. (Chapter 24-2)

Some of the difficulties experienced in moving victims into the state's medical triage system were compounded by the fact that the evacuation of hospitals was simply not addressed in Hurricane Pam, despite the presumption that New Orleans would flood and that the hospitals would become inoperable. In fact, the Hurricane Pam exercise assumed that some 2,000 patients would be sheltered in place in area hospitals which would cease to operate as functional medical facilities due to flooding – a prediction that came strikingly close to reality during Katrina. Though faced with this daunting scenario, little action was taken to address it prior to Katrina. As explained by Dr. James Aiken, Medical Director for Emergency Preparedness for the Medical Center of Louisiana in New Orleans (a.k.a. Charity and University Hospitals):

Well, to start with my own hospital, it [Pam] did not change our planning at all. I don't think it changed anyone else's planning that I am aware of...[T]he focus of the health care planning that I participated in [during the exercise] had to do with not what happens within what we call the affected areas [that] have flooding but what happened on dry land. And most of the activities that happened in the health care breakout sessions had to do with standing up the temporary medical support sites.

[M] any of my colleagues registered our concerns that we were literally writing off any serious planning above and beyond what we had then, which was to tell the hospitals they were going to have to be self-sufficient for three to five and now seven days... So the Hurricane Pam, again, exercises and planning efforts, as far as I know, never addressed the issue of pre-threat evacuation or actually serious detailed planning for the affected area. (Chapter 24-3)

Une hypothèse hors-cadre: l'évacuation

As Dr. Guidry [Medical Director rand State Health Officer] explained:

When I had discussions with a number of these hospitals in this area over the years, the questions was, "How are you going to evacuate?" And their response was always, "We do not plan to evacuate. Our evacuation plan will be to get those people out that can travel, elective surgeries. But we will remain here with the people that are not able to get out and the people that are going to need ourcare so that we can be here after the event." (Chapter 24-4)

Aux confins de l'insaisissable

In the end, hospitals in Southeastern Louisiana were simply reluctant to follow their plans and evacuate the critically ill because of the danger, expense, and uncertainty of the hurricane path itself. As LSU's Dr. Aiken put it:

Hurricanes have a remarkable capability of changing directions quickly. And so when you say, "In the line of the path of a storm," you know, for us, that path actually gets realized after the fact. So when you talk about evacuating patients from the number of hospitals that now exist, and we have to expand this conversation beyond New Orleans, because, quite frankly, a lot of the destination hospitals that some of the areas use would be the same ones that we [LSU] would want to use.

... how do you decide which hospitals should evacuate and where should they go? I mean, do we evacuate the entire coastline?

... and again, remember 24 hours [prior to landfall of the hurricane], we do not want anybody on the road. So the risk benefit [issue arises], and also remember every single patient who is critically ill requires almost their own means of transportation, whether it's an ambulance or helicopter. We certainly could put a couple in. But for our critical care patients, school buses [are] not usually the answer.

In addition, evacuation would have required New Orleans area hospitals to confront the difficult problem of finding other hospitals that could take their patients. As Dr. Guidry explained, in Louisiana under normal situations, sick or emergency patients with pressing needs are sent to the New Orleans region, which hosts a large number of medical facilities, the state's "medical mecca." However, Katrina reversed that burden, causing 25 hospitals in the area to try to find places for their patients outside of New Orleans, and "the rest of the state can't absorb it." (Chapter 24–4-5)

Face à des impensables qui cristallisent brutalement

However successful it had been in prior hurricanes, the strategy of hospitals to stay open for critically ill patients and storm victims proved untenable in Katrina. After a few days, most hospitals that had stayed open were running out of fuel for their backup generators, making it impossible to operate effectively or, in some cases, unable to operate at all due to flooding. In desperation, they appealed to DHH to help them evacuate. Dr. Guidry found that helicopters and other transportation assets were tied up in search and rescue efforts:

And so their plan was stock up, be prepared to stay in place a few days. Most hurricanes, three days, five days out, you're done with it and be ready to take care of people after. The calls started coming in saying we're about to lose power, we're going to have to bag [manually ventilate] patients. We got to get them out of here. We got to get them out of here. We got to get them out of here. And I was asking for the resources to move them. Search and rescue is going to have to move them. I got to have the helicopters, I got to have the planes to move them out...So it then becomes where do I send them, how do I get them there, how do I get them out of there. So the Hospital Association is coming to me in tears, the folks there are in tears trying to help their folks and I'm beating my head to try to get the help. And you've got the search and rescue that's trying to get people out of water and rooftops and out of hospitals. And that's all the competing needs for the limited assets. (Chapter 24-5)

Plans-papier

The Committee also found that there was no process to vet the plans for consistency and practicability. For example, many nursing homes rely on ambulance services to evacuate their populations. During a crisis, however, ambulance services may be in use by other nursing homes or hospitals. Furthermore, nursing homes and hospitals are not required to evacuate. The facility's plan could simply be to weather the storm – even if the nursing home is in a flood-prone area. In short, nursing homes are only required to have their emergency plans *on the books*, which is a far cry from ensuring that they will actually work during a time of crisis. (Chapter 24-7)

Les volontaires : la question des accréditations, et l'impréparation générale

In the immediate aftermath of Katrina, HHS began receiving numerous calls from health professionals wanting to volunteer their time and services to the affected region. In response, HHS created an entirely new federal volunteer signup website. 192 For lack of a national credentialing system, HHS decided to rely on a private contractor to individually verify the credentials of the 34,000 individuals who volunteered in the weeks after Katrina.

The volunteering and deploying process was time and resource consuming at best. After registering on the website, volunteers were contacted by the private contractor to verify their credentials. Volunteers were sent to the HHS Human Resources Office to be hired as temporary employees, then to OPHEP for deployment. Credentialing became a significant bottleneck in the process, and there seemed to be no consistent plan as the weeks went on. Numerous documents indicate credentialing delays by the private contractor, who was hired and started work only after landfall. Because different organizations were handling credentialing, hiring, and deployment, HHS had limited information on volunteers in the system and where they were being deployed. The volunteers also posed a host of

difficulties for the HHS logistics department because volunteers were not familiar with travel regulations, procedures, and reimbursement protocols, among other issues. Creating this massive federal volunteer effort during the crisis took a significant amount of effort and resources at the federal and the local level and impaired HHS's ability to function as efficiently as possible.

Once created, the new volunteer system experienced many problems. Numerous documents indicate constant additions and changes to the website,198 underscoring the unplanned nature of this project in the midst of a significant national catastrophe. This was also singularly a federal effort. Staff to the Secretary of HHS made clear in an e-mail to those administering the database that there was a lack of coordination with states around volunteer recruitment. States felt that the HHS volunteer recruitment effort conflicted with their own efforts to recruit and organize volunteers which they would dispatch themselves and the HRSA-sponsored credentialing programs they had been encouraged to establish. It also failed to directly include state emergency-management agencies which were trying to fill requests for medical assistance from the Gulf Coast to ensure the efforts were coordinated and not duplicative.

Eventually, approximately 1,400 out of 34,000 volunteers in HHS's volunteer system actually deployed, or only 3.5 percent of those that signed up on the volunteer website. The costs of HHS's constructing and maintaining this database, and of contracting with a private credentialing entity, are not known. In the end, it was unable to efficiently process volunteers. The federal volunteer-deployment effort was a haphazard attempt to respond to undoubtedly well-intentioned people offering help in the immediate aftermath of Katrina. While it is human nature to want to volunteer and assist in the face of a major disaster, the significant effort made to attempt to accommodate individual volunteers may not have been the best use of resources.

To date, HHS has failed to meet its statutory mandate to create a national credentialing system to allow health professionals to work across localities and states to meet healthcare personnel surge needs. Had a national credentialing system been in place for Katrina, volunteer health professionals would likely have been utilized more quickly and effectively, obviating the need to create an entirely new federal volunteer database and deployment effort in the midst of a national crisis. (Chapter 24–22-23)

Chapitre 18

LE DOMAINE MILITAIRE : ENTRE PESANTEURS ET INITIATIVES

LCACs [Landing Craft Air Cushion], C-17s, C-130s, hospital ships, medical teams - whatever.

Overkill is better than undershoot.

POTUS is coming back to D.C. tonight just for this.

Admiral Ed Giambastiani, Vice Chairman of the Joint Chiefs of staff, to Admiral Keating, Commander of U.S. Northern Command,

August 30, 2005.

(Chapter 26 – 23)

Nous ne rentrerons pas dans les spécificités américaines, l'essentiel est surtout de relever, ici encore, des constats et réflexions de portée plus générale. On trouve ici de lourdes pesanteurs, et de remarquables capacités – en illustration de phénomènes bureaucratiques de portée générale.

Les pesanteurs. Avant de prendre quelque initiative que ce soit, si l'on veut se protéger (et échouer, mais cela n'est pas tenu pour si grave) un certain nombre de lois naturelles administratives sont à respecter à la lettre. Il faut :

- Disposer d'une vision claire de la situation dans son ensemble.
- Disposer de toutes les assurances garantissant que l'action est absolument nécessaire. Toute nouvelle grave doit faire l'objet de vérifications avant qu'elle n'engage à prendre une initiative par défaut, la situation doit être considérée comme normale et sous contrôle, ne justifiant aucune action ou initiative inhabituelles ;
- Imposer que les sollicitations éventuelles suivent rigoureusement les canaux administratifs prévus et les modes de transmission indiqués (même s'il n'y a plus de moyens de communication, plus d'électricité, il n'est pas question de tenir pour valide une demande arrivant par l'Internet, par exemple, s'il est stipulé qu'elle doit arriver par courrier comme ce fut le cas de demandes d'aide en provenance de Louisiane); et s'il n'y a pas de sollicitation explicite, la situation doit être tenue pour nominale aussi longtemps que l'on ne dispose pas des preuves écrites et transmises par plusieurs canaux officiels indiquant le contraire de façon évidente et à l'aune des critères habituels.
- Suivre un processus hiérarchique d'autant plus rigoureux, pointilleux et détaillé que les enjeux sont importants, et en évitant toute précipitation.
- Pour prévenir tout risque de difficulté de frontière, et afin de bien borner ses propres responsabilités, clarifier de façon minutieuse les lignes de démarcation et les attributions des multiples acteurs concernés.
- Ne rien engager sans plan détaillé et approuvé.
- Disposer de 80 à 90% de l'information avant de s'engager en quoi que ce soit. Surtout dans les cas graves, et plus encore dans les cas inhabituels.

Le sublime. A l'opposé, on trouve des démonstrations de professionnalisme et de responsabilité remarquables.

• Une ligne de fond : sortir de l'état de « léthargie par défaut » – on prend les rênes avant

- que la crise ait déclenché des états de sidération partout dans le système ; on ne laisse pas les différentes instances, à commencer par les plus éminentes, devenir les meilleures têtes de pont de la crise.
- Une ligne de pilotage : le chef d'état major donne ses intentions, à chacun ensuite d'utiliser au mieux son jugement pour traduire ces intentions stratégiques sur le terrain. Il ne donne pas le script, il donne une page blanche en exigeant que chacun fasse usage de ses capacités pour y transcrire le meilleur de qu'il est en mesure d'inventer et de faire.
- Une ligne d'audit implicite : vous ne serez pas jugé sur votre dextérité à utiliser toutes les ficelles des textes pour vous mettre aux abris, mais sur la pertinence de votre réponse à l'exigence de prise en charge. En d'autres termes, une mission d'enquête ne vérifierait plus que chacun a bien appliqué ce qu'il était censé faire d'après les textes édictés, mais examinerait la capacité d'intelligence et d'action des uns et des autres lorsque les modes d'emploi habituels ont été pulvérisés.
- Un rythme en rapport avec les circonstances : l'acheminement des formulaires et la valse lente des tampons ne doivent pas être les déterminants du rythme de l'action.
- Des initiatives créatrices : c'est par exemple cette décision du Général Honoré de lancer sur le champ un exercice pour légitimer un déplacement des troupes d'active sur le territoire américain. Non de code : Exercice Katrina.

Un niveau d'engagement inédit

In addition to being tasked by FEMA to provide support, the State of Louisiana asked both the National Guard and DOD to provide large numbers of ground troops. The resulting movement of 50,000 National Guard and 22,000 active-duty troops in response to Katrina was the largest deployment of military capability within the United States since the Civil War. The National Guard and active-duty military response provided critical humanitarian relief that saved lives and eased the suffering of thousands. (Chapter 26-12)

Des demandes inadéquates, des réponses mal maîtrisées

Many of the state and federal requests for military support, however, lacked adequate specificity. The responses to the requests for military support often were poorly coordinated with each other, if at all. The deployments of the National Guard troops were not well coordinated with the active-duty forces. One result was that local, state, and federal officials had differing perceptions of the numbers of federal troops that would be arriving, the missions they would be performing, who was in command of the military forces, and who should be in command of those forces. (Chapter 26-12)

Le piège de la précision, en lieu et place du jugement

The challenge of obtaining rapid and reliable information about hurricane damage is not new. According to the what was then known as the General Accounting Office (GAO), "In the case of [1992's] Hurricane Andrew, it was several days before the local authorities realized how bad the situation was and how much assistance was needed." The GAO recommended "supporting state and federal agencies should not waste time waiting for accurate assessments but use their experience to push obviously-needed assistance toward devastated communities before citizens begin to die for lack of it." (Chapter 26-18)

Les pesanteurs naturelles

Ces lignes sont essentielles et reflètent bien des références très souvent existentielles dans les grandes institutions régaliennes :

The lack of situational awareness early in the response may have contributed to a delay;

other witnesses have attributed the time of response to Department bureaucracy and a "cultural reluctance" to commit Department assets to civil support missions unless absolutely necessary.

In its own analysis, the White House asserted that DOD's "21-step" approval process — which included converting a mission assignment into a Request for Assistance and reviewing the request for legality and appropriateness, among other things - was "overly bureaucratic" and "resulted in critical needs not being met." FEMA Deputy Federal Coordinating Officer (FCO) in Louisiana Scott Wells and other witnesses'46 described the process of gaining assistance from DOD as a "negotiation" in which DOD, along with the other government entities, collaborates in dividing up what needs to be done and by whom. (Chapter 26-19)

Prior to landfall, Lt. Gen. Honoré had asked Maj. Gen. Rowe, NORTHCOM Director of Operations, to identify certain assets for the response, including helicopters, boats, and communications equipment, but 12 hours after landfall Maj. Gen. Rowe replied that he was "somewhat hamstrung by JDOMS [Joint Directorate of Military support] desire to wait for [Requests for assistance]" and could not provide these critical assets to Lt. Gen. Honoré. To the Committee, Maj. Gen. Rowe explained: "I think the primary resistance is the organizational resistance and absence of a detailed, approved plan."

"It's hard to get them to do anything where there is a chance of failure," Scott Wells said, adding that DOD wants "to know 80 to 90 percent of the information before they will commit an asset to work with you." Wells asserted that DOD "could have played a bigger role. They could have played a faster and and a bigger role." (Chapter 26-20)

Des initiatives qui terrorisent le système

While FEMA and DHS officials have complained that DOD did not do enough, and was slow to process requests, our investigation has found that, in fact, FEMA originated very few requests in this early period. In one instance, DOD received complaints from DHS about actions it did take. As discussed above, the Navy had ordered the helicopter carrier USS Bataan to sail towards New Orleans behind the storm, and to prepare to provide assistance. However, on Monday afternoon, a senior DOD representative to DHS reported to Assistant Secretary McHale's staff that "folks over here [are hopping] mad about the news of the Navy ship that announced their deployment without evident legal authority." The USS Bataan, the military's most significant pre-landfall deployment, with helicopters prepared to assist with search and rescue, was challenged by DHS. The Office of the Assistant Secretary of Defense for Homeland Defense had to reassure DHS that USS Bataan was simply prepositioning, and in fact would not engage in the response without the proper request and authorization. As discussed below, USS Bataan's helicopters launched on Tuesday, the first active-duty aircraft to assist with search and rescue. (Chapter 26-20)

Un système qui reste lourd

The Committee has found that the JDOMS was slow in approving the initial request for helicopter support in Louisiana. The record shows that the time required to process this initial request was not consistent with the scale of the disaster. This timeline and the testimony of witnesses both within and outside of DOD indicates that, while the extent of the damage may not have been known, both a traditional treatment of civil support as a secondary mission and a bureaucratic process slowed the response within the Department. The expeditious response by the helicopters themselves demonstrates that the Army was ready to mobilize, but that in this case, orders slowed the response. As the following sections will show, however, any reluctance and bureaucracy gave way beginning

Tuesday, as top DOD officials took steps to expedite the responsiveness and bypass the ordinary approval process in moving assets forward. (Chapter 26-21)

Un système très mal informé à haut niveau

During the first two days after landfall, then-Acting Deputy Secretary of Defense Gordon England exercised primary authority over the Department's response because the Secretary was traveling with the president. Deputy Secretary England described the level of accurate information in the Pentagon for the first 24 hours as "no input except what was on the news;" his primary source of information was the television. He said he attempted to contact FEMA Director Michael Brown and other DHS officials early Monday morning, but was unsuccessful.

Assistant Secretary McHale appears to have received a situation report at 5 p.m. Monday, which said that the Industrial Canal and the 17th Street Canal levees had breached and that "much of downtown and east New Orleans is underwater." There is no evidence that his office took action on this report. Early on Tuesday, he received, from DHS, an Army Corps of Engineers confirmation of the breach at the 17th Street levee. At the time of his interview with the Committee on November 9,2005, Col. Chavez, the Senior Military Advisor to the Assistant Secretary still believed the levees did not actually breach until Tuesday evening," and that he did not receive confirmation of the breach until Wednesday morning, 48 hours after landfall and the first breaches. (Chapter 26-21)

Manque d'information, ou incapacité à détecter de l'information non classique?

NORTHCOM Operations Directorate had been conducting daily interagency teleconferences since August 24 to coordinate the military response. By 1:30 p.m. Mountain Time Monday, damage assessments were beginning, but were not conclusive. NORTHCOM's Deputy Director of Intelligence, Captain Brett Markham, told the Committee that "we relied heavily, on the 29th, on our National Technical Means" (sensory equipment managed by national intelligence agencies to collect information for the benefit of the entire federal government). He said that some information - including a graphic representation of flooding received from the National Geospatial Agency collected on August 29, but that it didn't present a sufficiently clear picture. Colonel Wesley McClellan, a senior member of NORTHCOM's Interagency Coordination Group, which comprises numerous interagency representatives, said that it also lacked damage assessment information, and was unable to specify the types of support needed from DOD. Like his counterparts at the Pentagon, Admiral Keating, the NORTHCOM Commander, also woke up on Tuesday believing that "New Orleans dodged a bullet." However, as the extent of the damage became clear on Tuesday, NORTHCOM staff clearly saw the need for military assistance, but was frustrated by the paucity of requests for assistance. Brigadier General Harold Moulton, who later in the week deployed from NORTHCOM to establish a command-and-control headquarters in New Orleans, described the growing frustration that developed as the damage became apparent:

The National Response Plan process establishes a sequence which goes from local asking for help from the state, state asking for help from the federal government, the federal looking around and choosing which appropriate spot through the mission assignment process to eventually get into... That whole concept seemed to be, for lack of a better term, frustrating for this staff and for Admiral Keating as they were trying to figure out how to respond to this compelling human tragedy that they could see unfolding on TV.

Col. Daskevich, who had deployed from Oklahoma on Saturday to serve as the DCO – NORTHCOM's direct representative - in Baton Rouge, reported to the State Emergency

Operations Center at 4:30 a.m. Monday. He spent most of Monday struggling to gain an accurate picture of the situation, and acknowledged that from Baton Rouge, he in fact had very little awareness of the developments in New Orleans. Col. Daskevich appears to have received a report of levee failure on Monday. However, because he was unfamiliar with the significance of the levees, he did not recognize the potential implications of this limited information. The hunt for information in the first 24,48 hours after the storm was a challenge," he said. Having deployed with only one additional staff member, as ordered by NORTHCOM, Col. Daskevich acknowledged that a lack of manpower, communications equipment, and operating space within the state Emergency Operations Center rendered it "extraordinarily demanding to try to keep up with all of the information flow and, or course, to actually do business" during the first several days. (Chapter 26–22-23)

Malaise croissant en raison du silence de la FEMA – comment respecter des règles dont on voit qu'elles mènent au fiasco?

Though officials had begun to learn more about the extent of the damage, through Tuesday morning the Department remained in a posture as dictated by the NRP, to allow FEMA to coordinate the response. At the same time, senior officials within the Department responsible for Homeland Defense were becoming concerned that they were not receiving requests from FEMA, and that awaiting such requests could further delay the movement of military assets. Assistant Secretary McHale, who that morning met with Deputy Secretary England, and Chairman of the Joint Chiefs of Staff Gen. Myers to discuss the hurricane and the Department's response during the daily morning briefing, said that notwithstanding media reports "that were less sobering than the scope of the actual damage," the leadership recognized that the Department needed to mobilize its assets for the support requests they anticipated:

We were much more focused and concerned than the published reports of the damage might have justified. In part that was because certain key individuals expressed a deep concern that the damage was more severe than was being reported and so there was a collective sense that Hurricane Katrina was likely to be equal to or greater in damage than that of Hurricane Andrew in 1992. (Chapter 26–23-24)

Et l'on finit par passer à une posture plus offensive

Yet officials within the Pentagon were surprised at the silence from FEMA. First thing in the morning, Gen. Myers inquired from his Operations Directorate how many requests the Joint Staff had received, "and the answer was, We hadn't got any." A resulting discussion with the Deputy Secretary, then, led to the conclusion that "we need to start leaning forward - they're going to need some Department of Defense assets.

During a meeting at 7:30 a.m. Central Time, Deputy Secretary England informed senior Pentagon officials, including representatives of the military services and the Chairman of the Joint Chiefs of Staff, of the Department's commitment to quickly provide to the NORTHCOM Commander whatever assets were needed to support the overall hurricane response, and urged all commanders to "lean forward" to be able to quickly meet requests for assistance. In a subsequent call that morning to Adm. Keating, Deputy Secretary England made clear that NORTHCOM would be provided any asset Adm. Keating deemed necessary.

Deputy Secretary England reported to Secretary Rumsfeld:

[W]e are leaning forward on all fronts. I have authorized all local commanders to provide their assistance and have authorized NORTHCOM and the Chairman to take all appropriate measures to push forward available DOD assets that could be useful to FEMA.

In a meeting at 3:40 p.m., Gen. Myers then instructed his service chiefs to work together with NORTHCOM in determining necessary assets, telling them to pre-position resources in anticipation of a request for assistance from FEMA, if they thought it prudent. To expedite the deployment process, he instructed the services to proceed on the authority of this vocal command - Secretary England's direct instruction to Adm. Keating, and his own guidance to the service chiefs - and that the necessary paperwork would follow later." Think large," he told them.

A vocal command of this magnitude is extremely rare in DOD. For the purpose of ensuring legality, availability of resources, and documentation of the chain of command, all deployments are normally processed rigorously through specific written orders and electronic tracking systems. Deputy Secretary England's command represented an extraordinary delegation of military judgment, on the assurance that Adm. Keating would keep the Department informed. It was a "blank check", Deputy Secretary England said. Assistant Secretary McHale elaborated: "What was communicated... was what we in the military call 'commander's intent.' The message from the Deputy Secretary of Defense, consistent with the counsel provided by the Chairman of the Joint Chiefs, was to act with a sense of urgency and to minimize paperwork and bureaucracy to the greatest extent possible. As Adm. Keating understood the direction, "We're moving anything we think FEMA will need. No obstacles from DOD or Joint While DOD's inherent authorities to respond had not changed, and it was understood that all the necessary paperwork would follow, the decision reflected an extraordinary delegation to the military commanders. Assistant Secretary McHale said, "The climate in the decision-making process in this department could not have been more proactive than it was.

Although individual commanders had already begun moving assets and conducting predeploymen preparations, many witnesses have credited these actions with fundamentally shifting the overall response of DOD, particularly at the Departmental level, into a proactive mode. Capt. McDaniel, who represented the Navy to FEMA, said:

The pendulum swung from one extreme to the other through this. I mean, it went from having to pry Secretary Rumsfeld's fingers off of a helicopter package... and this 100-pound gorilla just goes, 'Okay, we've got it.' Boom, and then the floodgates open.

Col. Harrington agreed that the "cultural reluctance" had now been overcome, and that attitudes within the Department "dramatically shifted" as "things got a little crazy."

On Wednesday morning, the Chairman of the Joint Chiefs issued guidance to Joint Forces Command (which maintains control of most military assets within the United States until they are assigned to Combatant Commanders such as NORTHCOM), consistent with his guidance to the service chiefs on Tuesday: "(1) Continue to lean forward; (2) Remind services to work through Joint Task Force components; and (3) Be aggressive but don't get in FEMA's way." Forces had begun to deploy in large numbers to the region, some requested by NORTHCOM, and many others volunteering on their own initiative. The initial result was a "wide open barn door," according to Maj. Gen. Rowe, with NORTHCOM having difficulty tracking selfdeployed assets. Chapter 26 –24-25)

Blocage et frustration

Mais qu'il est frustrant de constater que l'on en englué dans l'impuissance ! « Il ne nous demandent rien ! ». Le problème serait de sortir de la situation de blocage, au-delà de la frustration.

Colonel Darryl Roberson, Assistant Deputy Director for Antiterrorism and Homeland Defense in the Joint Staff, described his frustration at not being asked to do more sooner:

I will tell you that I personally felt very frustrated that we had not been called in earlier. We had assets available. We were all leaning forward. We knew we were

going to receive them. We responded, in my opinion, in an unprecedented manner to everything that we got. I am absolutely convinced in my heart that it is a good-news story that DOD came to the rescue. That may sound strong. Obviously I'm biased. But in my mind, DOD saved the day to a large extent, and it was because of what we did. [M]y frustration comes from the fact that I think we could have done it earlier if we had been asked.

Assistant Secretary McHale expressed a similar frustration, stating that throughout the first week, he believed that FEMA's requests for assistance were still not commensurate with the scale of the catastrophe and the types of efforts that would be required of DOD, and that even "by Saturday it was clear that the [requests] we had received, reviewed, and approved were pretty narrow in scope." Yet on the message conveyed by Deputy Secretary England, military forces converged upon the Gulf Coast. (Chapter 26–25-26)

Ce que l'on a fait, en rongeant son frein, tandis que la FEMA était aux abonnés absents

Despite an overall lack of awareness within the Department about conditions in Louisiana and Mississippi, a number of military commanders within the services took action, pursuant to their own command authority, to prepare assets for potential requests for assistance. In general, it is possible to characterize commanders' actions throughout the first week as one of three types: (1) preparation and mobilization into the Joint Operating Area in coordination with NORTHCOM; (2) mobilization into the Joint Operating Area, but without full coordination with NORTHCOM; and (3) individual preparations conducted within the services, in absence of specific orders to do so. To characterize the response most broadly, commanders took action consistent with the guidance of Deputy Secretary England and Gen. Myers, making all reasonable efforts to preposition assets or prepare for their deployment. And indeed, the overwhelming majority of deployments occurred prior to a request by DHS or FEMA. As will be discussed below, the lack of expected requests in fact led the Department to draft requests for FEMA, in recognition that such military assistance was required, but that FEMA had either failed to ascertain the requirements, or had inadequately expressed the requirements to DOD. (Chapter 26–25-26)

La Marine : une forte capacité d'initiative

The Committee found that, overall, the Navy showed a strong willingness to push assets into response efforts, ultimately sending more than 20 ships and 100 aircraft into the Gulf of Mexico, often in advance of a request or an order. The Navy provided a wide variety of mobile platforms for landing and servicing aircraft, treating patients, transporting enormous quantities of cargo and commodities, in addition to land-based assets which included engineering battalions of "Seabees" and logistics support.21 But more than other services' assets, which may often arrive by air in a matter of hours, the mobility of the Navy's primary assets is limited by the "timedistance" problem: An immutable factor in a ship's ability to arrive on scene is the distance it must travel and its maximum steaming speed. In this case, the presence of the helicopter carrier USS Bataan in the Gulf prior to Katrina proved extremely fortunate, for many of the ships had to steam from Norfolk, Virginia, and with the combined preparation and steaming time, arrived in the Gulf of Mexico on Saturday and Sunday. But preparations for the ships' deployment began shortly after landfall, even as the initial lack of damage assessments created an information vacuum.

In accordance with standard practice for hurricanes, Second Fleet Commander Vice Admiral Mark Fitzgerald placed a group of three amP h ibious warfare ships in port in Norfolk, Virginia, on 24-hour alert for possible deployment. These three ships-the USS

Iwo Jima, USS Shreveport, and USS Tortuga - had been previously designated as the Expeditionary Strike Group (ESG) to respond to contingencies on the East Coast or in the Atlantic The ESG has large deck vessels for landing helicopters, "well-decks" for retrieving amphibious landing craft, significant hangar and deck space for supplies, refueling capacity for helicopters already engaged, and facilities to provide showers, food, and water for both victims and response personnel. Vice Adm. Fitzgerald also contacted Coast Guard Vice Admiral Vivien Crea, on Tuesday morning, and "offered help" from the Navy. He credits this channel of coordination as essential to the events of the first week; he had difficulty communicating with Lt. Gen. Honoré and with NORTHCOM because of the initial focus on National Guard and Army land-based missions. Vice Adm. Crea confirmed that, "The Navy was very proactive in sending things down. We didn't have to ask them... They started diverting ships and aircraft that direction."

Meanwhile, having been stationed in the Gulf of Mexico at the conclusion of a previously scheduled exercise held prior to Katrina, the USS Bataan followed Katrina, and by Tuesday morning was within 150 to 200 miles of New Orleans. Watching the news, the vessel's commanders began identifying ways to help. At 3 p.m. CT, the USS Bataan received orders from Second Fleet to send helicopters into New Orleans to conduct search and rescue missions in coordination with Coast Guard District Eight .The Navy and Marine Corps helicopters were in the air by 5 p.m., and reported to the Coast Guard Air Station Commander, who, as the designated On-Scene Commander, held responsibility for coordinating all air search-and-rescue assets. They were joined by two Navy SH-3 helicopters from Pensacola who arrived unannounced at the Coast Guard station, offering their services. In all, USS Bataan's aircraft rescued, evacuated, or transported over 2,000 persons. (Chapter 26-27)

Fleet Forces Command and Second Fleet identified Rear Admiral Joseph Kilkenny, Commander of the *USS Hary S Truman* Carrier Strike Group, to represent the Navy on the proposed Joint Task Force Katrina under Lt. Gen. ono ore.'^^ The Task Force was formally established late Tuesday night; Rear Adm. Kilkenny flew to Naval Air Station Pensacola Wednesday morning,223 where he began coordinating the deployment of Navy helicopters to the region.224 Rear Adm. Kilkenny echoed Vice Adm. Fitzgerald's statement that Lt. Gen. Honoré was difficult to reach during the first few days, but that he was able to report back on his actions through Second Fleet;" Rear Adm. Kilkenny said that he knew Lt. Gen. Honoré's general intentions to focus on the immediate saving of lives through search and rescue, and could proceed by simply coordinating with Second Fleet.

At 3 p.m. CT Tuesday, Fleet Forces Command had directed Second Fleet to launch the ESG. USS Iwo Jima, USS Shreveport, and USS Tortuga left Norfolk, Virginia on Wednesday, scheduled to arrive off the Louisiana coast on Sunday They carried a standard load of equipment called the Disaster Relief Kit. The kit included supplies such as bulldozers, medical supplies, water purification, and other equipment.228 Fleet Forces Command then deployed the aircrafi carrier USS Hary S Truman (without orders from NORTHCOM) in order to provide fuel and deck space for the rapidly increasing fleet of helicopters. The aircraft carrier departed Norfolk on Thursday. On Friday NORTHCOM submitted a Request For Forces to the Joint Staff asking that USS Truman be committed to the response, and USS Truman was tasked with supporting the Joint Task Force upon its amval off the coast of Biloxi, Mississippi, on Sunday, September 4.

On Thursday, Vice Adm. Crea requested that Second Fleet assist with clearing channels in order to reopen shipping lanes into New Orleans and the Mississippi River, one of the nation's most critical commercial routes, as quickly as possible.23' *USS Grapple* deployed the same day, assisting with salvage operations in Pascagoula, Mississippi, on September 6. The mine countermeasures ship *USNS Altair* deployed from Ingleside, Texas, on Friday,

September 2, and commenced port clearance operations on Saturday, September 3, arriving alongside the pier in New Orleans the same day.232 With the channel clear, the *USS Tortuga* was able to proceed up the river on Sunday, followed by the *USS Iwo Jima* on Monday, September 5.

In addition to serving as Lt. Gen. Honoré's headquarters for the Joint Task Force in New Orleans, *USS Iwo Jima* provided showers, food, and rest for the first responders who had operated in the devastated city for a week. As the ship's captain described in an e-mail on September 6:

We are one [of] the few full service airports in the area and have been operating aircraft... for almost 15 hours each day. We are also one of the only air conditioned facilities within a 10 mile radius and... we are also the only hot shower within miles. All day long we have been accommodating local policemen, firemen, state troopers, National Guard, 82nd Airborne division personnel with hot showers and hot food.

Numerous other ships and forces deployed, including the High Speed Vessel *USS Swift*, to replenish *USS Bataan* with disaster relief supplies, three Logistics Support vessels, and four amphibious hover-landing craft to transport supplies into New Orleans. The hospital ship *USNS* Comfort, had begun its preparations on Sunday before landfall; because its specialized personnel and equipment require additional preparation time, it deployed from Baltimore, Maryland, on Friday, September 2, arriving in Pascagoula, Mississippi, on September 9. The Navy also deployed medium-lift and heavy-lift helicopters from 15 squadrons throughout the country. In addition to those already operating from the *USS* Bataan, a total of 50 rotarywing aircraft deployed from Jacksonville, Norfolk, Corpus Christi, and San Diego with search and rescue, evacuation, and logistical operations. [...] The heavy-lift H-53 aircraft assisted the levee repair operations, dropping sandbags into the breaches. (Chapter 26–26-29)

L'armée de Terre : la détermination inventive du Général Honoré – le déclenchement d'un « exercice Katrina » pour tourner les impossibilités

Lt. Gen. Honoré, based at Fort Gillem, Georgia, as Commanding General of First Army, planned to deploy to the Gulf Coast as soon as the storm had cleared. Although he had not been ordered to do so, he wanted to establish himself in the area to be positioned advantageously as the response progressed: "My thought was 'get there,' because the first rule of war is you've got to get there," he said. His authority as an Army commander permitted him to move from one military installation to another provided that such a movement could be considered training. Thus, he created an "Exercise Katrina," and in coordination with NORTHCOM and his superior officer at Army Forces Command, planned his move to Camp Shelby, an Army facility in South Mississippi.

Lt. Gen. Honoré explained that it was not in his nature to wait for a Request for Assistance of deployment orders prior to moving: "That is a response, sometimes, by folks to say, 'Let's wait until they ask for something.' But in this case, we've got a case where we need to save life and limb. We can't wait for a [Request for Assistance] or shouldn't be waiting for one. If there's capability, we need to start moving."

Lt. Gen. Honoré informed NORTHCOM and Adm. Keating of his plan to deploy to Camp Shelby on Monday but because Katrina continued to track northward from the Gulf Coast, he could not move until Tuesday morning. He arrived at 11 a.m. C T and surveyed the base and the surrounding region of Gulfport and Biloxi, which looked to him like they "had been hit by a nuclear weapon." Lt. Gen. Honoré had previously received NORTHCOM's warning order to "be prepared to establish [Joint Task Force] Katrina covering the states of LA, MS, AL, FL, KY, TN, and GA for command and control of consequence management operations resulting from the severe weather caused by

Hurricane Katrina . "(A Warning Order instructs a commander to take all necessary preparations so as to be able to react immediately to a likely forthcoming Deployment Order or Execute Order). The Execute Order, which officially converted his training mission into an operational mission, arrived at 4 p.m. C T. Lt. Gen. Honoré assumed control over all active-duty forces then and subsequently involved in the response within the above states, now designated as the Joint Operating Area; he would report to NORTHCOM. (Chapter 26–29)

Des problèmes de coordination : l'intervention des Marines, comme OVNI

Il est toujours difficile de trouver le bon ajustement entre une belle coordination venant après la bataille, et un empressement justifié mais qui peut rester en dehors des cadres qui se mettent en place.

Evidence and testimony received by the Committee suggest that the Marine deployments were not fully coordinated within DOD, and that NORTHCOM was not hlly aware of Marine Corps efforts in the Gulf. Lt. Gen. Amos e-mailed Lt. Gen. Honor6 on Thursday morning, writing that he was sending helicopters and engineering equipment. "What can I do for you?" he asked. Lt. Gen. Honoré responded, "HELLO BROTHER GET HERE AS FAST AS YOU CAN." Friday morning, when Lt. Gen. Amos told Lt. Gen. Honor6 of his intentions to send a commandand-control suite to New Orleans, Lt. Gen. HonorC replied: "[it's] hitting fan get here fast as you can." That day Lt. Gen. Amos flew five aircraft to Belle Chasse carrying 150 Marines – the majority of the battalion's command element - along with a mobile communications suite, capable of establishing a command-and-control headquarters anywhere in the An email to Maj. Gen. Rowe of NORTHCOM from one of his planners shows that the Marines' preparatory movements were not coordinated with NORTHCOM: "They do not have orders to move out yet but they are inside our [Joint Operating Area] w/out [Joint Task Force Katrina] or [NORTHCOM visibility]." (Chapter 26–34)

Des liens plus souples qu'il faut savoir reconnaître

L'important est moins la coordination « totale » que la capacité globale du système. Tout ne peut pas être vissé comme une pièce d'horlogerie, l'obsession d'ordre absolu aurait rapidement raison de l'intelligence de l'action.

[...] the deployment order appears to have been given in the spirit of Gen. Myers's guidance encouraging the services to pre-position assets to enable their rapid employment when requested by FEMA. However, the deployment does not appear to have been fully coordinated within DOD. In particular, unlike all other troop deployments into the area under NORTHCOM's command, there had been no corresponding request for forces from NORTHCOM. Maj. Gen. Rowe stated that although he knew Lt. Gen. Amos and Lt. Gen. Honoré were communicating, he was unaware of the specific exchanges leading up to the order: "[Tlhat's one part of the help that I will have to give you that we did not ask for. However, I am aware that General Amos and General Honoré corresponded. General Honoré shared that with me, that General Honoré at that point said the help would be appreciated." Furthermore, this urgent need for the deployment of Marine troops does not appear to have been fully communicated to other DOD officials considering whether there was a need to deploy active duty troops. (Chapter 26–34)

Une posture très proactive

The next day, Saturday, September 3, the President issued a broad order for the deployment of active-duty ground troops. Because Lt. Gen. Amos had anticipated the deployment for several days, with his Marines "sitting on their packs," they were "ready to

go... I was determined that when we got the Execute Order, we were going to darken the skies with C-130s and get them down there as quickly as we can." Over the next 28 hours, aircraft ferried 1,250 troops, now reporting to Maj. Gen. O'Dell, who had been appointed as Marine Component Commander for the Joint Task Force, reporting directly to Lt. Gen. Honoré.

Maj. Gen. O'Dell confirmed that the Friday order from Marine Forces Atlantic was subsumed by the President's order on Saturday: "Prior to the President's order, for planning, I knew that we would have elements of my division as I've described and 24 MEU [Marine Expeditionary Unit] from Camp Lejeune... available." Most significantly, he added that the only thing that the President's order changed about the Marines' plans was that an element from the West Coast joined the 24 MEU. (Chapter 26–34-35)

Se préparer à des bouleversements dans les rôles

Soudain, la FEMA demande au DOD, non pas de venir en appui, mais de prendre tout simplement son rôle.

After speaking with Buikema [Regional Director, FEMA] on Thursday morning, Burris [Director of Operations, FEMA] called Col. Chavez in the Office of the Assistant Secretary of Defense for Homeland Defense. Burris told Col. Chavez that "The FEMA logistics capability has been overwhelmed," and that he "wants DOD to take over logistics operations in Louisiana and Mississippi." Chavez viewed this request as extraordinary because it appeared FEMA was asking DOD to take over its job. Col. Chavez says he asked Burris, "is this really what you want us to do, take over the function? He indicated that that is indeed what they wanted to do." Col. Chavez told Burris that the request "would require a Secretary DHS to Secretary DOD call to initiate and significant General Counsel input."

The NRP stipulates that DOD is a supporting agency to all 15 ESFs [Emergency Support Functions]. Thus, they are on notice that they may be called upon to assist civilian authorities in a variety of ways. However, in this instance, the civilian agency - FEMA was asking DOD to take over a role it had not traditionally played in disaster response, and which is not listed as one of DOD's support functions in any of the listed ESFs. Thus, Col. Chavez's surprise is understandable. After conferring with Col. Chavez, Burris modified his request to state that FEMA wanted DOD to "provide the support and planning and execution of the full logistical support to the Katrina disaster in all declared states in coordination with FEMA. (Chapter 26–39)

Ou, à tout le moins, à des ajustements un peu chaotiques

In the words of Assistant Secretary McHale, it "may well have been the single most complex civil support mission in the history of the U.S. military." Ultimately, for reasons discussed below, DOD did not take over all logistics operations from FEMA, although they did provide significant assistance. DOD plans to or has sought reimbursement from FEMA for only \$118 million of the \$1 billion dollars obligated under this mission assignment.

The Secretary of Defense approved the request orally on Friday, September 2, and Assistant Secretary McHale notified Deputy Secretary of Homeland Security Michael Jackson of the approval on Friday in an e-mail.

On Saturday, September 3, the paperwork was approved, and DOD issued its order directing the commander of NORTHCOM, Adm. Keating, to "plan and develop a concept of operations to execute logistical support operations in affected states of Louisiana and Mississippi".

On Friday, September 2, before the mission assignment was officially approved,

NORTHCOM's planning staff began gathering information in "excruciating detail" about what orders FEMA had already placed with the Defense Logistics Agency (DLA), "how many trucks are lined up, how many trucks have left, how many trucks have been loaded." They started calling the operational staging areas and collecting detailed information from the FEMA representatives on the ground there. (Chapter 26–40)

Et l'on découvre que le partenaire central n'a pas du tout les compétences attendues

They learned that, unlike DOD, FEMA did not have "detailed supply accountability and the intransit visibility of assets." There was no tracking methodology, and no one within FEMA "owned" the complete commodities-movement process. They also learned that the DLA was sourcing the MREs from only two facilities where loading was additionally constrained by space limitations and material handling equipment. (Chapter 26–40)

Katrina demonstrated that DOD has well-developed expertise in logistics management, but there is no reason that FEMA could not develop a similar level of proficiency. (Chapter 26–42)

Avant, finalement, de se voir assigner une liste impressionnante de missions

Given the level of devastation on the Gulf Coast, it was clear to Assistant Secretary McHale that "a much greater level of DOD activity was going to be required."374 On the morning of Saturday, September 3, shortly before the President announced his decision to deploy 7,200 active duty troops to Louisiana, Assistant Secretary McHale and Deputy Secretary Jackson met at the White House. [...]

Deputy Secretary Jackson and Assistant Secretary McHale met later that day with Deputy Secretary England at the Pentagon to begin "aggregating and classifying and categorizing what types of mission assignment activities we thought were needed by DOD. Assistant Secretary McHale reported that they then "drew up a list of approximately 10 mission areas" in which DOD help had not yet been, but was likely to be, requested. The intent, according to Deputy Secretary Jackson, was to formulate "what are we trying to accomplish, what do we need to get done, how are we going to do it?" On Saturday, September 3, and the following day, DOD and DHS officials "at very senior levels" drafted a group of new DOD mission assignments:

- conduct search and rescue operations,
- perform security capabilities assessment and provide security capabilities advice and technical assistance.
- collect and evacuate live persons to temporary processing centers,
- collect and remove bodies of deceased persons,
- restore flood control systems,
- transport and distribute ice, water, food and medical supplies,38'
- disease prevention and control,
- planning for the quarantine of areas within New Orleans,
- quartering and sustaining of FEMA headquarters support element and relief workers,
- health and medical support,
- debris removal,
- restoration of basic utilities and key transportation routes (land and water),
- geospatial surveillance products and evaluations,
- logistical support at key air and sea distribution nodes,
- temporary housing, and long range communications between headquarters nodes and firefighting. (Chapter 26–42)

Mais, en réalité, beaucoup de dispositions avaient été prises et engagées préalablement

Our investigation has shown that DOD was moving assets in many respects before they were either requested by FEMA or approved by the Secretary of Defense. The record indicates that DOD logisticians were gathering information and developing a plan to execute the logistics mission assignment on Friday, September 2, prior to its oral approval by the Secretary of Defense later that same day, and prior to its formal approval on Saturday, September 3. In addition, DOD was already involved in search and rescue operations, evacuation operations, health and medical support, geospatial surveillance, and logistical support at key air and sea transportation restoring flood control systems;" and transporting commodities. (Chapter 26-43-44)

La question du retard dans l'intervention de l'Armée

In the afternoon of Monday, August 29, several hours after Katrina's landfall, Governor Blanco telephoned President Bush. "We need your help," the Governor told the President. "We need everything you've got." Based on their conversation, the Governor believed the President had "every intention to send all of the resources and assistance within the power of the federal government." Yet although over the next several days Governor Blanco made at least two more personal pleas to the President, by phone and in person aboard Air Force One, asking for a total of 40,000 federal troops, it was not until Saturday, September 3, five full days after landfall, that the President ordered 7,200 Army and Marine ground forces to Louisiana.

One of the key questions about the response to Katrina is, "Why did it take so long for the President to respond to the Governor's requests for federal troops?". (Chapter 26-46)

Les limites de l'enquête, en raison de l'opacité de la Maison Blanche et des ordres de silence envers la Commission

Unfortunately, much of the story of the President's decisions remains opaque. The White House refused to permit the Committee to interview White House personnel about the President's decision or the actions of the White House staff. DOD instructed its personnel not to discuss communications with the White House. Because the Committee has been unable to develop a complete and accurate record regarding these decisions, it is unable to make any findings regarding the President's decision to order deployment of federal active-duty troops on Saturday, September 3, including the reasons why the President did not order that deployment sooner. (Chapter 26-46)

Entre complexité et confusion

Nevertheless, the Committee has extensively interviewed Louisiana, DOD, and National Guard officials about their own decisions and actions. From their recollections, the Committee has been able to assemble a picture of a rapid but uncoordinated military response to the various requests for assistance.

Two more specific findings also have emerged. First, the large numbers of National Guard troops deploying into Louisiana was a major factor in DOD's decision not to deploy additional active-duty troops into Louisiana prior to the President's deployment order.

Second, the difference in opinion between state and federal officials about whether more active duty military ground troops should have been deployed sooner appears to stem, in part, from the lack of coordination in the formulation and consideration of the various state and federal requests for military support. Requests for military troops were made to the EMAC [Emergency Management Assistance Compact, accord régional d'assistance mutuelle] and the National Guard Bureau within DOD. Requests for military

troops also were made directly to the President, White House officials, and the commander of the military forces in Louisiana, Lt. Gen. Honoré. Other requests for military assistance were made through FEMA according to the process set forth in the NRP for requesting DOD support. Many of the state and federal requests for military support lacked adequate specificity as to the missions to be performed or the capabilities being requested. The responses to the requests for military support often were poorly coordinated with each other. One result from this lack of specificity and coordination at all levels was that local, state, and federal officials had differing perceptions of the numbers of federal troops that would be arriving, the missions they would be performing, who was in command of the military forces, and who should be in command of those forces. (Chapter 26–46-47)

Le changement d'échelle, qui dépasse les dispositifs prévus

In Katrina, the EMAC [Emergency Management Assistance Compact, accord régional d'assistance mutuelle] process proved neither suitable nor capable to handle the type of largescale deployments of military troops that were needed in the Gulf region. The EMAC was never intended or designed to coordinate large military troop deployments. As a result, both Louisiana and Mississippi turned to the National Guard Bureau to "expedite" the deployment of National Guard troops from other states. (Chapter 26-49)

Confusion toujours, même si l'on passe par le sommet, à n têtes

[...] the transmission of the state's request for resources directly to the White House does not appear to have expedited the response to the state, at least with respect to federal military resources. White House officials did not understand what the Governor was requesting. There also appears to have been poor coordination between the White House and FEMA. Even after the Governor clarified the nature of her request directly with the President - that she wanted federal troops but not "federalization" -Brown continued to advocate to the White House that the response be "federalized." Additionally, Brown does not appear to have consulted with DOD regarding the need for federalization, either prior to or after advocating that position to the White House. (Chapter 26-56)

La rupture de langage traduit une rupture de système de référence : Babel

Le problème n'est pas de mieux définir le vocabulaire, comme on le dit habituellement – comme ici le concept de « fédéralisation » des secours. Si les mots implosent c'est que la situation n'est plus compréhensible pour les intervenants. Les discussions sur la notion de fédéralisation ne font que traduire une désarticulation par la crise.

At about the same time that the Governor informs the President that she did not want federalization, senior FEMA officials began discussing it. Lokey recalled a conversation with Brown:

I remember going to Michael Brown and saying, this is beyond me, this is beyond FEMA, this is beyond the state. We need to, and I used the term, we need to federalize this or get a massive military invasion in here to get some help. And Mike said, "I'll talk to headquarters. I'll talk to DHS about that and I'll talk to the attorneys."

Lokey said to the Committee staff he did not understand what he meant when he used the term "federalization":

I don't exactly know what I meant. What I meant was that -what I was talking about was turning this over to somebody that can manage something this size. I've never done something like this. I was trying my best. I wasn't doing very good at it. So that was just a term I used.

Brown stated that he recommended the entire response be "federalized," meaning that the President invoke the Insurrection Act and place the National Guard under the control of

the active duty forces:

Because at that time, we're looking at these stories of shootings and looting and everything else going on, and I'm fearful that's spiraling out of control, and I want active-duty troops that are ready, willing and able to kill in that area, because we can't do search and rescue with that kind of stuff going on.

According to Lokey, "within an hour" of his conversation with Brown about federalization,

Governor Blanco requested to see him. "What's this about you taking over my disaster?" she asked Governor Blanco later explained that she objected to federalization because it could have subjected the state's National Guard troops to the Posse Comitatus Act prohibition against federal troops conducting law enforcement activities.505 "I did not want the Guard federalized," Governor Blanco testified. "It's very important for a governor to be able to retain control of the National Guard precisely for its law enforcement capabilities."506 Louisiana officials also believed there was no need to federalize the Guard. "[L]et me remind you the state is still sovereign," a member of the Governor's staff told Lokey and Brown. "We can handle it," Maj. Gen. Landreneau added. "Fine, good," Brown said. (Chapter 26–57-59)

Quand la réalité a de la difficulté à se faire entendre au milieu du fracas de la bataille institutionnelle

President Bush arrived aboard Air Force One at the New Orleans Louis Armstrong Airport late Friday morning. Mayor Nagin, FEMA Director Brown, Lt. Gen. Blum, White House Chief of Staff Card, White House Deputy Chief of Staff Hagin, Louisiana Senators Landrieu and Vitter, and several Louisiana congressmen were present for an initial meeting with the President and Governor Blanco. After the initial meeting, President Bush and Governor Blanco met privately.

During the initial meeting aboard Air Force One, Mayor Nagin recommended that Lt. Gen. Honoré be placed in charge. Mayor Nagin testified:

I probably was a bit pushy at that meeting, because in the midst of all the rhetoric that was going on around the table, I stopped everyone and basically said, "Mr. President, Madame Governor, if the two of you don't get together on this issue, more people are going to die in this city, and you need to resolve this immediately." And they said yes. And I said, "Well, everybody else in this room, let's leave and let them work this out right now". (Chapter 26-64)

Grandes questions

1°) La place de la Défense dans les crises civiles

The Department's contributions to the Katrina response flow directly fiom its professional, sustained emphasis on education, training, retention, and rigorous adherence to standards, coupled with a budget and resources unparalleled across the government. Military culture also played a role, as many officials reported to the Committee that their efforts in response to Katrina were the most rewarding and satisfying missions of their often extensive careers. Lieutenant Colonel Gordon Ellis of the Ohio National Guard commanded a battalion that deployed to the Superdome during the first week, and reported:

Like all commanders, my soldiers were there about seven days before they had their first shower. They never once complained, while they were there, and to see the professionalism and the dedication that those young soldiers displayed throughout that difficult time makes me immensely proud to have been a part of that.

However, as with all agencies and all levels of government, Katrina exposed weaknesses of, and raised questions about, the military's mechanisms for responding to disasters. Given DOD's unmatched power and size, and its unique Constitutional status, these questions merit careful consideration.

To what extent should the nation rely upon the Department of Defense in disaster response? Department of Homeland Security was created, in part, to respond to domestic emergencies, but Katrina revealed that in critical missions, particularly in logistics, search and rescue, and command and control, it was unprepared to address a catastrophe of Katrina's magnitude. At the same time, Department of Defense, since September 11,2001, and since establishing U.S.

Northern Command, has revised its mission to reflect a greater focus on homeland defense. Its capabilities in this arena have therefore grown more robust. But Assistant Secretary McHale cautioned against placing too much reliance upon the military's capabilities:

I would urge you to think simultaneously about speed and the fundamental public policy missions, public policy questions associated with the role of the military within domestic American society and constitutional government... We have to balance not only what the military is capable of doing, questions of speed and resources, but what the military ought to be doing consistent with the historically constrained role of the military within domestic American society.

Is it wiser to further develop these capabilities in DHS? If DOD's resources were already engaged in an overseas mission, military support might not be available to the extent that it was during Katrina. In that case, a more capable DHS would be preferable, especially since many of the missions DOD performed were not uniquely military. DHS could adopt military models of logistics, training, career development, and centralized incident management to improve its ability to function independently. (Chapter 26–69-70)

2°) Le bon équilibre entre initiative et coordination

At the same time, when military assistance is required, to what degree should we rely on a system in which specific assets are requested? After action reviews stressed, just as they had following Hurricane Andrew, that DOD must not wait for requests to push assets forward. But Katrina revealed a tension between a system of planned, coordinated movement, and the value of commanders' initiative in moving in advance of orders. Initiative, in this case, proved essential to the swift deployment of resources, but it also contributed to an uncoordinated response, in which strategic commanders lacked clear visibility over the force structure. (Chapter 26–70)

3°) La tension entre niveaux institutionnels

Katrina also revealed tension between gubernatorial and Presidential executive powers, underlying a delicate federalist balance: should governors retain full control of their National Guard forces after catastrophic events? The governors of the two most seriously affected states here answered "yes" unequivocally. Yet at the height of the crisis, the President and senior military and civilian DOD leaders grew concerned that the scale of the military response – both the size of the National Guard force and the addition of federal active-duty ground troops - required a single commander. Governor Blanco's rejection of their proposed solution, however, has led DOD officials to realize that unity of command, long a staple of military operations, can also prove inconsistent with states' Constitutional powers.

The final resolution was to achieve unity of effort through the close coordination of federal and stated-controlled military forces. But as has been widely documented,

numerous factors challenged this coordination. While the Committee has not determined that a lack of coordination impaired the effectiveness of the military response to Katrina, many leaders agree that we must establish mechanisms now to ensure unity of effort between the Guard and active duty forces the next time they are called for such a common cause. Only through forethought, planning, and consensus among the agencies and levels of government can we ensure that we do not encounter a political or leadership crisis in a catastrophe that may be even more destructive, and provide less warning, than Katrina. (Chapter 26–70)

Chapitre 19

LA PLANIFICATION NATIONALE D'URGENCE : UN PARAVENT ?

Katrina, comme d'ailleurs les exercice TOPOF, a été un révélateur de problèmes majeurs :

- L'idée de planification est immanquablement traduite dans les faits par la confection de plans-papier volumineux ;
- Il ne peut y avoir compétence sans entraînement, mais il n'y a pas d'entraînement; et pas de capacités en place pour espérer quelque entraînement à la hauteur des enjeux;
- Comme, à l'évidence, le système n'est pas au point, on réclame des plans encore plus détaillés, « de façon à ce que chacun sache bien ce qu'il a à faire » ;
- On sent bien qu'il faudrait d'autres paradigmes, et d'autres outils sont promis, mais ils ne sortent jamais des chaînes de montage bureaucratiques et du labyrinthe des approbations en tout genre, sauf dans les quelques semaines après des fiascos majeurs où l'on peut entériner ce qui était déjà dans les tuyaux, jusqu'au prochain fiasco;
- Stupéfaction: à la première épreuve on s'aperçoit que les dirigeants n'ont en fait pas la moindre idée de ce qu'il y a dans les plans de leur propre entité – fût-elle en charge de la sécurité nationale.

La leçon fondamentale est claire : c'est le domaine en lui-même, non la question des plans, qui pose problème. Aussi longtemps que ces univers de la discontinuité dans lesquels plongent les crises majeures sont tenus pour hors champ de connaissance, de responsabilité, de sérieux managérial, il est dérisoire de disserter plus longtemps sur les formes d'un plan.

Le Plan, ou la fascination pour une improbable mise en tuyau

The NRP was publicly issued with fanfare in January 2005. Tom Ridge, then DHS Secretary, said, "America is better prepared today, thanks to the National Response Plan." He contrasted the NRP with other plans and reports routinely issued in Washington: "Instead of promising results in the future, it is a deliverable that we believe will bring definite results now."

The NRP, however, was not a self-executing document. It is a complex, ambitious, 400-plus page high-level plan that was described in a document produced to the Committee by the Office of the Vice President, not inaccurately, as "a very detailed, acronym-heavy document that is not easily accessible to the first-time user." (Chapter 27–1-2)

Pas d'entraînement

Without a systematic training and implementation effort, the NRP was unlikely to be widely or readily understood, and unlikely to offer effective guidance, just four months after its implementation, for the massive federal, state, and local response necessary for Katrina.

DHS's implementation effort appears to have been entirely inadequate. After the NRP was issued, DHS conducted a wave of training for headquarters staff of component agencies. Beyond that, it appears no one at DHS was charged with ensuring that the NRP would be well implemented. The National Incident Management System (NIMS) Integration Center is responsible for federal, state, and local NRP awareness training as an adjunct to its primary mission of fostering the widespread adoption of the NIMS, a nationwide approach for different jurisdictions and levels of government to work together in domestic incidents, but its staffing (fewer than 10 people) inherently limited its impact. The Integration Center relies largely on self-administered online training, in which sessions

could last as little as 15-20 minutes.

Only one large-scale exercise of the NRP took place before Katrina, the DHS Top Officials 3 exercise (TOPOFF 3) in April 2005, at about the time the NRP was to take full effect and supersede other plans. TOPOFF 3, sponsored by DHS, involved responders from all levels of government. A report by the DHS Inspector General in November 2005 found that "the exercise highlighted – at all levels of government – a fundamental lack of understanding for the principles and protocols set forth in the NRP and NIMS." It appears that little was done to correct this shortcoming, and that widespread unfamiliarity with the NRP persisted.

In addition, the absence of any other exercises of the NRP meant that there were not further formal opportunities to understand and flesh out the roles allocated by the Plan, to clarify ambiguities, to identify potential problems, and to incorporate lessons recognized back into the Plan making them lessons learned. DHS's lack of substantial and sustained effort to familiarize officials and responders with the NRP and to exercise the NRP under simulated conditions meant, as one expert testified, that "the NRP was only a plan – it was not a functioning, practiced, operable, system." (Chapter 27–2)

La fausse solution miracle : pour contrer les béances, toujours plus de détails

Detailed, more specific planning is likely to be particularly important in responding to catastrophes. Comptroller General Walker has stressed the crucial need for strong planning for catastrophic events, and recommended that the NRP and its Catastrophic Incident Annex – the portion of the NRP that provides for a proactive, national response to a catastrophe – "should be supported and supplemented by more detailed and robust operational implementation plans." (Chapter 27–5)

Autres crises, autres paradigmes

As Thad Allen noted, the NRP as written "doesn't contemplate" an event on the massive scale of Katrina. "[W]hen it goes off the scale, you know, you need a separate plan for how to deal with something that massive. In this case, there were some things that were unique to this event that can only be handled by an almost different approach to what you're doing."

The NRP's Catastrophic Incident Annex and its associated but still-to-be-released Catastrophic Incident Supplement were intended to provide this separate plan for a catastrophe, but, incomplete and largely untested, they went unused. The Catastrophic Incident Annex sets out the broad principles of a proactive response; the Catastrophic Incident Supplement was supposed to fill in significant, operational details. Unfortunately, when Katrina hit, nearly nine months after the NRP had been announced, the Supplement still had not been issued. (Chapter 27-5)

Réticences multiples, problèmes fondamentaux non identifiés

The NRP's Catastrophic Incident Annex and its associated but still-to-be-released Catastrophic Incident Supplement were intended to provide this separate plan for a catastrophe, but, incomplete and largely untested, they went unused. The Catastrophic Incident Annex sets out the broad principles of a proactive response; the Catastrophic Incident Supplement was supposed to fill in significant, operational details.48 Unfortunately, when Katrina hit, nearly nine months after the NRP had been announced,

the Supplement still had not been issued.

According to David Garratt, Acting Director of FEMA's Recovery Division, who had chaired the interagency Catastrophic Incident Planning Group that was charged with developing the Catastrophic Incident Supplement, the Supplement had been 99 percent completed by late 2004, roughly the same time the NRP itself was finished. Garratt explained that when it came time to get the concurrence of the relevant federal agencies to the Catastrophic Incident Supplement, all the agencies approved with the exception of the Department of Defense (DOD). DOD had concerns about a Memorandum of Agreement related to the National Disaster Medical System and, in particular, provisions related to reimbursement for certain medical care in a public health emergency. The Memorandum of Agreement (to which DOD, FEMA, the Department of Health and Human Services, and the Department of Veterans Affairs were each parties) went unresolved and unsigned until approximately September 6, 2005 – eight days after Katrina made landfall and apparently only after the White House's Homeland Security Council got involved. The Supplement, meanwhile, has never been issued.

The delay in issuing the Catastrophic Incident Supplement – and developing the agency plans and procedures that were required to support it – deprived the federal government of a potential tool in its response to Hurricane Katrina. The heart of the Supplement is an Execution Schedule that provides an agency-by-agency (and hour-by-hour) list of the assets various federal agencies are to deploy automatically to the affected area once the Secretary of Homeland Security orders implementation. Had it been issued and high-priority resources pre-identified and ready to deploy, the Catastrophic Incident Supplement might have sped delivery of supplies and personnel to mobilization centers close to the disaster or, in certain circumstances, directly to the incident scene without a need for requests from state and local authorities or from any other federal agency.

Even if the Supplement had been implemented, however, it is not clear that it would have bee adequate to the task at hand. The Execution Schedule is essentially a method of pre-prioritizing a certain set of assets – an important and potentially very useful function, but not by itself likely to constitute a sufficient response to an event of catastrophic magnitude. Garratt, chair of the Catastrophic Incident Planning Group, characterized the Supplement as "basically just an acceleration model for resources that are already identified under the NRP." Indeed, the fact that the Catastrophic Incident Supplement, while complete, has not yet been issued, apparently reflects questions about whether it needs further modification. To be truly effective, the Supplement would need to move beyond its important but narrowly focused Execution Schedule, and incorporate more robust, catastrophe-focused planning. (Chapter 27–5-6)

La planification, un exercice purement esthétique, disjoint de la décision?

When the President issued an emergency declaration in the days before landfall, it should have been apparent that Katrina had significant potential to cause a "catastrophe" as defined by the NRP-CIA. After landfall, it should have been immediately apparent that the catastrophe had occurred. Indeed, Secretary Chertoff would eventually describe Katrina as an "ultra catastrophe." But the NRP-CIA was never activated. We do not know for certain whether DHS leaders ever considered activating the NRP-CIA, although both Secretary Chertoff's Chief of Staff Wood, and Garratt, a FEMA employee who headed the Catastrophic Incident Planning Group, were unaware of any discussions concerning the NRP-CIA in the days before Katrina made landfall.

In the aftermath of Hurricane Katrina, DHS and other federal officials have suggested that it was not appropriate to invoke the NRP-CIA to respond to the hurricane because the NRP-CIA was intended only for "no-notice" events – for which there is no time to go through normal procedures – whereas there was notice that Katrina was heading toward the Gulf Coast. The Catastrophic Incident Annex itself, however, does not contain any language that would limit it to no-notice events. The yet-to-be-issued Catastrophic Incident Supplement was somewhat more explicit, stating that it is intended to apply to "no-notice" or "short-notice" events. These terms are left undefined in the Supplement. While DHS officials contend that Hurricane Katrina was not a nonotice or a short-notice event, a contrary view is just as plausible. Specifically, it could be argued that a massive hurricane hurtling towards a major American city with two or three days' notice meets some common-sense definition of a short notice event.

Indeed, the Catastrophic Incident Supplement's Execution Schedule makes specific reference to hurricanes, events for which there is typically some notice, suggesting further that these documents would apply to an event such as Katrina.86 Nonetheless, federal officials have argued that Katrina provided too much notice to qualify as a "short-notice" event.87 The basis for this argument is respect for the states – with prior notice the normal NRP process of consultation with the states about their needs should apply. There are, of course, countervailing considerations: some known events can still be so overwhelming and urgent that the NRP-CIA may be the appropriate tool. If it were deliberate policy to exclude an event such as Katrina from the purview of the Catastrophic Incident Annex, there may be a significant flaw in the policy underlying the NRP-CIA and the Catastrophic Supplement. As Comptroller General David Walker testified, "the idea that we would be less proactive in dealing with a known natural disaster [than with a nonotice event] just defies common sense." (Chapter 27–9-10)

Incompréhention-résistance générale

In a Quick Look Report on TOPOFF 3, issued in May 2005, DHS recognized that the exercise had revealed a fundamental lack of understanding of unified command. The Report noted that "confusion at all levels regarding identification and clarification of roles and levels of responsibilities." In November 2005, the DHS's Inspector General found that while "overall, objectives were addressed and met," the TOPOFF 3 exercise demonstrated "at all levels of government – a fundamental lack of understanding for the principles and protocols set forth in the NRP and NIMS." The Inspector General highlighted "confusion over the different roles and responsibilities performed by the Principal Federal Official (PFO) and the Federal Coordinating Officer (FCO)," an issue that also plagued the Katrina response. (Chapter 27-12)

Chapitre 20

FRAUDES ET GASPILLAGES

La Commission dénonce un certain nombre de points qui, bien évidemment, doivent émouvoir si l'on veille sur la bonne utilisation de l'argent du contribuable. Mais il ne suffit pas de déplorer un manque de rigueur financière. Lorsque le système est aussi peu compétent sur tous les tableaux, on imagine mal que le point financier puisse apparaître mieux traité que les autres. On peut tomber ici des deux côtés opposés : soit un laxisme total, soit une rigueur paralysante.

Il faut certainement prendre garde, en effet, à ne pas verser dans une réponse qui consisterait à simplement rigidifier les procédures : les victimes seraient livrées en biens de nécessité vitale avec des semaines de retard, en maisons de secours au bout de trois ans, etc. Il faut probablement : savoir qu'il y aura fraude et gaspillage, vu la situation chaotique ; et mettre en place des dispositifs ex-post de contrôle, mais sans s'interdire d'agir.

Il faut sans doute aussi cerner ce qui appelle d'autres logiques de fonctionnement. Notamment, le système (fédéral en l'espèce) peut fort bien ne pas être en mesure d'entrer dans les espaces bouleversés et les temps écrasés de l'après-désastre. Il s'agit alors d'inventer de nouvelles voies d'action. En d'autres termes, en matière financière aussi, il faut faire preuve d'inventivité dans le pilotage, et pas seulement d'intransigeance en renforçant les règles habituelles. Ou d'impuissance pendant, de dénonciations flamboyantes le temps d'un rapport ou d'un discours médiatique, et de classement dans l'oubli convenu après quelques temps.

Paiements dans la confusion

GAO [Government Accountability Office] outlined several other examples of fraud, abuse, or poor management, including the following:

- FEMA made expedited-assistance payments to tens of thousands of individuals whose registrations contained false or duplicative information, including Social Security numbers that had never been issued, or had been issued to another individual, or to an individual since deceased. It is important to note that not all duplicate information was submitted fraudulently. GAO is continuing to investigate both payments resulting from individuals intentionally trying to defraud the government and those resulting from errors in FEMA's system or registration process.
- GAO found thousands of Social Security numbers that were used on more than
 one registration associated with the same disaster. A Social Security number is a
 unique number assigned to an individual. Because individuals are eligible to receive
 disaster relief only on their primary residence, the same Social Security Number
 should not be used more than once to receive assistance for the same disaster.
- GAO found that \$10 million in duplicate payments were made when 5,000 registrants received both a debit card and a check worth. (Chapter 28-3)

Gaspillages et attitudes peu responsables

Pour l'hébergement en urgence, les coûts d'hôtels ont dépassé les limites, et la commission dénonce un manque de contrôle. On ne voit pas cependant qu'il aurait fallu attendre la venue

d'un contrôleur fédéral pour ouvrir une chambre d'hôtel. Cela n'empêche pas un contrôle expost.

As evacuees were moved out of shelters, FEMA instructed hotels across the country to allow anyone with a driver's license from the affected areas to check in and then send FEMA the bill. There were virtually no controls in place. The DHS IG found hotels charging for empty rooms, individuals holding multiple rooms, hotel rooms being used as storage units for personal goods, individuals staying at resorts, and hotels charging rates above even the "rack rate" (the maximum or full price the hotel will charge for the room) – at times costing taxpayers up to \$400 per night.

The DHS IG indicated that his investigators had seen more waste in contracts than actual fraud at that point, but attributed this partly to the fact that FEMA was in the very early stages of the major contracting activity. (Chapter 28-3)

L'archétype du gaspillage : l'odyssée de la glace

In the immediate aftermath of a disaster, some of the commodities most in demand included water, food, and ice. The trouble FEMA had delivering commodities is discussed elsewhere. In the case of ice, plenty of movement occurred – but not always to places one would expect.

FEMA ordered 182 million pounds of ice to respond to Hurricane Katrina. After a typical hurricane, evacuees soon return to their homes, but often those homes are without power for some period of time. Ice helps keep food and medicine cold until power is restored. After Katrina, however, hundreds of thousands of evacuees were sent to shelters across the country and did not return home for days and weeks after the storm. Thus, the need for ice was much lower in some areas than anticipated. While there was a severe shortage of ice in some affected areas, and many hurricane victims who remained in the area did not have access to ice, in the end FEMA had excess ice and used less than 50 percent of what it had ordered.

Some of the ice ended up in Portland, Maine – 1,600 miles from the disaster area. The cost of handling and storing the 200-plus truckloads of ice that went to Portland was approximately \$275,000. More ice went to other distant locations around the country because FEMA decided it made more sense to move the ice to cold-storage facilities for use in new disasters than to let it melt. It is not clear that this was the most cost-effective choice, given the lack of planning that resulted in trucks being rerouted multiple times, and sometimes sitting idle for days, all while costs to the government were mounting.

On September 16, NBC News reported that it had found trucks full of ice in locations such as Maryland, Missouri, Georgia, and Tennessee. Some of the trucks had been driving and/or sitting idle with their full loads for two weeks. One truck driver reported that he had begun his trip in Oshkosh, Wisconsin, traveled to Louisiana, then was sent to Georgia, but was rerouted to South Carolina, before being sent to Cumberland, Maryland. NBC News later reported that the truck was then sent to Iowa, where the ice was put into cold storage.22 The driver reported that this cost taxpayers at least an extra \$9,000. When multiplied by hundreds of truckloads that also took circuitous routes to cold storage, the wasted taxpayer dollars begin to add up.

Some of the ice shipped to cold-storage facilities around the country has already been used for other disasters. But one truckload ended up at the Reid Park Zoo in Tucson, Arizona, to be enjoyed by the polar bears and other animals. The truck driver who donated

the ice to the zoo did so after traveling through 22 states without delivering a single bag of ice to hurricane victims. (Chapter 28–4-5)

Autre cas emblématique : les caravanes pour l'hébergement

As part of its Individual Assistance Program, FEMA typically provides travel-trailers to house individuals whose homes have been badly damaged or destroyed while they rebuild or find alternate housing. When Hurricane Katrina hit, and FEMA realized the scope of temporary housing needs, the agency began buying all of the travel trailers it could find. Unfortunately, in this buying frenzy, FEMA purchased approximately \$900 million worth of manufactured homes and modular homes that could not be used because FEMA's own regulations do not allow for these types of homes to be placed in flood plains. Further, some of the homes purchased did not fit FEMA's size standards.

The Committee held a hearing on the manufactured housing in Hope, Arkansas on April 21, 2006, and learned more about FEMA's poor decisionmaking and wasteful spending. FEMA purchased 24,967 manufactured homes and 1,295 modular homes in response to the need for transitional housing to assist displaced evacuees. However, FEMA seemingly had no plans for how the homes would be used when the purchases were made. FEMA issued a mission assignment to the U.S. Forest Service to set up eight emergency storage sites, including one in Hope, Arkansas. To house some of the manufactured and modular homes, FEMA leased a staging area at the Hope Municipal Airport at a cost of \$25,000 per month – equivalent to a rent of \$300,000 per year. The Committee learned that prior to the lease with FEMA, the City of Hope had rented the same site to a hay farmer for \$5,000 per year.³⁴

As of the April hearing, there were 15,603 manufactured and modular homes as well as 7,229 travel trailers staged at the eight emergency housing sites. While FEMA was able to use some of the homes in other disasters, and had plans for the use of an additional number of the homes, they still had no plan for thousands of manufactured and modular homes. The Committee learned that FEMA had already hired sales staff to sell the homes as surplus property if they are not eventually used,35 but typically this type of sale recoups only pennies on the dollar. The manufactured and modular homes purchased represent some of the most serious waste discovered to date. (Chapter 28–6)