

August 8, 2018.

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

Re: WC Docket Nos. 18-143, 10-90 and 14-58; FCC 18-57 Proposed Rule by FCC on  
06/13/2018 ID: FCC-2018-0212-0002

Dear Ms. Dortch:

We are writing to submit response comments to the Commission regarding the implementation of the **Uniendo a Puerto Rico Fund** on behalf of the following organizations. These organizations whom have previously filed comments as members of the **Coalition to Fund CPR**. The goal of our coalition is to help aid in the establishment of resilient and backup telecommunications infrastructure in Puerto Rico and the U.S. Virgin Islands to ensure the survivability of basic communications after a future natural disaster.

Indeed, Puerto Ricans and fellow residents of the Caribbean are all too familiar with the devastation created by hurricanes due to the region's susceptibility to these weather patterns. It is for these reasons that we must go beyond restoring legacy systems and utilize this as an opportunity to make critical investments in the underlying telecommunications infrastructure of the islands. These investments would be short lived unless we also create redundancies and backup systems to make our infrastructure more resilient. Indeed, we believe that Satellite technology can serve the most cost effective and deployable stop-gap solution to supply the islands' telecommunications necessities during times when the conventional infrastructure is compromised.

Further, we understand that the Commission should not exclude particular technologies. By remaining technology neutral the Commission would incentivize healthy competition and innovation among applicants. We wholeheartedly agree with FCC Chairman Ajit Pai stated intention to put "Puerto Rico squarely on the map when it comes to digital innovation." As a result, we write to offer our support for the **Coalition to Fund CPR**, which is a model for emergency telecommunication services for backup and business continuity for Puerto Rico and the Virgin Islands.

Our recommendations in response to the filed comments can be categorized into the following four categories:

1. Stage one funding was too narrowly focused. It excludes locally based satellite facilities. It should be expanded. Otherwise this will hamper economic development in Puerto Rico and innovation.
2. New entrants with exciting technology better able to withstand extreme weather and natural disasters were inadvertently excluded. The commission should provide funding to include them.
3. Stage two and later rounds of funding must be available to new entrants. Specially, entrants with satellite facilities in Puerto Rico.
4. Funding must allow for innovative, independent community based and multi sector emergency telecommunications networks to be established. Networks like the Centros de Preparación y Respuesta. (CPR)

### Artificial Latency Threshold

The coalition agrees with the comments filed by SES Americom, Inc. and 03b Limited on the potential that an artificial bandwidth threshold would undermine the reach and quality of broadband services particularly because systems with latencies higher than one hundred ms already support real-time broadband applications.

As written in the comments, “A latency threshold of 100 ms is arbitrary because it would not allow PR/USVI Fund applicants to access satellite connectivity that can support the same broadband applications that would otherwise be available via terrestrial infrastructure.”

One notable example is SES’ services to Unalaska, Alaska to provide high-speed broadband through its GSO satellites, “... SES partnered with OptimERA to provide reliable GSO C-band capacity to deliver reliable and affordable internet connectivity ...” As SES notes in their comments, “ many critical broadband-enabled applications are not latency sensitive, such as video streaming, web browsing, social media, and email, which also makes GSO connectivity an important option for supporting broadband service.”

As result, we recommend that the Commission consider that satellite-based communications networks for Puerto Rico should be designed so that they are not locked to either a geostationary satellite or a non-geostationary satellite. The reason for this key consideration is that each system brings its own inherent advantages as well as limitations.

For example: non-geostationary satellites operate from a lower altitude and, thus, have the advantage of lower latency, which is important for services that are sensitive to signal delays. However, from a lower altitude these satellites appear to move across the sky, which means that more expensive tracking and/ or multi-beam antennas are necessary.

Geostationary satellites, on the other hand, operate at higher altitudes so they involve higher latency levels. However, geostationary orbit satellites are able to provide wide-area coverage, and because they appear to be in a fixed location in the sky, low-cost antennas can be used. These satellites are currently the mainstay of space-based communications, particularly for broadcasting services -- which are insensitive to signal delays.

A communications network configured with the flexibility to leverage both types of systems will be robust for the greatest number of applications for Puerto Rico.

### Eligible Entities

If the Commission were to proceed with a process that utilizes a competitive proposal, as envisioned in the Notice, we respectfully submit the following suggestions to improve the process –

The coalition would like to associate itself with comments by the Telecommunications Regulatory Board (TRB) of Puerto Rico in so far as the, “Commission should award funding to geographical areas smaller than municipalities.” Indeed, we must acknowledge the reality that Puerto Rico remains physically mostly rural and is subdivided into nine hundred barrios.

In the wake of Hurricanes Irma and Maria it became apparent that there is a critical need for connectivity at the local level. The barrios and municipalities that were furthest away from the

staging areas for support were left without communications capabilities. The lack of communications in turn prevented emergency officials from being able to gauge the extent of the damage in those regions, which were also the communities that disproportionately contributed the most fatalities. It was in these barrios and municipalities that we saw inordinate delays in restoring basic resources, including connectivity to either mobile or wireline communications.

An inexpensive solution that needs to be established prior to the next catastrophe are VSAT satellite communications systems. Much in the way that mobile carriers ought to prepare before a hurricane through the dispersal of equipment and supplies necessary for restoration activities, we ought to have VSAT systems in place throughout these municipalities to ensure that an emergency communications network is online immediately after the natural disaster. Further, we ought to pair this connectivity with a system such as the proposed **CPR Project**, which would be based on a technology that is not affected by the Caribbean's atmospheric conditions.

### Role of Municipalities

Satellite broadband was the only reliable communications system in the aftermath of the hurricanes and should be fully implemented across the island, especially in rural and mountainous areas in order to build a truly resilient and connected Puerto Rico. In response to some of the comments, we recommend that the Fund allow for innovative, independent community based and multi sector telecommunications networks to be established and avoid one-fits all, contract bundling and solutions that require for one vendor to manage the entire project.

### ETC Designations

The coalition strongly disagrees with limiting eligible applicants to providers with Eligible Telecommunications Carrier (ETC) designations. Indeed, we strenuously disagree and disassociate ourselves from the comments filed by the Telecommunications Regulatory Board (TRB) of Puerto Rico with respect to ETC designations. At present, there are no satellite facilities based in Puerto Rico with an ETC designation. Therefore, such a provision would block the development of resilient/backup systems and limit the potential for technological innovation. It is absolutely necessary that the Commission allow for local VSAT operators willing to develop local facilities in Puerto Rico to be eligible for funding.

Indeed, we understand the need to ensure the funding is utilized appropriately and for the intended purposes of the **Uniendo a Puerto Rico Fund**. Yet, we strongly believe that such a provision would simply serve as overregulation and a barrier to new entrants that could have utilized a technology option that is better suited to withstand extreme weather and natural disasters. In sum, the Commission ought to provide funding for those new entrants in stage two that have satellite facilities.

We thank you in advance for consideration of these views. Please do not hesitate to contact us at 917-293-6489 or by email at [jlrodriguez@camporicogroup.com](mailto:jlrodriguez@camporicogroup.com)

Thank you in advance,

**Coalition to Fund CPR  
Signatories (partial)**

<u>Name as Filed by FCC</u>	FCC ID#
1- Canovanas Emergency .....	<a href="#">107274437065</a>
2- Carmen Bulchoz, Vivian Moreno .....	<a href="#">1072753026018</a>
3- Jimmy Torres Vélez.....	1072720202095661
4- CRG Communications.....	107270348214555
5- Rancho Culebra- .....	<a href="#">1072690598916</a>
6- Rev. Heriberto Martinez Rivera.....	<a href="#">1072668027892</a>
7- Foundation for a Better Puerto Rico.....	<a href="#">1072665861320</a>
8- Lydia Valencia.....	<a href="#">10726370922859</a>
9- Enlace de Familias/Holyoke Family Network...	<a href="#">10726229800156</a>
10- Jason Ortiz.....	107261285605401
11- Rev. Dr. Eliseo Nogueras.....	<a href="#">1072612028651</a>
12- Jose Marquez.....	107260788410859
13- Ronald Blackburn-Moreno, Dr. Adalexis Diaz Orlandi.....	<a href="#">1070557176452</a>
14- Vivian Moreno.....	107050510716903