

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Improving the Resiliency of Mobile Wireless Communications Networks)	PS Docket No. 13-239
)	
Reliability and Continuity of Communications Networks, Including Broadband Technologies)	PS Docket No. 11-60
)	

COMMENTS OF THE CITY OF NEW YORK

I. INTRODUCTION

The City of New York (the “City”) submits the following comments in response to the Federal Communications Commission’s (the “Commission” or the “FCC”) Notice of Proposed Rulemaking (“NPRM”) in the above-captioned proceeding. The City supports and applauds the Commission’s effort to establish rules necessitating disaster reporting requirements for Commercial Mobile Radio Service (CMRS) providers, and for providing this opportunity for the City to comment on the benefits of the proposed rules and on additional measures that should be implemented to enhance resiliency in an infrastructure-dependent network industry.

Hurricane Sandy was a reminder of just how critical telecommunications services are during times of emergency and disaster. The storm caused major damage to the City’s commercial telecommunications infrastructure and severely impacted the public’s ability to communicate with the City, first responders, and family and friends.¹ “The City, its residents, and its business

¹ See New York City Special Initiative for Rebuilding and Resiliency: *A Stronger, More Resilient New York* (June 11, 2013), chapter 9. <http://www.nyc.gov/html/sirr/html/report/report.shtml>.

community, are dependent on communications services to report emergencies, interact with first responders, and maintain continuity of business and daily life before, during, and after any storm or disaster.”² The impact resulting from Sandy’s power outages and service disruptions could have been greatly eased by providing the public with real time information about the operational status of communication networks and restoration efforts. While the FCC’s proposed rule is certainly a step in the right direction, additional measures must be taken to protect the public in times of emergency and disaster and when choosing a provider.

In particular, the City urges the FCC to promulgate rules that would:

- Give local authorities as near as possible to real-time access to specific wireless outages that have occurred in their areas during disasters and up to date status on their restoration efforts, to focus searches on areas where outages preclude residents and others from otherwise contacting first responders.³
- Give consumers real-time access during emergencies to provider-specific outage information, with estimated restoration times, to better enable consumers to pursue alternatives, workarounds and relocation efforts.
- Give consumers access to provider-specific outage information and actual restoration times, to enable consumers to consider that information at the point of purchase of wireless services.
- Give localities specific information regarding proposed temporary infrastructure deployment measures and operational status of such temporary installations so that localities can facilitate transportation and permitting and better gauge disaster area communications coverage.

II. DISCUSSION

A. Share information with first responders

² Statement of New York City Chief Information and Innovation Officer Rahul N. Merchant to the Federal Communications Commission Regarding Communications and Hurricane Sandy, PS Docket 11-60 on February 7, 2013.

³ This information should be provided to the extent such specific information is not already provided directly to localities pursuant to any other Commission Report and Order.

Local authorities need to know specifically which areas are suffering wireless outages in the event of a disaster. As wireless carriers report detailed information to the Commission, they should simultaneously report such information to local authorities so that first responders can know exactly where people cannot reach out for help.⁴ Equipped with that information, first responders can better focus their life-dependent search-and-rescue operations. Most providers already participate in voluntary reporting to the FCC during times of disaster, but those reports can provide little direct benefit to the public if local authorities do not have real-time access to those reports.⁵ Therefore, while the City supports the Commission's proposal to require facilities based CMRS providers to submit information to the Commission for public disclosure, such as the percentage of cell sites that are operational, the City urges the Commission to ensure that local authorities are also provided real-time access to additional detailed information provided by the CMRS providers to the FCC during disasters.

B. Share information with consumers

The City encourages the Commission to make outage-related information available to consumers at *two* points: during telecom disruptions due to disasters, and when consumers are selecting telecom services for purchase.

During disasters, consumers need real-time information on both service interruptions and estimated service-restoration times. Provider-specific information about outages and restoration would better enable consumers to pursue alternatives, workarounds and relocation efforts, and to gain better and quicker access to working service during and in the immediate and short-term aftermath of emergency conditions. The fullest possible access to the same information that is

⁴See footnote 3.

⁵ See U.S. Gov. Accountability Office, *GAO-10-249, Telecommunications: Information Collection and Management at the Federal Communications Commission* 15 (2010).

available internally to wireless service providers regarding where and for how long outage conditions exist will enhance the ability of businesses and the wider public to respond effectively to health and safety issues related to disaster situations and to achieve the swiftest restoration of normal living and working conditions.⁶

The second point at which consumers need provider-specific outage-related information is at purchasing decision points, when consumers are deciding on which carrier best meets their needs. At this point, which will ordinarily be under normal, non-emergency conditions, consumers will benefit from information relevant to their purchasing decisions, including statistics about which carriers have performed best and have demonstrated the greatest network resiliency and ability to substantially withstand disaster conditions. At both the “disaster” information point and the “purchasing” information point, consumers need provider-level information regarding the prevalence and scope of service disruptions and time to restoration in areas affected by disruptions.

C. Reporting metrics for dense urban areas

In response to the Commission’s request for comment on specific reporting metrics, the City respectfully submits that the Commission’s proposal for providers to report on a per-county basis is not sufficiently granular, at least in high-density urban areas such as the City. In those areas, the City recommends reporting by census tract. New York City consists of five counties, each with variant terrain. As a result of this variance, areas within each county will be impacted differently in a disaster. The City consists of 2,168 census tracts, which typically have a

⁶ Gerry Smith, *Don't Count On Your Cell Phone For Help After The Next Huge Hurricane*, Huffington Post (Oct. 21, 2013), http://www.huffingtonpost.com/2013/10/21/cell-phones-hurricane-sandy_n_4118262.html.

population of about 3,000-4,000 and an average land area of 90 acres.⁷ Providing data at this level would provide a more useful stream of information for users, without requiring public disclosure of the specific location of any particular cell equipment that would raise security or competitive network design concerns. Providers should, however, be permitted and encouraged to provide additional information as necessary to explain any percentages that could potentially present misleading information to consumers. Additional explanatory information might include the total number of sites within the defined area subject to the calculation and whether the outage impacts any customers within the defined area or whether the outage impacts any customers at all.

D. Sharing of temporary infrastructure location and operational status

During a disaster, it will likely be irrelevant to many consumers whether working cell sites are permanent or temporary. Therefore, the City is neutral as to whether cells/carriers on wheels (COWS) and cells/carriers on light trucks (COLTS) should be calculated as part of the provider's network. However, it is very important that local authorities are aware of the deployment locations and real-time functionality of COWS and COLTS. During a disaster such temporary installations may be primarily installed in the heaviest hit areas, areas where there are large numbers of responders. Localities need to know when COWS and COLTS are up and when they are down in order to gauge overall coverage of an area. Also, COWS and COLTS may depend on fuel support; therefore they are more vulnerable and may require protection with the assistance of local authorities. With specific information about COWS and COLTS, localities

⁷ New York City Department of City Planning, *New York City Census Factfinder: Frequently Asked Questions*, available at http://www.nyc.gov/html/dcp/html/census/nyc_cff_faqs.shtml (last visited Oct. 23, 2013).

can better facilitate transportation and permitting and will be informed as to whether onsite efforts including search and rescue teams can depend in part on such installations.

E. Increased resiliency

In addition, the City urges the Commission to pursue measures for improving wireless network resiliency, beyond expanded information sharing. Infrastructure can be designed to improve the capacity and hardening of networks to withstand disasters and decrease service disruptions to consumers.⁸ This is particularly true for facilities and system components within the FEMA-identified floodplain. The experience of Hurricane Sandy indicates that reliance entirely on expanded information sharing is insufficient, and that enhanced infrastructure resiliency mandates are necessary.

Therefore, the Commission should consider implementing minimum performance standards for wireless carriers for voice and text messaging services during disasters and other high-volume call times.

Also, the City responds in the affirmative to the Commission's question raised in the second sentence of Paragraph 62 of the NPRM: "...should we consider emergency back-up power requirements similar to the requirements the Commission previously adopted for mobile wireless networks but never made effective?" Even well before Sandy, the Commission had found in 2007, after wide-ranging study, the need for new emergency back-up power standards for mobile wireless networks. The City acknowledges the backup power requirements in the Commission's recent 911 Reliability Order dated December 12, 2013 but the experience of Hurricane Sandy suggests to the City a compelling basis for the Commission to also re-examine and adopt a

⁸ Where and if appropriate, these measures can include elevation of critical electrical and mechanical equipment or the installation of localized flood protections.

version of the conclusions and standards it reached in 2007 regarding backup power for wireless networks.

The City further urges the Commission to consider encouraging wireless service providers (and supporting antenna industries) to develop, consistent with local attachment and siting requirements, innovative power support systems such as micro batteries and solar panels.

Finally, the Commission should consider mandating carrier assistance to local communities in the pre-staging of telecommunication support assets such as COWS, COLTS, and charging stations, so as to meet essential preparedness and resiliency standards.

III. CONCLUSION

The City applauds the Commission's efforts to expand the resilience of the nation's wireless infrastructure and supports the Commission's proposed rule to require wireless mobile service providers to disclose outage information. The City respectfully requests that the Commission revise its proposed rule to include more granular disclosure requirements that would promote information, restoration, resiliency and transparency to consumers in both emergency situations and when comparing mobile wireless service providers. The City also supports the implementation of additional measures to improve wireless network resiliency in emergency situations. Given the increasingly widespread dependency on wireless communication systems as a primary source of communication and the possibility that broadband public safety systems may utilize public-private partnerships, the public safety and consumer education benefits that would result from imposing these additional requirements far exceed the minimal additional burdens on service providers who operate on spectrum assets under license from the public and for the public interest.

Thank you for this opportunity to comment.

Respectfully submitted,

New York City Department of Information Technology and Telecommunications

and

Mayor's Office of Citywide Emergency Communications