

**Before the
DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE
Washington, DC 20250**

In the Matter of)	
)	
Rural eConnectivity Program)	RUS-20-Telecom-0023
Final Rules, Request for Comments)	RIN number: 0572-AC51

COMMENTS OF TECHFREEDOM

TechFreedom, hereby files these Comments in response to the Request for Comments in the above-referenced proceeding.¹ TechFreedom limits these comments to the issue of whether satellite systems can be supported by RUS funding.

1. About TechFreedom

TechFreedom is a non-profit think tank dedicated to promoting the progress of technology that improves the human condition. To this end, we seek to advance public policy that makes experimentation, entrepreneurship, and investment possible, and thus unleashes the ultimate resource: human ingenuity. Wherever possible, we seek to empower users to make their own choices online and elsewhere.

TechFreedom is particularly interested in the promise that space technologies can provide to spread broadband connectivity to the farthest reaches of this planet.

¹ Rural eConnectivity Program, 86 Fed. Reg. 11,603 (Feb. 26, 2021) (hereinafter Notice). The Notice set the comment date as April 27, 2021. These comments are therefore timely.

TechFreedom lawyers have been involved in policy debates surrounding space technologies for decades.²

2. The Proposed Rule Bans Funding or Satellite System Support of Broadband Infrastructure Which is Inconsistent With Prior Rounds

In its *Notice*, the Rural Utility Service (RUS) sets forth proposed rules for the next round of funding for its Rural eConnectivity Program, designed to help close the digital divide by driving broadband infrastructure further into Indian Country. As the *Notice* states:

With access to the same advanced telecommunications networks as its urban counterparts—especially those designed to accommodate distance learning, telework, and telemedicine— rural America will eventually see improving educational opportunities, health care, economies, safety and security, and ultimately higher employment.³

TechFreedom supports this effort. However, as part of the proposed rule, RUS states that it will prohibit funding to support satellite services as part of the system architecture to bring broadband to the most remote areas of the country. Proposed Section 1740.12(b)(10) states: “Ineligible award costs: Award funds under this part may not be used . . . [t]o fund facilities that provide satellite service including satellite backbone services.”⁴

This is reversal of the approach taken in Round One and Round Two, where RUS stated:

² See, e.g., James E. Dunstan, *Earth To Space: I Can't Hear You – Selling Off Our Futures to the Highest Bidder*, SPACE STUDIES INST. (1997), <https://techfreedom.org/wp-content/uploads/2020/10/SSI-1997-Earth-to-Space-I-cant-Hear-You.pdf>.

³ Notice at 11,603.

⁴ Notice at 11,612-13.

“Eligible Award Costs Award funds may be used to pay for the following costs . . . (iv) To fund terrestrial-based facilities for satellite broadband service, provided the applicant clearly identifies the PFSA [Proposed Funded Service Area], demonstrates the ability to provide 25 Mbps downstream and 3 Mbps upstream simultaneously to every premise in the PFSA, and offers subscribers reasonable service plans that do not cap bandwidth usage.⁵

Similar language was included in the *Round Two FOA*.⁶ The current *Notice* fails to articulate why RUS has changed its position on providing funding to satellite systems as part of an architecture to bring broadband to Indian Country.

3. Satellite Systems Must Be Included in Any Effort to Bring Broadband to the Most Remote Locations in the United States

It is beyond debate that, the more rural the area, and the more topographically diverse the area, the more expensive it is to build broadband. For the most remote areas, wired solutions are not an option, at least not at a price that is at all affordable. Even NCTA, the cable industry group, admits that for the most remote area, their members will never be able to afford to deploy service.

Some geographic areas are so remote or so sparsely populated that constructing wired broadband networks will not be an efficient investment of public funding. Making wired broadband available to 100 percent of homes is a laudable goal, but rather than blindly following an uneconomic policy of building wired access to every home, school, and business in the United States, an efficient subsidy program should also take advantage of wireless and satellite Internet access options where wired service is not economically feasible.⁷

⁵ Broadband Pilot Program, Funding Opportunity Announcement, 83 Fed. Reg. 64,315, 64,320 (Dec. 14, 2018) (hereinafter Round One FOA).

⁶ See ReConnect Pilot Program, Funding Opportunity Announcement, 84 FR 67,913, 67,918 (Dec. 12, 2019) (hereinafter Round Two FOA).

⁷ INTERNET & TELEVISION ASS'N, DELIVERING BROADBAND TO ALL AMERICANS (June 2017), [https://www.ncta.com/sites/default/files/2017-10/NCTA%20Issue%20Brief_%20DELIVERING%20BROADBAND%20TO%20ALL%20AMERICANS%20June%202017\(PHOTO\).pdf](https://www.ncta.com/sites/default/files/2017-10/NCTA%20Issue%20Brief_%20DELIVERING%20BROADBAND%20TO%20ALL%20AMERICANS%20June%202017(PHOTO).pdf).

The FCC has recognized the importance of satellite systems to closing the digital divide for several years, as new satellites systems were proposed, authorized, and are now being deployed.

Another huge new opportunity to close the digital divide in rural America comes from major advances in satellite-delivered broadband. The Commission is moving forward with two important initiatives to unlock the potential of this technology. Here's the context. Instead of sending one large satellite into a high orbit, we can now send a whole bunch of them into low- or mid-Earth orbit. These non-geostationary satellite orbit, or NGSO, constellations will create a mesh network of satellites in space that hold the potential to provide consumer-focused residential broadband at a speed and price-point that is competitive with terrestrial broadband offerings.⁸

The FCC allowed satellite operators to bid for Universal Service Fund (USF) support in its Rural Digital Opportunity Fund (RDOF) Order.⁹ SpaceX, through its Starlink service (a non-geostationary orbit – NGSO – system), won \$885.5 million in RDOF support, and will provide broadband service to 643,000 previously unserved homes and businesses in 35 states, including parts of the Navajo Nation.¹⁰ Starlink has already deployed more than

⁸ Ajit Pai, *Digging In for the Long Haul*, FED. COMM'NS DIV. (Apr. 1, 2020), <https://www.fcc.gov/news-events/blog/2020/04/01/digging-long-haul>. See also Remarks of FCC Chairman Ajit Pai at the Opening of OneWeb Satellites' Production Facility (July 22, 2019), <https://docs.fcc.gov/public/attachments/DOC-358604A1.pdf> ("Low-Earth orbit satellite companies like OneWeb have a sky-high ambition: to close the digital divide around the globe. Their technology holds special promise for bringing high-speed broadband service to those in rural, Tribal, and remote areas, connecting many who have never been connected before. This meshes well with the FCC's twin priorities of closing the digital divide and promoting innovation.").

⁹ Rural Digital Opportunity Fund, Report and Order, 35 FCC Rcd. 686 (2020).

¹⁰ Brian Berger, *SpaceX wins big share of \$9.2B RDOF broadband subsidy*, SPACENEWS (Dec. 7, 2020), <https://spacenews.com/spacex-wins-big-share-of-9-2b-rdof-broadband-subsidy/#:~:text=SpaceX's%20share%20of%20the%20funding,win%20RDOF%20Phase%201%20dollars.>

1,300 of the 30,000 satellites it is authorized to launch by the FCC.¹¹ And Starlink is already partnering with Native American Tribes.¹² OneWeb, Starlink's leading competitor, has 146 satellites on-orbit, and plans to begin commercial service in late 2021.¹³

If the FCC is including satellite systems in its support system, there is no reason for RUS to deny support for similar systems. TechFreedom supports returning satellite systems to the "eligible" list, so long as such systems can meet the speed and latency thresholds established by the FCC in its RDOF rules. In general, subsidies should be awarded based on the nature of the service enjoyed by consumers, not the technology used to provide service.

CONCLUSION

The Rural eConnectivity Program provides important money and regulatory oversight and discipline to help bring broadband to Indian Country. In doing so, all technologies capable of

¹¹ Amy Thompson, *SpaceX launches 60 new Starlink internet satellites, nails latest rocket landing at sea*, SPACE.COM (Mar. 24, 2021), <https://www.space.com/spacex-starlink-22-satellites-launch-rocket-landing-success>.

¹² Jason Murdock, *SpaceX Starlink Internet 'Catapulted Us Into the 21st Century,' Native American Tribe Says*, NEWSWEEK (Oct. 9, 2020), <https://www.newsweek.com/spacex-starlink-internet-hoh-tribe-washington-state-elon-musk-1537783>.

¹³ Jason Rainbow, *Arianespace launches 36 more OneWeb satellites*, SPACENEWS (Mar. 25, 2021), <https://spacenews.com/arianespace-launches-36-more-oneweb-satellites/#:~:text=TAMPA%2C%20Fla.,orbit%20constellation%20to%20146%20satellites>

delivering broadband speeds must be “on the table.” TechFreedom supports returning satellite services to the “eligible” list.

Respectfully submitted,

_____/s/____

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