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Via Electronic Filing

September 28, 2017

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC, 20554

Re: Notice of Ex-Parte Communication: In the Matter of Use of Spectrum Bands Above 24 GHz for Mobile Radio Service, GN Docket No. 14-177; In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, WT Docket No. 17-79

Dear Ms. Dortch:

On September 26th, John Donovan, Maryanne Uselton, and I (all of AT&T Communications) met with FCC Commissioner Brendan Carr and his Acting Legal Advisor for Wireless and Public Safety, Kevin Holmes.

During the meeting, we discussed AT&T's efforts to prepare for and respond to Hurricanes Harvey, Irma, and Maria. We also discussed the challenges associated with the restoration of service in Puerto Rico, most notably the logistical issues associated with the transport of communications equipment and personnel to Puerto Rico in the aftermath of Hurricane Maria. Additional details regarding the recovery effort can be found in the attached document, a copy of my recently-posted entry on AT&T's Public Policy Blog.

In addition, we discussed the Spectrum Frontiers Proceeding and the importance of making available millimeter wave spectrum for 5G deployment. The FCC plays a pivotal role in auctioning additional high band spectrum and clearing the roadblocks associated with siting of 5G equipment. We noted that AT&T has taken a leading role in 5G trials. For example, we recently announced trials for which participants will be able to stream AT&T's DirecTV Now service over a 5G connection as well as experience shorter lag times for uses such as video conferencing and virtual-reality gaming.

In accordance with the Commission's rules, this letter is being filed electronically with the Secretary for inclusion in the public record.

Sincerely,

Joan Marsh

Cc: Commissioner Brendan Carr
Mr. Kevin Holmes

Attachment

AT&T

The Tale of Three Storms

By [Joan Marsh](#), AT&T Executive Vice President of Regulatory & State External Affairs

September 28, 2017 at 10:38 am

The 2017 hurricane season has been a monster. Three storms engulfed our country, followed by three very extensive yet different recovery and restoration efforts. As the impacted communities struggle to get back on their feet, it's worth exploring some of the differences.

Hurricane Harvey was all about water, and its communications recovery story is all about fiber. Unlike copper, fiber is indifferent to water – you dry it out and it's ready to roll. A higher penetration of fiber feeder to cell sites increased both the reliability and the resiliency of the wireless transport architecture. And because the electric grid also fared relatively well in the flooding, the communications outages were more limited. All in, less than 3% of our cell sites were out of service at the peak (although water penetration did cripple some of our wireline facilities). Indeed, many wireless customers were able to use their phones to call for rescue from the flooding.

The story of Hurricane Irma was one of a hardened electric grid and strategic placement of recovery assets. Irma caused catastrophic commercial power failures, with power outages blanketing the state. AT&T staged over 2,400 portable generators and used 390,000 gallons of fuel to keep our cell sites up during those outages. But the Florida electric grid recovered quickly and within a week we had only a few hundred cell sites still on a generator. We were also able to provide a big shot in the arm in the hardest hit areas in the Keys through the placement of light trucks bearing satellite and cell equipment. Immediately after the storm, when access was still limited, our first responder partners in South Florida gave our Satellite/COLTS a police escort into Marathon Key to provide much needed communications. All in, we were able to quickly deploy 14 Sat/COLTs to cover communications holes while the electric grid recovered.

The impact of Maria on Puerto Rico and the U.S. Virgin Islands is different on so many fronts. First, and importantly, they are islands. Although we were able to pre-stage fuel, we could not pre-stage recovery assets in fear that they would be lost. And getting recovery assets to the islands is a huge challenge given the damage sustained at the airports and the need, particularly on Puerto Rico, to give priority access to life-sustaining supplies, including food, water and fuel. We were able to land four commercial planes on Puerto Rico within days to dispatch crews, generators and smaller equipment, but getting our Satellite/Cell Trucks to the islands has been a huge challenge. Air options are extremely limited due to the size of the plane needed to transport a 14,000-pound truck. Sea options are available, but they are slower. We currently have three Satellite trucks on a FEMA barge due to land next week and three more on the way this morning. And we sent 50 satellite phones for use by the Puerto Rican government in areas where there is no cell service.

Puerto Rico is also challenged because the storm blew almost all of the island's wired infrastructure to the ground – electric cable and fiber feeder alike. Generators are short term solutions to an electric outage, but are challenging to manage for months. We also learned that as community clean-up efforts started, fiber feeder cable supplying backhaul were prone to being cut, creating new outages. In many areas, the fiber backhaul is simply gone. And a generator we had powering a large coverage site on St. Croix was stolen, handing the community a huge set back. But thanks to an active local community, a generator was supplied to restore power to the site while the original generator was recovered by the FBI.

We will continue our efforts to bring full communications back to our customers in Puerto Rico and the Virgin Islands and we will stand beside them as they start to rebuild. But Maria created restoration challenges unlike those we've seen in other storms and, in the aftermath, there will be lessons for all of us to learn on restoration and recovery.

<https://www.attpublicpolicy.com/public-safety/the-tale-of-three-storms/>