



Wiley Rein & Fielding LLP

The FCC's Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks

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The Crisis in Public Safety Communications

George Mason University

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Overview

- **Panel's Charge and Make-up**
- **Panel Observations**
- **Panel Recommendations**
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Panel's Charge and Make-up



The Panel's Charge

Scope of the Panel's activities:

- To study the impact of Hurricane Katrina on all sectors of the telecommunications and media industries, including public safety
- To review the sufficiency and effectiveness of the recovery effort with respect to this infrastructure
- To make recommendations to the FCC regarding ways to improve disaster preparedness, network reliability and communication among first responders



The Panel's Charge (cont.)

Timeline:

- Charter effective January 9, 2006
- Report due to the FCC by June 15, 2006
- Report filed on June 12, 2006



Panel Membership

The members of the Panel represented every sector of the communications industry:

- Telephony
- Cable
- Law Enforcement
- Notification Technology
- Wireless
- Broadcasting
- Manufacturers
- Emergency Medical
- Public Interest Groups
- Satellite
- Utilities
- Fire and Rescue
- Unlicensed Wireless

Many members had direct hands-on experience dealing with Katrina and its aftermath



Panel Focus

The Panel had four main areas of focus for its review and recommendations:

- Network reliability and resiliency
- Recovery coordination
- First responder communications
- Emergency communications to the public



Panel Observations



Network Reliability and Resiliency

Katrina had a devastating effect on the communications infrastructure of the region:

- More than 3 million customer telephone lines were knocked out of service
- Thirty-eight 911 call centers went down
- Over 1000 wireless base stations went out of service
- Approximately 100 broadcast stations went dark
- Hundreds of thousands of cable customers lost service
- Public safety systems experienced significant outages

Damage in the coastal areas was particularly significant



Network Reliability and Resiliency (cont.)

Wind and rain damage was substantial, but not the main problem:

- Antennas blown out of alignment could be repaired fairly quickly

The most damage to the communications infrastructure came from Katrina's collateral effects:

- Flooding
- Power/fuel
- Failure of pathways linking key network elements
- Line cuts



Network Reliability and Resiliency (cont.)

However, there were resiliency successes in Katrina's aftermath:

- A large portion of the communications infrastructure withstood the storm's wind and rain with only minor damage
- Satellite networks, although taxed by extensive numbers of additional users, remained available and usable throughout the affected region
- The communications networks operated by utilities appeared to have a very high rate of survivability



Recovery Coordination and Procedures

Significant challenges also were encountered during the recovery effort:

- Inconsistent and unclear requirements for communications infrastructure repair crews and their subcontractors to gain access to the affected area
- Limited access to power and/or generator fuel
- Limited security for communications infrastructure and personnel
- Limited pre-positioning of back-up equipment
- Lack of established coordination between the communications industry and state and local officials, as well as among federal, state and local government officials with respect to communications matters
- Limited use of available priority communications services



Recovery Coordination and Procedures (cont.)

There were coordination successes:

- Coordination between the federal government and communications industry were established and generally effective (the FCC, in particular, was praised for its role)
- Informal coordination among industry to share fuel, security, etc. helped to maximize assets and bolster the recovery effort



First Responder Communications

Typically resilient public safety systems also were seriously impacted by Katrina and its aftermath

These challenges appeared exacerbated by:

- Lack of advanced planning for massive system failures
- Lack of interoperability
- Ineffective PSAP rerouting
- Extremely limited contingency communications planning by emergency medical community



Emergency Communications to the Public

Communications to the public about the hurricane, evacuation information and recovery efforts could have been improved:

- Emergency Alert System (EAS) was not fully activated
- New technologies that might address limitations in EAS coverage are not widely utilized
- Information accessible to persons with disabilities and non-English-speaking Americans was limited
- Inconsistent or incorrect emergency information was sometimes disseminated



Panel Recommendations



Recommendations

Pre-positioning for disasters – a proactive, rather than reactive program for network reliability and resiliency:

- ***A readiness checklist for the communications industry***
The FCC should work with and encourage each industry sector, through their organizations or associations, to develop and publicize sector-specific readiness recommendations
- ***An awareness program for public safety regarding non-traditional emergency alternatives***
The FCC should take steps to educate the public safety community about the availability and capabilities of non-traditional technologies that might provide effective back-up solutions for existing public safety communications systems



Recommendations (cont.)

- ***An A Priori regulatory program for disaster areas***
The FCC should explore amending its rules to permit automatic grants of certain types of waivers or special temporary authority (STA) in a particular geographic area if the President declares that area to be a “disaster area“
- ***A single repository and contact for consistent outage data collection***
The FCC should coordinate with other federal and state agencies to identify a single repository/point of contact for communications outage information in the wake of an emergency. The Panel suggests that the FCC is the federal agency best situated to perform this function

Recommendations (cont.)

Recovery coordination – critical steps for addressing existing shortcomings and maximizing use of existing resources:

- ***National credentialing guidelines for communications infrastructure providers***

The FCC should work with other appropriate federal departments and agencies and the communications industry to promptly develop national credentialing requirements and process guidelines for enabling communications infrastructure providers and their contracted workers access to the affected area post-disaster



Recommendations (cont.)

- ***Emergency responder status for communications infrastructure providers***

The Panel supports the National Security Telecommunications Advisory Committee's ("NSTAC's") recommendation that telecommunications infrastructure providers and their contracted workers be afforded emergency responder status under the Stafford Act, but recommends that it be broadened to include all communications infrastructure providers

- ***Utilization of state/regional coordination bodies***

The FCC should work with state and local government and the communications industry (including wireline, wireless, WISP, satellite, cable and broadcasting) to better utilize the coordinating capabilities at regional, state and local Emergency Operations Centers, as well as the Joint Field Office



Recommendations (cont.)

- ***Expanding and publicizing emergency communications programs (GETS, WPS and TSP)***

The FCC should work with the National Communications System (“NCS”) to actively and aggressively promote GETS, WPS and TSP to all eligible government, public safety, and critical industry groups

- ***Broadening NCC to include all communications infrastructure sectors***

The FCC should work with the NCS to broaden the membership of the National Coordination Center for Telecommunications (“NCC”) to include adequate representation of all types of communications systems, including broadcast, cable, satellite and other new technologies, as appropriate



Recommendations (cont.)

- ***FCC website for emergency coordination information***
The FCC should create a password-protected website, accessible by credentialed entities, listing the key state emergency management contacts, as well as post-disaster coordination areas for communications providers
- ***FCC website for emergency response team information***
The FCC should create a website to publicize the agency's emergency response team's contact information and procedures for facilitating disaster response and outage recovery



Recommendations (cont.)

First responder communications – essential steps for addressing lessons learned from Hurricane Katrina:

- ***An emergency restoration supply cache and alternatives inventory***

The FCC should encourage state and local jurisdictions to retain and maintain, including through arrangements with the private sector, a cache of equipment components that would be needed to immediately restore existing public safety communications. The FCC should also work with the NCC to develop inventories of alternative communications assets



Recommendations (cont.)

- ***Facilitating first responder interoperability***

The FCC should take several steps to facilitate interoperability among first responder communications, including:

- Maintaining the schedule for commercial spectrum auctions to fund the federal public safety grant programs
- Working with the National Telecommunications and Information Administration (“NTIA”) and the Department of Homeland Security (“DHS”) to establish appropriate criteria for these grants
- Encouraging the expeditious development and approval of 700 MHz regional plans
- Working with NTIA and DHS to develop spectrum sharing among federal, state and local agencies for emergency response purposes
- Publicizing interoperability successes and best practices



Recommendations (cont.)

- ***A plan for resiliency and restoration of E-911 infrastructure and public safety answering points (“PSAPs”)***

The FCC should encourage implementation of certain Network Reliability and Interoperability Council (“NRIC”) best practice recommendations to ensure more robust E-911 service. In addition, the FCC should recommend and take steps to permit the designation of a secondary back-up PSAP more than 200 miles away, as well as urge applicable federal programs to expand eligibility for 911 enhancement/interoperability grants



Recommendations (cont.)

- ***An outreach program to educate and include the emergency medical community in emergency communications preparedness***

The FCC should work to assist the emergency medical community to facilitate the resiliency and effectiveness of their emergency communications systems through education and clarification of Stafford Act classification and funding eligibility



Recommendations (cont.)

Emergency communications to the public – actions to better alert and inform:

- ***Revitalize and publicize the underutilized emergency alert system***

The FCC should revitalize and publicize the underutilized EAS through education and the exploration of complementary notification technologies

- ***Ensure consistent and reliable emergency information through a consolidated and coordinated public information program***

The FCC should work with federal, state and local agencies to ensure consistent and reliable emergency information through a consolidated and coordinated public information program



Recommendations (cont.)

- ***Commence efforts to ensure that persons with disabilities and non-English speaking Americans receive meaningful alerts***
The FCC should commence efforts to ensure that persons with disabilities and non-English speaking Americans receive meaningful alerts, including resolving technical hurdles to these individual's utilization of EAS, publicizing best practices for serving these individuals, and encouraging state and local emergency agencies to make critical emergency information accessible to persons with disabilities and non-English speaking Americans



Next Steps



Next Steps

On June 19th, the FCC released a Notice of Proposed Rulemaking initiating a comprehensive rulemaking to address and implement the Panel's recommendations

- Comments were due August 7, 2006
- Replies were due August 21, 2006

