



**Federal Communications Commission  
Public Safety and Homeland Security Bureau**



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# **FCC Public Safety Regulatory Update**

**Intergovernmental Advisory Committee  
January 7, 2013**



# Outline



- Effects of the Derecho and Superstorm Sandy on Network Infrastructure
- FCC Emergency Response and State/Local Government Coordination Issues
- Next Generation 911 and Text-to-911
- Other Public Safety Issues



# Derecho Major Effects



## ■ Impact on 911 Service

- Ohio, Indiana -- Isolated, short-lasting network breakdowns that knocked out 9-1-1 service temporarily
- Northern Virginia and West Virginia – As a result of carrier network failures, a significant number of PSAPs were unable to receive 911 calls at all or did not receive E911 location information for extended periods
- In some PSAPs, 911 service was partially down for several days



# Superstorm Sandy Major Effects



## ■ Wireless Outages

- DIRS reports show 25 percent of cell sites out in affected areas after the storm (higher percentage in some of the hardest-hit areas)
- Some outages due to lack of power, others to interruption of backhaul
- Number of cell sites out overall declined from 25 percent to 15 percent by November 2
- Wireless service restored relatively quickly away from center of storm's path, more slowly in New York and New Jersey



# Superstorm Sandy Major Effects



## ■ 911 Impact

- Most calls were received at 911 call centers, though in limited cases calls were re-routed or did not contain location information

## ■ Cable Outages

- Initial DIRS reports showed cable outages at 25 percent
- Outages declined from 25 percent to 17 percent by November 2



# FCC Emergency Response

## FCC Human Assets



- 24/7 Operations Center
  - Situation reporting
  - Outreach to and coordination w/licensees, State & Local EOCs, PSAPs, and federal partners
- Incident Management Team
  - Close coordination with DHS, FEMA and the federal interagency
  - Logistical coordination support for FCC licensees



# FCC Emergency Response

## FCC Human Assets



### ■ Disaster Response Team

- Subject matter experts in communications w/communications disaster response experience
- Real time work in support of first responders, PSAPs, and FCC licensees
- Damage assessment
- Interference resolution
- Annual training with Federal, State, Local responders and communications industry partners



# FCC Equipment Assets and Capabilities



- Roll Call
  - Remote sensing platform w/30 mile radius
  - 500 Hz – 2 GHz
  - Capability to identify active spectrum and licensed users
  - Any broadcast/public safety or government wireless licensee, provider and/or user in the range
- TEMS Cellular Mapping
  - Capability to produce Google street-level cellular coverage maps
  - Situation Reporting



# Outage Reporting



- Network Outage Reporting System (NORS)
  - Mandatory for wireline, wireless, paging, cable, satellite, Signaling System 7 service providers, and undersea cable landings in the U.S.
- Disaster Information Reporting System (DIRS)
  - Voluntary for wireless, wireline, broadcast, cable, undersea cables, and interconnected VoIP
  - Proposed voluntary reporting for PSAPs



# Operational/Coordination Issues for Consideration



- Access and coordination for communications repair crews
  - Requires coordination w/State and local jurisdictions for access to critical facilities (e.g., cell sites, broadcast facilities, transmitters, etc)
  - Requires federal, State, and local action to waive ordinances, license and environmental requirements to temporarily place COWS, COLTS, and/or to SatCOLTs on federal, public and/or private property to restore cell service
  - Requires coordination w/local power companies when replacing poles and lines



# Operational/Coordination Issues for Consideration



- Staging and security for licensee staff and equipment
  - Requires secure staging area for licensee staff, vehicles, and equipment
  - Requires security for critical facilities and temporarily placed generators
- Fuel for communications repair vehicles and facilities
  - Requires priority fuel supplies for communications repair crew vehicles and facilities
- Generators to temporarily restore communications capabilities
  - Requires priority supply of generators for licensees to temporarily restore critical communications services



# OEM Points of Contact



- Ken Moran, PSHSB Senior Deputy Chief and Chief Preparedness Officer, [Kenneth.Moran@fcc.gov](mailto:Kenneth.Moran@fcc.gov), 202-418-0802
- Richard Lee, PSHSB Associate Chief, [Richard.Lee@fcc.gov](mailto:Richard.Lee@fcc.gov), 202-418-1104
- Eric Panketh, Acting Chief, Operations and Emergency Management (OEM) Division, [Eric.Panketh@fcc.gov](mailto:Eric.Panketh@fcc.gov), 202-418-0063
- 24/7 FCC Operations Center, [FCCOperationCenter@fcc.gov](mailto:FCCOperationCenter@fcc.gov), 202-418-1122



# FCC NG9-1-1 Five-Step Plan Status



- Develop location accuracy mechanisms for NG9-1-1 – Ongoing FCC rulemaking; CSRIC indoor location report due in March
- Enable consumers to send text, photos, and videos to PSAPs – FCC proposed text-to-911 rules in December 2012 Further NPRM
- Develop an NG9-1-1 funding model – Ongoing
- Facilitate the completion and implementation of NG9-1-1 technical standards -- Ongoing
- Work with states and other stakeholders to develop an NG9-1-1 governance framework – FCC recommendations to Congress due February 22, 2013



# Text-to-911 FNPRM

## Text-to-911 Implementation



- FCC Proposal: all wireless carriers and “interconnected” text providers (i.e., providers that support texting to any phone number) must enable consumers to send text messages to 911 in areas where PSAPs are prepared to receive the texts
  - Four major wireless carriers have voluntarily committed to implement text-to-911 by May 15, 2014
  - FNPRM proposes to apply the same or similar timeframe to all providers
  - FNPRM comments due March 11, 2013; replies due April 9, 2013



# Text-to-911 FNPRM

## Automatic "Bounce Back" Messages



- FCC Proposal: all wireless carriers and interconnected text providers must send automated "bounce back" error messages to consumers attempting to text 911 when the service is not available.
  - Four major wireless carriers have voluntarily committed to implement bounce-back capability by June 30, 2013
  - FNPRM proposes to apply the same or similar timeframe to all providers
  - Accelerated comment cycle on this issue: comments due January 29, 2013; replies due February 8, 2013



# Other Public Safety Issues



- VHF-UHF Narrowbanding
- 700 MHz Narrowband
- T-Band