



October 23, 2018

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: The Uniendo a Puerto Rico Fund and the Connect USVI Fund, Connect America Fund, ETC Annual Reports and Certification, WC Docket Nos. 18-143, 10-90, and 14-58

Dear Ms. Dortch:

Following a request from Federal Communications Commission (“Commission”) staff at a recent meeting,¹ Hughes Network Systems, LLC (“Hughes”) submits this ex parte to address the matter of developing a non-auction procedure for the expedient distribution of Stage 2 funding from the Uniendo a Puerto Rico Fund and the Connect USVI Fund (collectively, the “PR/USVI Funds”).

Hughes still has concerns about the use of a non-auction procedure to award Universal Service Fund (“USF”) funding.² However, given already planned auctions are consuming the resources of the Wireless Bureau’s Auctions Division, as well as the urgency to expediently restore and expand resilient broadband communications in Puerto Rico and the U.S. Virgin Islands, Hughes supports the Commission’s use of an objective, non-auction format for this one-time funding allocation.

If the Commission adopts a non-auction procedure to distribute the PR/USVI Funds, the Commission must ensure that the procedures maintain the levels of objectivity and impartiality that an auction would provide. In order to achieve this important goal, the Commission must adopt clear and objective criteria with which to evaluate any bids, which would be evaluated by a neutral third party arbiter.

To best achieve this, the Commission must adopt a clear, unambiguous scoring rubric, based on and weighted according to the Commission’s stated objectives in the PR/USVI Fund NPRM.³ The rubric must eliminate any ambiguity relating to the potential scores that bidders

¹ See Hughes Ex Parte in WC Docket No. 18-143 et al filed September 12, 2018.

² See Hughes Comments in WC Docket No. 18-143 filed July 26, 2018; *see also* Hughes Reply Comments in WC Docket No. 18-143 filed August 8, 2018.

³ The Uniendo a Puerto Rico Fund and the Connect USVI Fund, et al. Order and Notice of Proposed Rulemaking, FCC 18-57 (2018) (“PR/USVI Fund NPRM”).

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can receive from the objective evaluators. Accordingly, Hughes recommends the use of a clear, simple, 100 point rubric, based on the Commission's four enumerated priorities:⁴

40 points	Price per Location
20 points	Network Resiliency
20 points	Network Deployment Timing
20 points	Network Performance

Hughes proposes that the four criteria be used to evaluate every bid submitted for Stage 2 funding. Given the unique circumstances presented by the widespread decimation of telecommunications infrastructure in Puerto Rico and the U.S. Virgin Islands, Hughes agrees that the most expedient option is to make the entirety of the territories, including low cost areas, eligible for bidding.⁵ However, the Commission should only include the low cost areas in the eligible areas if: 1) the Commission adopts the larger minimum geographic area proposal, whereby service providers would bid for each of Puerto Rico's 78 municipios and each of the four islands that comprise the U.S. Virgin Islands, in their entirety; and 2) service providers are obligated to provide service in unserved areas first before expanding or duplicating service into low cost areas.

Price per Location

As the Commission recognizes, price per location should be the principal factor in determining a winning bid.⁶ The ability to deploy broadband services in a cost-efficient manner is of the utmost importance in regions where funding needs to be stretched to ensure the expansion of broadband networks to so many. Hughes proposes adopting the following scoring structure for price per location:

0 points	Reserve price
10 points	10 percent below reserve price
20 points	20 percent below reserve price
30 points	30 percent below reserve price
40 points	40 percent or more below reserve price

Network Resiliency:

While storms to the degree of Hurricanes Maria and Irma will hopefully never be experienced again by the islands of Puerto Rico and the U.S. Virgin Islands, hurricanes and tropical storms are events that should be properly attributed for when deploying broadband networks in these regions. As the Commission recognizes, funding for infrastructure in Puerto Rico and the U.S. Virgin Islands should be used in part to ensure the resiliency of the broadband network.⁷ Accordingly, it is important to make network resiliency an important bid consideration. Hughes proposes that a fifth of the available points be attributed to this factor.

⁴ Ibid, at ¶ 55.

⁵ Ibid, at ¶ 45-46.

⁶ Ibid, at ¶ 55.

⁷ Ibid, at ¶ 33.



As the record shows, one of the most effective ways to ensure network resiliency is to design networks with physically path diverse backup infrastructure.⁸ Comments filed during the course of this proceeding have also demonstrated the benefits of path diverse infrastructure when the primary terrestrial networks are damaged or destroyed.⁹ Accordingly, as detailed below, networks with path diversity should be afforded the most points in this category.

Hughes notes that given the size and disparate geographic conditions of each municipio and island it may not be possible to have complete physical path diversity to the entire service area, as the physical and economic barriers to terrestrial deployments will remain. However, the Commission should consider the proposed network to be “fully hardened” where the service provider ensures that the entire eligible service areas receives service from at least one hardened technology and the physical path diversity that is incorporated into the network covers no less than 70% of the service area.¹⁰

To ensure a resilient network, points should be awarded as follows:

0 points	Non-hardened networks
10 points	Semi-hardened networks <ul style="list-style-type: none">• Terrestrial hardened – strengthening cell towers and power supply sites to ensure maximum reliability, including back-up equipment and services to sustain operations during adverse conditions for a guaranteed number of hours• Satellite hardened – gateway is located off Island and has a redundant off Island gateway in case of primary gateway outage.
20 points	Fully hardened networks <ul style="list-style-type: none">• The area is fully served by one hardened network and 70% or more of the area is served by a second, physically path diverse, hardened network (as defined above).

⁸ Physical path diversity requires more than simple redundancy in the networks, which often results in two or more terrestrial carrier lines sharing the same infrastructure and pipes into and out of a facility, and thus sharing the same vulnerabilities. To be truly physically path diverse, different technologies, employing different infrastructures and architectures, and having different exposures to vulnerability, must be deployed. See e.g. Hughes Comments in PS Docket No. 11-60 filed July 16, 2018; see also Hughes blog: 9-1-1 Backup, last visited Oct. 12, 2018, available at <https://government.hughes.com/what-we-do/emergency-communications/911-backup>.

⁹ See e.g. *Liga de Cooperativas Comments*; see also *Comments of the Puerto Rico Manufacturers Association*, WC Docket No. 18-143 (Jul. 3, 2018) (“PRMA Comments”); see also *Casa Pueblo*, WC Docket No. 18-143 et. al (Jul. 5, 2018) (“Casa Pueblo Comments”).

¹⁰ In addition to added resiliency, this model will help the Commission assuage its concern regarding competitive neutrality resulting from the large service areas. Service providers, including incumbents, will likely need to partner with other service providers in order to efficiently and affordably propose and deploy resilient, path diverse networks. See PR/USVI Fund NPRM, at ¶ 47. (The Commission notes that there “may be some risk that municipios are too large to target funding in a competitively neutral manner— incumbent providers with large existing service territories are likely more amenable to providing service over a wider area.”)



Time to Deploy

Given the time that has already elapsed between the 2017 hurricanes and the start of this proceeding, the ability to quickly and efficiently deploy broadband to the awarded areas is of the utmost importance. Hughes urges the Commission to encourage faster deployment than it did in the Connect America Fund Phase II (“CAF II”) auction,¹¹ as the citizens living in these regions need access to reliable broadband services more expediently.

To best achieve this, the Commission should adopt the following scoring for provider build-out milestones:

0 points	40/60/80/100 percent of build-out in years 3-6, respectively
10 points	50/70/100 percent of build-out in years 2-4, respectively
20 points	100 percent of build-out by end of year 2

Performance Metrics

The standard USF performance metrics: speed, latency, and capacity, should be included as the final category. All three components should be weighted relatively equally and should incorporate the first three CAF II performance tiers as their subcategories.¹² For example:

Speed:

0 points	10/1 Mbps
4 points	25/3 Mbps
7 points	100/20 Mbps +

Capacity:

0 points	150 GB
4 points	> 150 GB or US median (whichever is higher)
7 points	2 TB

Latency:

0 points	> 100 ms
6 points	100 ms or less

By adopting these CAF II tiers, the Commission can ensure continuity across concurrent USF proceedings. By applying a mostly equal weighting for each subcategory, the Commission eliminates any reviewer bias and ensures that the principles of technology neutrality will be applied to the selection process.

¹¹ PR/USVI Fund NPRM, at ¶ 63.

¹² Connect America Fund; ETC Annual Reports and Certifications; Rural Broadband Experiments, WC Docket Nos. 10-90, 14-58, 14-259, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949 (2016).



Conclusion

In order to implement a fair and neutral, non-auction procedure to distribute the PR/USVI Funds, the Commission should adopt a simple, clear and unambiguous rubric for scoring all bids that removes any potential review bias. The rubric should equitably weigh the Commission's four major objectives: resiliency, cost, timing, and performance, in order to ensure that the communication infrastructure needs of Puerto Rico and the U.S. Virgin Islands can be expediently met and objectively executed.

Pursuant to the Commission's rules, this notice is being filed in the above-referenced dockets for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

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