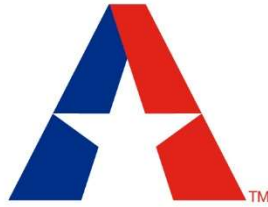


**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Reliability and Continuity of)	PS Docket No. 11-60
Communications Networks, Including)	
Broadband Technologies)	
)	
Public Safety and Homeland Security)	
Bureau Seeks Comment on Improving)	
Wireless Network Resiliency to Promote)	
Coordination Through Backhaul Providers)	
)	
Public Safety and Homeland Security)	
Bureau Seeks Comment on Improving)	
Wireless Network Resiliency Through)	
Encouraging Coordination With Power)	
Companies)	

COMMENTS



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COMMENTS



AMERICAN CABLE
A S S O C I A T I O N

I. INTRODUCTION & SUMMARY

The American Cable Association (“ACA”) hereby responds to two Federal Communications Commission (“Commission”) Public Safety and Homeland Security Bureau (“Bureau”) public notices that seek comment, respectively, on the resiliency and disaster recovery practices of mobile wireless backhaul providers (“Wireless Backhaul

Public Notice”)¹ and on coordination between power companies and communications providers during disasters (“Power Companies Public Notice”).² ACA represents more than 700 small and medium-sized communications providers, many of whom provide wireless backhaul services. These ACA members and others have experience coordinating with power companies to restore service during natural disasters. ACA’s members also include municipally owned and cooperatively owned communications providers that are themselves providers of electrical power. ACA is thus well qualified to comment on the Bureau’s public notices.

As explained below, ACA members and others that provide wireless backhaul services operate in a highly competitive market and provide service under strict contracts that spell out the resiliency requirements each provider must follow in serving each customer. With these mechanisms in place, it is both unnecessary and unwise to shoehorn backhaul providers into the Wireless Resiliency Cooperative Framework (“Framework”) or a new “cooperative framework” of their own. On the other hand, ACA recommends below a few steps that can be taken to improve the process by which investor-owned power companies coordinate with communications providers, especially smaller providers, during disasters.

¹ *Public Safety and Homeland Security Bureau Seeks Comment on Improving Wireless Network Resiliency to Promote Coordination through Backhaul Providers*, PS Docket No. 11-60, Public Notice, DA 18-1238 (PSHSB Dec. 10, 2018).

² *Public Safety and Homeland Security Bureau Seeks Comment on Improving Wireless Network Resiliency Through Encouraging Coordination With Power Companies*, PS Docket No. 11-60, Public Notice, DA 19-13 (PSHSB Jan. 3, 2019).

II. WIRELESS BACKHAUL PUBLIC NOTICE

In the Wireless Backhaul Public Notice, the Bureau seeks comment on whether backhaul providers should be included in the wireless industry's Wireless Resiliency Cooperative Framework ("Framework")³ or should create a similar framework of their own.⁴ As ACA explains below, the contracts that govern the provision of wireless backhaul services have proven largely successful to ensure that service is provided on a resilient basis and that providers share adequate information with their wireless customers and with other parties as appropriate during disasters. In the absence of direct evidence that these existing mechanisms are deficient, the Bureau should refrain from attempts to incorporate backhaul providers into a "cooperative framework" structure that risks undermining rather than improving upon backhaul providers' already strong resiliency practices.

A. Wireless Backhaul Providers Serve Wireless Carriers Under Strict Contracts That Meet the Resiliency and Information Sharing Requirements of Each Customer

Wireless backhaul service is provided under strict contracts with service level agreements that spell out in detail the resiliency practices that backhaul providers must follow. These contractual mechanisms, and the financial incentives of backhaul providers more broadly, ensure that backhaul service is provided on a resilient basis and that backhaul providers share information with their customers and others as necessary. As ACA has explained, the provision of wireless backhaul is a lucrative

³ See Letter From Joan Marsh, AT&T Services, et al., to Marlene H. Dortch, Secretary, FCC, PS Docket Nos. 13-239 and 11-60 (dated Apr. 27, 2016) ("Framework").

⁴ See Wireless Backhaul PN at 3; see *a/so* Framework.

business for providers, one in which providers compete aggressively to win and maintain customers.⁵ To compete successfully in this market, providers must be willing and able to provide service on terms and conditions that meet carriers' needs.

Such terms and conditions are demanding, particularly with regard to service continuity and outage restoration. ACA members report that the contracts under which they provide wireless backhaul services include detailed service level agreements that specify minimum uptime and other strict performance requirements. These contracts also often require the provider to share extensive information with its wireless carrier customer about the design and configuration of its network, in part to assure the customer that its performance requirements are capable of being met. Contracts also typically specify steps that must be taken to notify the customer when an outage occurs and keep it apprised of progress in restoring service.

There are strong incentives for backhaul providers to comply fully with their contractual obligations. Backhaul contracts often include stiff financial penalties for lapses in performance, including potential loss of the contract. While exceptions may be provided for "force majeure" events, these exceptions are often narrowly drawn. For instance, one ACA member reports operating under a backhaul contract that grants the wireless carrier the right to terminate the contract if service is not restored within a matter of days.

The termination of a contract would cause significant financial loss to a provider of backhaul services, because providers often incur major upfront expenses to deploy

⁵ See *Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket No. 11-60, Reply Comments of ACA (filed July 31, 2018) ("ACA July 2018 Reply Comments").

fiber necessary to provide the service to the wireless carrier. The provider then recoups these costs over the life of the contract. In an instance where a contract is prematurely terminated, the backhaul provider could lose its capital investment. To avoid this from happening, backhaul providers are highly motivated to ensure they are meeting all of their contractual obligations with their wireless carrier customers when service is lost during a disaster, and one of these most fundamental obligations is to fully restore service as soon as possible.

In meeting these obligations during disasters, ACA members share information about their recovery progress as necessary to satisfy the expectations of their customers. ACA members' strong interest in preserving good customer relationships encourages them to share information on whatever terms the customer prefers, including in response to direct requests from the customer for status updates.⁶ Backhaul providers also have incentives to share, and do share, information with emergency responders and other parties to the extent doing so can expedite their own recovery efforts.⁷

Moreover, resiliency and coordination arrangements within the wireless backhaul industry do not remain constant, but rather improve over time as wireless carriers and backhaul providers learn lessons from each new disaster recovery effort. Because the

⁶ Backhaul providers and other communications providers often cannot restore service in an area until the power company has fully restored electrical power. In such cases, the provider's ability to estimate precisely when it can restore its own service will depend on the information it is able to obtain from the power company about power restoration. See *infra* pages 10-13 (commenting on Power Companies Public Notice).

⁷ As the Bureau notes, many backhaul providers also share information through the Department of Homeland Security's National Coordinating Center ("DHS/NCC"), on which ACA also participates. See Wireless Backhaul Public Notice at 3, n.6; see also ACA July 2018 Reply Comments at 5.

wireless backhaul market is so competitive and contracts are renegotiated so frequently, there are ample opportunities for wireless carriers—several of whom operate nationwide, and therefore are likely to experience service impacts any time a major disaster strikes—to demand adjustments to backhaul providers’ resiliency measures, including their information sharing practices. The benefit of this market-based approach to resiliency is that expectations of parties are never locked in time.

For smaller backhaul providers such as ACA members, there are additional factors that promote effective coordination and exchange of information during disasters. ACA members have deep roots in their communities and strong local relationships, which create foundations of trust when ACA members are working with others in their communities to respond to a crisis. These local ties also give ACA members a personal stake in restoring service quickly for their customers, who are often neighbors, friends and family. Moreover, because ACA members tend to serve geographic areas of modest size, they rarely face the same logistical challenges as larger backhaul providers when managing a disaster response. While larger providers may have to gather information about outages from across a wide footprint, triage restoration, and then monitor their restoration efforts remotely, these issues do not tend to arise for smaller providers. Such providers are more likely to be able to ascertain quickly the full extent of the repairs necessary in their network, to observe the progress of the repair work on the ground, and to share this information in a timely manner with the wireless customer’s personnel and others as appropriate.

Notably, while the Bureau has sought comment twice on the resiliency practices of backhaul providers, it has not presented any direct evidence of a problem.⁸ This lack of evidence is unsurprising, given the strong incentives of backhaul providers to maintain resilient service, restore outages quickly when they occur, and keep wireless carrier customers apprised of restoration progress.

B. Shoehorning Wireless Backhaul Providers Into a Cooperative Resiliency Framework Would More Likely Undermine Than Advance Network Resiliency

Because existing mechanisms are adequate to ensure the resiliency of wireless backhaul services, incorporating backhaul providers into the Framework or into a new resiliency framework of their own is unnecessary. And because the “cooperative framework” model is ill-suited to wireless backhaul services, imposing this model on backhaul providers is more likely to complicate than improve upon their disaster recovery activities.

The Framework was developed by and for the mobile wireless sector as a tool to promote coordination and cooperation within that specific sector during emergencies, with the goal of “facilitat[ing] greater network resiliency and faster restoration of service.”⁹ As CTIA has explained, the Framework “commits wireless provider signatories to take actionable steps that keep consumers connected when emergencies

⁸ See Wireless Backhaul Public Notice; see also *Public Safety and Homeland Security Bureau Seeks Comment on the Effectiveness of the Wireless Network Resiliency Cooperative Framework and for the Study on Public Access to 911 Services during Emergencies*, PS Docket No. 11-60, Public Notice, 33 FCC Rcd 5997, 5998-99 (PSHSB 2018).

⁹ See Framework at 1.

occur by encouraging collaborative wireless network continuity and restoration efforts.”¹⁰

The Framework calls expressly for coordination between carriers during disasters that exceeds the scope of any pre-existing contractual relationship.¹¹ Other parts of the Framework ensure that wireless customers are adequately prepared for major storms and have access to “service and restoration status” information when a storm hits.¹²

Wireless carriers report, and ACA does not dispute, that the Framework has served as an effective tool to promote network resiliency and disaster recovery within the mobile wireless sector.¹³ This would not be surprising, as the Framework was developed by “wireless industry leaders” to address facets of network resiliency within the purview of that sector and to respond to the needs of mobile wireless customers.¹⁴

Conversely, the Framework was not developed to govern the resiliency practices of the communications industry as a whole. The Bureau should be wary of expanding the Framework to include classes of providers that had no input in the Framework’s creation and who, therefore, may find the Framework to be of limited relevance to their own disaster recovery activities. Furthermore, the Bureau should not assume that the “cooperative framework” model chosen by mobile wireless carriers to govern their

¹⁰ See *Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket No. 11-60, Comments of CTIA at 5 (filed July 16, 2018) (“CTIA July 2018 Comments”).

¹¹ Framework at 2 (“Wireless carriers commit to working with other wireless carriers to implement reasonable roaming arrangements for the duration of an event if existing roaming arrangements and call processing methods do not already achieve it.”).

¹² See Framework at 3.

¹³ See, e.g., CTIA July 2018 Comments.

¹⁴ Framework at 1.

resiliency practices is always the best mechanism, or even a viable one, for promoting communications network resiliency in every circumstance.

Wireless backhaul service is a case in point. As an initial matter, the specific elements of the Framework would need to be modified substantially even to allow for the possibility that backhaul providers could participate. For instance, the concept of “reasonable roaming” has no relevance in the context of backhaul service.

Furthermore, backhaul providers could not share with the public any “service restoration and status” information that would substantially improve consumers’ understanding of the progress being made to restore communications services. Backhaul providers do not serve the public directly, so the typical consumer is unlikely to have any familiarity with the concept of backhaul or its significance in the first place, which means the presentation of backhaul restoration information seems more likely to confuse than inform consumers. The remaining elements of the Framework also could not sensibly be applied to backhaul providers without significant changes.

More fundamentally, the “cooperative framework” model is a poor fit for a business, such as wireless backhaul, in which service is provided under strict contracts with service level agreements. It is unclear what resiliency commitments backhaul providers as a class might undertake that are distinct from, and would not conflict with, the obligations that each backhaul provider already owes each wireless carrier customer by the terms of a particular agreement. The existence of two potentially conflicting sources of resiliency obligations for backhaul providers would add further complexity, and possibly introduce confusion, to the already substantial challenges of

disaster response and recovery.¹⁵ Also, while backhaul contracts can and do evolve in response to lessons learned from previous storms, a “cooperative framework” may rigidify providers’ and customers’ expectations regarding the measures that are appropriate to ensure resiliency of backhaul services, which could slow the pace of improvements. Moreover, while ACA opposes any inclusion of backhaul providers in the Framework, there are especially strong reasons not to expect smaller providers to participate. The smaller-scale restoration work that such providers undertake during disasters, as discussed above, is particularly unlikely to benefit from a more formalized coordination process.

For the foregoing reasons, the wireless industry’s Framework should not be expanded to incorporate backhaul providers, nor is there a rationale for backhaul providers to create a new “cooperative framework” of their own.

III. POWER COMPANIES PUBLIC NOTICE

In the Power Companies Public Notice, the Bureau seeks comment on coordination between the power and communications sectors during emergencies.¹⁶ Many ACA members provide communications services in areas hit by recent storms that brought with them widespread power outages. While ACA members take significant measures to prepare for such events, which include stationing backup generators and fuel supplies at critical network facilities, long-term power outages pose significant challenges for any communications provider. ACA thus supports cooperative

¹⁵ See *Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket No. 11-60, Comments of NCTA - The Internet & Television Association at 6 (filed Jan. 28, 2019).

¹⁶ See *generally* Power Companies Public Notice.

efforts, including through the Broadband Deployment Advisory Committee (“BDAC”)¹⁷ and the Department of Homeland Security,¹⁸ to improve coordination between power companies and communication providers before, during, and after a disaster strikes.

From the perspective of ACA members, it can be difficult to engage with large, investor-owned power companies, both before and during major emergencies. Given the sheer size of these companies, and the scale of work they must undertake to restore power in the wake of a major emergency, it can be hard, particularly for smaller communications providers, to find the right personnel within the organization to deal with at various stages of the recovery process. Moreover, large power companies are not always fully aware of the important facilities in a small community that need prioritized restoration, such as wireless towers, or the routes that communications providers rely upon to serve these facilities. And unlike providers of wireless backhaul, power companies do not typically provide service to communications providers under strict contracts that specify minimum resiliency requirements or guarantee timely sharing of information during emergencies.

To address these shortcomings, ACA suggests that, at minimum, investor-owned power companies should be expected to identify appropriate points of contact and share

¹⁷ See *FCC Announces the Re-Charter of the Broadband Deployment Advisory Committee and Solicits Nominations for Membership*, GN Docket No. 17-83, Public Notice, DA 18-1239 (rel. Dec. 10, 2018) (“Issues to be considered by the BDAC will include . . . measures to prepare for, respond to, and recover from disasters that impact broadband networks. . .”).

¹⁸ See *Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket No. 11-60, Comments of NCTA - The Internet & Television Association (filed Feb. 8, 2019) (noting that DHS/NCC has “convened a range of communications providers, power companies, and government officials to discuss ways in which coordination [between the power and communications sectors] can be improved”).

these with communications providers, including smaller providers, in advance of an emergency. These companies should further be encouraged to solicit and accept input from communications providers about their customers that need priority restoration, and to consider this information as part of their overall restoration efforts.¹⁹ Establishing dedicated points of contact within power companies and improving the flow of information regarding power restoration priorities are modest steps that could benefit both power companies and communications providers—as well as members of the public, who are often customers of both—during emergencies. Improving coordination in these ways could also help reduce and minimize the impact of fiber cuts when restoring power, a problem that ACA members and other communications providers reported encountering in the aftermath of Hurricane Michael.²⁰

ACA members do not believe that the measures proposed above are necessary with respect to smaller power companies, particularly municipally owned and cooperatively owned communications providers that are themselves providers of electrical power. ACA has not heard from its members of any restoration-related problems involving these smaller power companies, which is unsurprising, given the strong mechanisms already in place to ensure that these power companies coordinate

¹⁹ ACA members do not propose to dictate to power companies the ordering of their restoration efforts, but only suggest that they take account of information they receive from communications providers, including smaller providers.

²⁰ See *Public Safety and Homeland Security Bureau Seeks Comment on Hurricane Michael Preparation and Response*, PS Docket No. 18-339, Comments of at 4-5 (filed Dec. 17, 2018); Comments of Verizon at 13 (filed Dec. 17, 2018). Following Hurricane Michael, representatives of the power and communications sectors have engaged in discussions, including through DHS/NCC, on how to mitigate fiber cuts when restoring power. The Commission's re-chartering of the BDAC with a focus on broadband network disaster recovery may present an opportunity for stakeholders to build on these discussions. In such discussions, it is critical that the needs and circumstances of smaller broadband operators are taken into account.

effectively with communications providers before, during, and after emergencies. To begin with, these providers must coordinate routinely between the power and communications sectors, during emergencies and otherwise, simply as a matter of coordinating their internal operations. And because these power companies also provide communications services, they have in-house expertise they can bring to bear on their coordination with other, unaffiliated communications providers in the face of a disaster.

Moreover, because these providers tend to be much smaller in size than investor-owned power companies, they do not face the same logistical difficulties in responding even to a major disaster. And these providers have strong local ties that give them a personal stake in working with others to restore service for their communities. Finally, many of these providers have mutual aid arrangements under which they share personnel and resources with one another when a disaster strikes, which can further expedite recovery.

IV. CONCLUSION

ACA looks forward to working with the Bureau and the Commission as it continues its efforts to promote network resiliency, including in response to recommendations from the BDAC. As the Commission pursues these efforts, ACA encourages it to ensure that the needs and circumstances of smaller providers are taken into account.

ACA appreciates the opportunity to file comments on the Public Notice, and it encourages the Bureau to take its comments into consideration.

Respectfully submitted,



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