

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

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In the Matter of)	
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RURAL DIGITAL OPPORTUNITY FUND)	WC Docket No. 19-126
)	
CONNECT AMERICA FUND)	WC Docket No. 10-90
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**REPLY COMMENTS OF
SPACE EXPLORATION TECHNOLOGIES CORP.**

I. INTRODUCTION

Space Exploration Technologies Corp. (“SpaceX”) hereby submits these reply comments in response to the Notice of Proposed Rulemaking (“*NPRM*”) proposing that the Commission establish a Rural Development Opportunity Fund.¹ The first round of comments demonstrates that the Commission can best serve consumers by dropping a standalone voice requirement, while continuing to apply performance metrics that support real-time service such as voice over internet protocol (“VoIP”). The record resoundingly supports the Commission’s proposal to continue to follow the approach it took in the Connect America Fund (“CAF”) Phase II auction, emphasizing functionality to encourage broad participation from different types of providers. The record also shows that numerous parties—for multiple reasons—agree with SpaceX that the Commission should disburse funds over multiple tranches. By doing so, the Commission can ensure support is allocated over time in the most efficient way possible, adjusting its approach in response to development of new technology.

¹ *Rural Digital Opportunity Fund, Connect America Fund*, Notice of Proposed Rulemaking, 34 FCC Rcd 6778 (2019) (“*NPRM*”).

II. THE RECORD SUPPORTS ENDING THE STANDALONE VOICE SERVICE REQUIREMENT.

Several parties concur with SpaceX’s proposal to end the standalone voice requirement. WISPA cites the decline of switched access lines and points out that consumers are “‘cutting the cord’ on switched access lines that do not require an Internet connections.”² GeoLinks states that while voice can be offered as part of a service bundle, consumers—not the government—should be the ones to decide what services meet their demands: “[i]f there is a demand for a standalone voice option, [auction] winners will offer it.”³ The only two commenters that suggest the Commission retain the requirement do not offer any legal or policy reasons why.⁴ Consumers across the country have moved away from standalone voice, and technology now allows the Commission to make sure that Americans living in high-cost areas do not get left behind and are not forced to accept services that their counterparts in other geographic regions no longer want. The Commission should retire this requirement, which serves only to impose additional costs on support recipients.

III. THE COMMISSION MUST ADOPT TECHNOLOGY-NEUTRAL REQUIREMENTS THAT FOCUS ON FUNCTIONALITY.

Consumers do not choose which service they use based on how the technology works; they decide based on performance and so should the Commission. The Commission properly

² Comments of the Wireless Internet Service Providers Association, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) (“WISPA Comments”) at 11.

³ Comments of California Internet, L.P. dba GeoLinks, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 8; *see also* Comments of Pacific Dataport, Inc., WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 14; Comments of The National Association of Counties et al., WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 2 (suggesting providers that do not provide voice should be allowed to bid).

⁴ *See* Comments of Illinois Dept. of Innovation & Technology, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 8; Comments of the California Emerging Technology Fund, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 12.

adopted technology-neutral weights and requirements for the CAF II auction, reasoning that focusing on a service's capability to deliver speed and latency, instead of excluding technology that could meet those performance metrics, would best serve the public interest and the goals of the Communications Act. This approach would reflect "the diversity of broadband offerings in the marketplace" and ensure that "rural America is not left behind, and the consumers in those areas benefit from innovation and advances in technology."⁵ Due to the size of the United States, different geographic areas can have vastly different topologies, populations densities, and challenges to network deployment. To meet consumer demands in these various markets, the Commission took a consumer perspective. Rather than limit itself to only one way of doing things, the Commission set rigorous performance standards and then supported any technology that could best provide that service to consumers.

The Commission implemented this approach very simply: provided that a bidder was capable of deploying service that meets these standards, the Commission treats the bidder equally with regard to bid weighting, the bidding process, application requirements, as well as the numerous other necessary steps to conduct an auction. The Commission's intent was to maximize the value per dollar of support and so provide more service to more consumers. The Commissioners recognized that revising the approach to open it to more technologies would result in more efficient use of funds. Then Commissioner Pai stated that the weighting system aims "to maximize the broadband bang we get for our universal service buck," while Commissioner O'Rielly stated that changes to the CAF II process to accommodate different

⁵ *Connect America Fund, et al.*, Report and Order and Further Notice of Proposed Rulemaking, WC Docket Nos. 10-90, 14-58 & 14-259, 31 FCC Rcd 5949, 5957 (2016) ("*CAF Phase II Auction Order*").

technologies “will have the effect of stretching USF dollars to cover more consumers.”⁶

Commissioner Rosenworcel emphasized that “[w]e need broad participation because there is no one-size-fits-all solution when it comes to getting service to rural communities. So we are open to any provider and technology that meets essential broadband and performance criteria.”⁷

For the coming auction, the Commission should once again take a consumer-centered approach by setting rigorous performance standards, regardless of the technology used to deliver the service. In particular, the Commission should ensure that supported networks are capable of the latency necessary to support voice services. As noted above, consumers in urban, suburban, and even many rural areas have moved away from standalone voice services because they have access to broadband that facilitates real-time services. The Commission should not force those who live in areas supported by the Universal Service Fund to choose differently. Consumers in high-cost areas should be afforded the same internet with the same services as those areas more economic to serve. But to accomplish this goal, the underlying broadband services must be able to support VoIP.

In fact, the fundamental requirement of providing real-time services is part of the Rural Development Opportunity Fund’s DNA, having been first expressed when the Commission overhauled Universal Service in 2011, and then reiterated when the Commission established the rules for the CAF II auction: “the Commission required recipients of high-cost universal service support to offer broadband service with latency suitable for real-time applications, such as voice

⁶ *See id.* at 6109, 6111.

⁷ *Id.* at 6108.

over Internet Protocol (VoIP).”⁸ To be sure, the Commission nevertheless allowed higher latency services to bid for support in the CAF II auction “in the interest of making [the CAF] auction as competitive as possible,” though at a higher weight.⁹ As it moves forward, the Commission should consider whether allowing higher latency services continues to make sense, given how quickly technology is evolving. Americans in rural areas should not have to be deprived of the same real-time voice services that urban consumers enjoy. The Commission should thus design this auction in such a way as to encourage robust broadband capable of supporting real-time services, but resist calls to pick winners and losers through counterproductive technology mandates.

The Commission should see through efforts to minimize competition through proposals to pick winners using opaque, complex and extreme weightings and restrictive requirements onto the Commission’s auction.¹⁰ Such proposals are manifestly intended to limit consumer choice by preventing competitive technology. They would have the Commission toss aside its reasonable auction design decisions, run counter to the explicit intent voiced by the Chairman and other Commissioners, and bias the entire auction process to favor the technology used by those

⁸ *Id.* at 5954 (citing *Connect America Fund, et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17721 (2011), *aff’d sub nom., In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014)).

⁹ *Id.* at 5962.

¹⁰ *See, e.g.*, Comments of the Fiber Broadband Association, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 11 (Baseline weight of 70); Comments of ACA Connects, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 9 (Baseline weight of 75); Comments of The Utilities Technology Council, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 10 & n.19 (eliminate Baseline, Above Baseline weight of 75); Comments of WTA—Advocates for Rural Broadband, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 16-17 (extensive additional weightings if network does not replicate specific wireline functions).

advocating those positions. At base, these proposals introduce unneeded complexity for the sake of excluding certain technologies.

Some parties have gone even further and have asked to exclude, outright, satellite providers from the auction.¹¹ These calls are misguided. New non-geostationary orbit (“NGSO”) systems, like the one currently being deployed by SpaceX, can meet demanding throughput and latency standards and should be allowed to compete alongside any other technology with similar performance. Some commenters do point to support geostationary orbit (“GSO”) bidders won in the CAF II auction to couch their proposals in the context of “high-latency” satellite broadband,¹² but their resulting calls to exclude “satellite” providers without further distinction are then overly broad and fundamentally misunderstand the diversity of services that use satellite technology. The Commission rightly recognized in the CAF II auction that NGSO systems are qualitatively different from GSO systems.¹³ The Commission should therefore continue to resist proposals for blanket prohibitions, restrictions or weights against “satellite” systems in general. Instead, the Commission can assure more and better services for consumers by continuing to focus on function rather than technology. As stated by Commissioner O’Rielly, the Commission “simply cannot afford to exclude satellite-based providers, especially given the new and exciting possibilities satellite offerings can offer.”¹⁴

¹¹ See Comments of USTelecom, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) (“USTelecom Comments”) at 21-24; Comments of Verizon, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) (“Verizon Comments”) at 4-6; Comments of The Institute for Local Self-Reliance, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 2.

¹² See Verizon Comments at 5-6; *see also* USTelecom Comments at 21-22 (eliminate satellite or impose higher weighting for high-latency).

¹³ *CAF Phase II Auction Order* at 1466 n.216, 1469 & n.234.

¹⁴ *NPRM* at 6837.

IV. THE RECORD REFLECTS BROAD SUPPORT FOR CONDUCTING MULTIPLE AUCTIONS IN SEVERAL TRANCHES.

SpaceX continues to believe that the best way to meet consumer needs over time is to allocate funds in tranches and was encouraged to see broad support for its position in the record. Parties cited many reasons why this is the best approach for the fund. Several parties cite the current inaccuracy of location data to support either (1) delaying the auction until the current broadband mapping effort is completed¹⁵ or (2) structuring the auction to prioritize entirely unserved areas where location mapping accuracy is not an issue.¹⁶ Some parties also accurately point out that technology and demand will change over time.¹⁷

Given the weight of evidence in the record, the Commission should, as SpaceX suggested, divide the auction into multiple tranches, focusing first on areas that are completely unserved by even 10/1 Mbps, so as to provide the fastest support for the areas most in need, then moving to areas unserved by 25/3, and so on. Doing so will allow the Commission to better calibrate its support and auction procedures as technology develops over time. This approach will also address calls for more accurate data, as the Commission will have more time to develop accurate databases as it allocates funding.

¹⁵ See Comments of Windstream Services, LLC, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) (“Windstream Comments”) at 6-7; Comments of United States Cellular Corporation, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) at 10-11; Comments of ITTA, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) (“ITTA Comments”) at 11-12; USTelecom Comments at 11.

¹⁶ See WISPA Comments at 28-32; Comments of NTCA, WC Docket Nos. 19-126 & 10-90 (filed Sept. 20, 2019) (“NTCA Comments”) at 31-32; Windstream Comments at 10.

¹⁷ See, e.g., NTCA Comments at 2-5.

V. CONCLUSION

The record demonstrates that consumers are best served by the Commission's stated policy of focusing on the capability of the services provided to customers, rather than the technology underlying how those service are provided. The Commission should thus reject proposals to apply blanket prohibitions, restrictions, or weights on "satellite" systems that do not take account of the different capabilities of different systems. By contrast, the Commission should adopt proposals made by many parties to divide the auction into multiple tranches, prioritizing unserved areas, which would have the effect of allowing it to calibrate support as technology develops over time, and the Commission should also eliminate the standalone voice requirement.

Respectfully submitted,

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