Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Improving 9-1-1 Reliability	)	PS Docket No. 13-75
	)	
	)	
Reliability and Continuity of Communications Networks, Including Broadband Technologies	)	PS Docket No. 11-60

COMMENTS OF
THE UNITED STATES TELECOM ASSOCIATION

The United States Telecom Association (USTelecom) respectfully submits these comments in response to the Notice of Proposed Rulemaking (Notice) "In the Matter of Improving 9-1-1 Reliability; Reliability and Continuity of Communications Networks, Including Broadband Technologies.[1] USTelecom is the premier trade association representing service providers and suppliers for the telecommunications industry. USTelecom members provide a full array of services, including broadband, voice, data and video over wireline and wireless networks. USTelecom and its member companies are longtime leaders in National Security Emergency Preparedness (NS/EP) Communications and we understand the critical role of 9-1-1 services to the community. USTelecom supports the Commission's effort to "enhance public safety by applying the lessons learned to help make communications more reliable and resilient,

[1] *See* Notice of Proposed Rulemaking, In the Matter of Improving 9-1-1 Reliability (PS Docket No. 13-75) and Reliability and Continuity of Communications Networks, Including Broadband Technologies (PS Docket NO. 11-60), released March 20, 2013.

and reduce the chances that these failures will be repeated."[2] The Commission thus should direct the existing Industry Forums to determine whether modified or additional best practices are warranted in light of the lessons learned from the Derecho.

I. THE 2012 DERECHO WAS AN EXTREME WEATHER EVENT

On June 29, 2012, a derecho of historic proportions struck the Ohio Valley and Mid-Atlantic regions. The fast-moving violent storm complex crossed 700 miles, impacting 11 states and Washington, D.C. It left a path of destruction causing widespread damage to the electric and communications infrastructures.[3] According to Phillip Wright, vice president of distribution operations for American Electric Power, the 2012 Derecho was the single-most devastating weather event in the history of Appalachian Power.[4] Physical damage to "electric power infrastructure, including transmission and distribution lines, substations, and utility poles," left more than 4 million electric utility customers across the region without power and restoration efforts in many cases took seven to 10 days.

This type of large-scale power outage redefined what an "extraordinary event" is in some impacted areas.[5] The prolonged lack of commercial power was the predominant cause of 9-1-1 service disruptions and as commercial power was restored, communications services were timely

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[2] *See* Written Statement of David S. Turetsky, Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission, "Resilient Communications: Current Challenges and Future Advancement" Before the Subcommittee on Emergency Preparedness, Response, and Communications Committee on Homeland Security, U.S. House of Representatives, Wednesday, September 12, 2012, at 5.

[3] Major Disaster Declarations were issued for Virginia, West Virginia, Maryland, New Jersey, and Ohio. Disaster Declarations, FEMA Web site http://www.fema.gov/disasters.

[4] Public Service Commission of West Virginia, Public Meeting, Case No. 12-0993-E-T-W-GI, October 22, 2012. *See* Utility Officials Discuss Derecho, The Charleston Gazette, http://www.wvgazette.com/News/201210220212.

[5] *See* Comments of Frontier Communications Corporation, PS Docket No. 11-60, at 3 (August. 17, 2012).

restored. It is important to acknowledge the critical interdependencies between the communications sector and the energy sector. The findings of the Communications Dependency on Electric Power (CDEP) Working Group underscore the Communications Sector's dependence on commercially available power sources.[6]

According to the U.S. Department of Energy's post-Derecho findings, "the [power] restoration performance following the 2012 Derecho was impeded by a number of factors that differentiate it from [Hurricane Ike, Hurricane Irene, and other similar storms]. These factors include the severity and scope of the storm and the resulting damage to electric infrastructure, storm preparation time, and post storm issues."[7]

II. COMMUNICATIONS SERVICE PROVIDERS CONTINUE TO STRENGTHEN 9-1-1 SERVICE AND PROACTIVELY IMPROVE 9-1-1 RELIABILITY

As noted in previous filings, communication providers' networks are resilient and reliable and generally performed well during and after the Derecho. However, some communications provider networks were negatively impacted by the historic storm. In the eleven months since the 2012 Derecho, these impacted communications providers have strengthened their 9-1-1 reliability and implemented a number of corrective actions based on their detailed post-storm

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[6] *See* Communications Dependency on Electric Power Working Group Report, "Long-Term Outage Study" National Communications System Committee of Principals, February 17, 2009. *See* NSTAC's Report to the President on Telecommunications and Electric Power Interdependencies (TEPI): The Implications of Long-Term Outages at http://www.ncs.gov/nstac/reports/2006/NSTAC_XXIX_Reports_082206.pdf; The Communications Sector Telecom Energy Alliance (TEA), composed of both government and industry partners, was established to further the recommendations from the Critical Dependency on Electric Power Working Group.

[7] *See* A Review of Power Outages and Restoration Following the June 2012 Derecho, Infrastructure Security and Energy Restoration, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy, August 2012, at 6. DOE Web site http://energy.gov/oe/downloads/review-power-outages-and-restoration-following-june-2012-derecho (April 30, 2013).

analyses. These significant, proactive measures will further ensure the reliability, resiliency, and availability of 9-1-1 communications networks. For example, on August 12, 2012, Verizon released a report detailing its own post-storm analysis of the 9-1-1 service disruptions impacting Northern Virginia and identified important proactive improvements to minimize the risk of future problems.[8] The analysis detailed actions Verizon has already initiated. Similarly, Frontier Communications is implementing additional best practices as a result of its experience with the Derecho.[9]

Communication providers have robust network monitoring, repair and restoration processes in place today. That said, during and following extreme events (like the Derecho), providers sometimes identify gaps and/or issues with these processes and work diligently to address and resolve them. While this is standard practice, and the process that impacted carriers followed during the Derecho, their mitigation plans may not be applicable to or technically feasible for every communications provider.

III. STAKEHOLDERS AND THE COMMISSION SHOULD REVISIT BEST PRACTICES IN A COLLABORATIVE MANNER

The FCC has a long history of supporting industry's development and implementation of best practices through the Alliance for Telecommunications Industry Solutions (ATIS) Network Reliability Steering Committee (NRSC),[10] the President's National Security

[8] *See* Verizon, 911 Service and the June 29, 2012, Derecho, released August 13, 2012. *See* Verizon Continues to Make Solid Progress in Strengthening 911 Service, Aggressively Addressing Issues in Virginia After 2012 Derecho, January 17, 2013, http://newscenter.verizon.com/corporate/news-articles/2013/01-17-verizon-statement-on-virginia-scc-report/ .

[9] *See* Frontier Comments at 6. *See also*, Frontier Communications Press Statement Regarding Network Reliability and Redundancy, January 10, 2013.

[10] *See* ATIS NRSC Best Practices Subcommittee Tutorial, November 2011.

Telecommunications Advisory Committee (NSTAC),[11] the Communications Security, Reliability and Interoperability Council (CSRIC), and the FCC's previously chartered Advisory Committees, including the Network Reliability and Interoperability Committee (NRIC) and the Media Security and Reliability Council (MSRC). These industry associations, committees and councils have been very effective at developing new and editing existing voluntary best practices. As such, USTelecom believes that these industry forums remain the appropriate place for review, development and/or improvement of existing 9-1-1 reliability best practices.[12]

Industry input into each 9-1-1 best practice is essential, as each best practice is not relevant for each area, sector, and node, and communications providers should maintain the flexibility to implement the best practices that are most appropriate for their networks and business models. This collaborative approach allows for more careful consideration of cost and benefits of various practices, in contrast to the cost-benefit analysis posed in the NPRM, which grossly underestimates the costs involved. Requiring 9-1-1 service providers to undertake costly measures that have questionable efficacy will lead to higher end-user rates without providing commensurate benefits to the end user. 9-1-1 service providers best know their own networks and facilities and can determine what measures will be effective in improving 9-1-1 reliability.

USTelecom supports enhanced public-private partnership efforts in lieu of new regulations on 9-1-1 network resiliency and reliability. Communications sector reliability overall has a long history of success through NRIC, CSRIC, ATIS, and the NSTAC. The Commission should avoid mandating rules that would require 9-1-1 service providers to implement specific,

[11] *See* NSTAC Report to the President on Communications Resiliency, April 19, 2011.

[12] *See* CSRIC II Working Group 6 (Best Practice Implementation) developed recommendations regarding the key best practices for each communications industry segment that should be implemented by communications service providers in order to enhance the security, reliability, operability and resiliency of communications infrastructure. CSRIC II Working Group 6, BEST PRACTICE IMPLEMENTATION, Final Report, January 2011.

uniform actions. An attempt to shoehorn all provider networks into a single solution is destined to fail, considering the many different network architectures, protocols, and assets. Any mandates would damage providers' flexibility in responding to natural and manmade disasters.

IV. CONTINUE TO DEPLOY NEXT GENERATION 9-1-1 CAPABILITIES

The Commission should continue to support the deployment of Next Generation 9-1-1 systems and capabilities by all stakeholders. As Commissioner Pai points out, "Many of the best practices discussed in the Notice—such as call overflow rerouting, link-failure rerouting, physical and logical network diversity, and continuous monitoring—are built into NG911 networks. Indeed, the Bureau's derecho report noted that had NG911 "architectures and capabilities been in place . . . they likely could have significantly lessened the derecho's impact on emergency communications."[13] Although NG9-1-1 deployment is in its infancy and will likely require a significant amount of state and federal support, a full NG9-1-1 architecture has the capability to dynamically reroute traffic and will provide an improvement in 9-1-1 system reliability.

V. CONCLUSION

The historic 2012 Derecho that struck the D.C. region, Ohio Valley and Mid-Atlantic regions was an extreme and sudden weather event. To ensure improved 9-1-1 reliability and the reliability and continuity of communications networks, the Commission should continue to support the deployment of NG9-1-1 and to direct the existing industry forums to determine whether modified or additional best practices are warranted in light of the valuable lessons

[13] *See* Statement of Commissioner Ajit Pai, *Improving 911 Reliability and Continuity of Communications Networks* PS Docket No. 13-75, *Including Broadband Technologies*, PS Docket No. 11-60, Notice of Proposed Rulemaking, FCC 13-33 (2013).

learned in post-Derecho analyses. The Commission should avoid, however, imposing rigid, costly, one-size-fits-all regulatory mandates on 9-1-1 service providers.

Respectfully submitted,

UNITED STATES TELECOM ASSOCIATION

By: 

Jonathan Banks
Anthony V. Jones

607 14th Street, NW, Suite 400
Washington, D.C. 20005
202-326-7300

May 13, 2013