

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
The Rural Digital Opportunity Fund Auction (Auction 904))	AU Docket No. 20-34
)	
Rural Digital Opportunity Fund)	WC Docket No. 19-126
)	
Connect America Fund)	WC Docket No. 10-90

**COMMENTS
OF
WTA – ADVOCATES FOR RURAL BROADBAND**

WTA – Advocates for Rural Broadband (“WTA”)¹ hereby submits its comments with respect to the Commission’s *Public Notice* [Comment Sought on Competitive Bidding Procedures and Certain Program Requirements for the Rural Digital Opportunity Fund Auction (Auction 904)], FCC 20-21, released March 2, 2020 (“*Public Notice*”).

WTA has focused these comments on the following four matters: (1) that the Commission should retain census block groups as the minimum geographic area for bidding in the Rural Digital Opportunity Fund (“RDOF”) auction rather than effectively excluding many small entities by shifting to census tracts; (2) that the Commission should require RDOF bidders to employ a 100 percent (rather than 70 percent) subscribership assumption in designing their RDOF-supported networks in order to ensure that both normal and emergency broadband service demands can be met expeditiously; (3) that the Commission should not permit RDOF bidders to gain an unfair

¹WTA is a national trade association representing more than 340 rural telecommunications providers that offer voice, broadband, and video-related services in rural America. WTA members are predominately rural local exchange carriers (“Rural LECs”) that serve some of the most rugged, remote and/or sparsely populated areas of the United States.

competitive advantage and subject their future broadband customers to uncontrollable interference and congestion problems by employing unlicensed spectrum; and (4) that the Commission should continue to preclude RDOF bidders from designating performance tiers and latency combinations that their proposed technologies have not yet demonstrated the capability to provide.

A. Minimum Geographic Area for Bidding

WTA opposes the further enlargement of the “minimum geographic area for bidding” from census block groups to census tracts. As the Commission recognizes, using census block groups provides greater flexibility than larger geographic areas like census tracts, particularly for those bidders that intend to expand existing networks or construct smaller networks. *Public Notice* at ¶11. Whereas the lesser number of census tracts may make it somewhat easier for the bidding system to process bids, this “efficiency” will be achieved at the cost of effectively precluding participation by many Rural LECs and other small local service providers with proven interest in and records of providing quality service to nearby rural areas.

During the Rural Digital Opportunity Fund (“RDOF”) rulemaking, WTA supported the use of census blocks as the minimum geographic area for bidding because these smaller and more adaptable areas were more likely to encourage and enable Rural LECs and other small existing broadband service providers to bid for areas on the edges of their existing rural service territories. These are areas that tend to get overlooked and underserved because they are on the distant high-cost edges of large service areas where they do not produce enough cash flow to justify allocation of resources that can be employed more profitably in less remote areas. Put another way, these “border” areas are seen by larger carriers as unattractive and unprofitable locations at the far ends

of their service areas, but viewed by small local carriers as attractive, adjacent “edge-out” areas into which they can extend their existing broadband networks.

WTA reiterated in its RDOF comments that many of its members have been begged repeatedly for years by residents of neighboring price cap areas to extend their broadband networks across existing exchange boundaries to serve them. WTA members would like to do so, and their long and proven record of providing quality, state-of-the-art broadband services with a local touch to their existing rural customers should demonstrate to the Commission that they will serve these “border” or “edge” areas efficiently and effectively on a continuing and long-term basis, and not move on to other ventures once RDOF support ends.

Whereas census blocks are the ideal bidding area for these “border” areas due to their flexibility and adaptability for targeted service and support, census block groups will be a feasible alternative for a substantial portion of “border” areas. However, census tracts are simply too large in most instances, and their use as bidding areas will eliminate in most cases the technical and economic practicability of obtaining and using RDOF support to extend Rural LEC and other existing local networks into neighboring unserved and underserved areas. It will also eliminate the ability of Rural LECs and other small entities to obtain and use RDOF support to design, bid for and construct small local networks. In short, if it reduces the number of bidding areas from approximately 66,000 census block groups to approximately 33,000 census tracts, the Commission will discourage or preclude many Rural LECs and other small local entities from participating in the RDOF auction. This not only will reduce the number of auction participants, but also will frustrate the Commission’s efforts to minimize significant economic and other impacts upon small entities.

Finally, the use of census tracts will have an adverse impact upon the timing and availability of broadband service for the rural residents of “border” areas. If they are located in a census block group acquired by the adjacent Rural LEC or other small carrier for “edge-out” purposes, rural residents can expect prompt deployment and attentive service because they were the target population for which the RDOF auction winner sought support. Likewise, if they are located in an area containing one or a few census block groups for which a small RDOF auction winner has proposed and designed a small network, they will be a significant part of the target population for which support was sought. In stark contrast, if they are located at the edge of a census tract (where, for example, the existing price cap study area boundary is situated), “border” area residents will be in a situation very similar to their present one. Specifically, they will be at the distant end of a census tract-based service area where service is not likely to be extended until much later (if at all), and where investment and maintenance and service quality are likely to fall off significantly once RDOF support and compliance obligations end.

B. Network Usage Assumptions and Subscription Rates

WTA supports the Commission’s requirement that RDOF applicants provide in their short form and long form applications the information necessary to allow the Commission’s staff to verify that the applicant has plans and capability to scale its proposed network, if necessary, to be able to offer service to 100 percent of the actual locations in its RDOF service area, including newly built locations (upon reasonable request) that were built prior to Milestone Year 8. *Public Notice* at ¶37.

However, WTA believes that the Commission should also require each RDOF applicant to assume a subscription rate of 100 percent – rather than at least 70 percent – for both voice services

and broadband services when designing and estimating the cost of its proposed network in order to show that it can meet the public interest obligations for its selected performance tier and latency combination. Use of 100 percent subscribership as a network design factor is very different from the properly rejected concept of penalizing carriers by reducing their RDOF support if they do not attain certain (*e.g.*, 70 percent) performance levels with respect to subscribership. A 100 percent subscribership design factor means that the RDOF-supported network can readily and rapidly serve all customer locations within its service area at its proposed speed and latency levels if they want or need service. It is the information and belief of WTA that most state commissions currently require the wireline carriers that they designate and certify as Eligible Telecommunications Carriers (“ETCs”) to have networks that are capable of providing voice and broadband services to ALL of the customers within their study areas. We are entering an unprecedented time in our history, where millions of Americans are using high speed networks to work from home, students are accessing school assignments and educational materials online, and we are just beginning to fully realize the importance of telehealth access using the networks that the RDOF will help fund. Given the uncertainty about the duration and recurrence of Coronavirus and other pandemics and quarantines and the possibility that these conditions may necessitate an increased reliance on robust rural networks in the future, RDOF-supported networks need to be designed so that they are readily and rapidly capable of serving 100 percent of their potential subscribers, rather than just 70 percent of them, without the delays necessary to make significant network upgrades.

C. RDOF Applicants Should Not Be Permitted to Use Unlicensed Spectrum to Satisfy Public Interest Obligations

RDOF applicants should not be allowed to use unlicensed spectrum bands to demonstrate that they have sufficient access to spectrum, or to bid for and receive RDOF support for networks that will be constructed and operated on unlicensed spectrum bands. This prohibition is necessary to establish a level RDOF auction playing field, and to ensure that rural customers will not be saddled with inferior congested and interference-prone services due to regulatory differences that unfairly disfavor more reliable fiber optic and licensed wireless networks.

Generally, unlicensed spectrum bands can be used: (a) without filing applications for Commission radio licenses; (b) without competing in Commission spectrum auctions and paying for radio licenses for which an entity is the high bidder; (c) without paying Commission application and regulatory fees; (d) without filing further applications with the Commission when modifications are made to radio facilities; and (e) without complying with the mass of Commission regulations and reporting requirements applicable to wireline telecommunications carriers and licensed radio facilities. The ability to avoid these substantial regulatory requirements and costs allows RDOF applicants proposing to use unlicensed spectrum bands to accept significantly lower levels of RDOF support, and hence gives them a substantial and unfair competitive advantage over Commission radio licensees and telecommunications carriers that are subject to much greater Commission regulatory obligations and costs.

The disadvantage of using unlicensed spectrum is that the RDOF applicant has little or no ability -- now or in the future -- to prevent other entities from using the same frequency band or bands and to obtain protection from interference and congestion. Unlicensed spectrum is shared and the shared bands can become crowded. The unlicensed spectrum system counts on there being enough bandwidth for users to avoid each other by chance, and/or employs equipment with “spread

spectrum” technology that uses various “sniffing” or “frequency hopping” techniques to move data and to look for open channels in order to try to reduce interference and congestion. However, as more entities operate on unlicensed spectrum bands and their customers have greater and greater usage and bandwidth needs, the periods and levels of harmful interference and sustained congestion on unlicensed spectrum will increase. Unfortunately, unless they are able to reach agreements with multiple (and frequently increasing and changing) other users of the same unlicensed frequency block, RDOF recipients using unlicensed spectrum will have no way of controlling interference and congestion. In addition, the Commission’s rules generally do not permit unlicensed radio systems to operate with as much power as licensed systems on exclusive use bands – a situation which often results in less reliability and lower quality. The end result will be that the rural customers of RDOF winners using unlicensed spectrum will receive inferior and unreliable broadband service, and will have been deprived of the opportunity to have received more reliable and better quality broadband service from losing RDOF bidders that would have been able to limit or eliminate such interference and congestion on their fiber optic or licensed radio networks.

These concerns are not theoretical. Affiliates of WTA members that use unlicensed spectrum to provide broadband in adjacent areas have constantly been forced to change frequencies because other users sharing the spectrum regularly cause harmful interference and fail to cooperate to reduce it.

WTA is not arguing that unlicensed spectrum should not be used to provide WiFi or other broadband service, just that entities proposing to construct RDOF-supported networks solely or predominately on unlicensed spectrum should not be eligible to participate in the RDOF auction. In addition to the critical “level auction playing field” and interference/congestion issues discussed

above, WTA notes that unlicensed spectrum has served as a sort of “commons” open to a wide variety of broadband service providers and users. Unlicensed spectrum should not be permitted to be taken over and dominated by recipients of RDOF support that received an unfair advantage in the RDOF auctions due to its “free” status.

D. RDOF Applicants Should Not Be Allowed to Select Performance and Latency Combinations Beyond the Demonstrated Capability of Their Proposed Technology

WTA agrees with the Commission that RDOF applicants should not be permitted to select performance tiers and/or latency combinations that their proposed technologies have not yet demonstrated the capability to provide. *Public Notice* at ¶¶48-51. One of the primary goals of the RDOF mechanism and auctions is to get higher-speed broadband service deployed quickly to areas that do not presently have it. At the same time, technology development and its commercial application generally take significantly longer than anticipated, and often require additional periods of adjustment and modification to find and resolve or repair initial problems and defects. Put simply, claims or predictions that a certain new technology or new line of equipment or new network will be ready for commercial use by a certain date have very often proven to be unduly optimistic and impossible to achieve.

The Commission can reduce and minimize service delays, waiver petitions, defaults and failure to satisfy build-out milestones and performance requirements by precluding RDOF applicants from selecting performance tiers and/or latency levels that their proposed technologies have not yet demonstrated the capability to provide. Claims that such technologies are being developed or improved, and that the required capability will “soon” be available, are inherently speculative and uncertain. RDOF applicants (and their prospective customers) employing existing technologies that have proven capabilities to provide their proposed speed tiers and latency levels

from Day One should not be disadvantaged by being forced to compete against, and possibly being underbid and/or forced out of the RDOF auction by, applicants that may not be able to provide their proposed service levels for years, if ever.

Conclusion

In sum, WTA urges the Commission: (a) to use census block groups as the minimum geographic area for RDOF bidding; (b) to require RDOF applicants to employ a subscribership assumption of 100 percent to design and estimate the cost of their RDOF-supported networks; (c) to prohibit RDOF applicants from using unlicensed spectrum to construct their RDOF-supported networks; and (d) to preclude RDOF applicants from selecting performance tiers and/or latency levels that their proposed technologies have not yet demonstrated the capability to provide.

Respectfully submitted,
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