Before the Federal Communications Commission Washington, D.C. 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

REPLY COMMENTS OF NTCA-THE RURAL BROADBAND ASSOCIATION



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I. INTRODUCTION & SUMMARY

NTCA—The Rural Broadband Association ("NTCA")¹ hereby submits these reply comments in response to comments addressing the Public Notice² released by the Federal Communications Commission ("Commission") in the above-captioned proceedings. NTCA herein proposes that the Commission hold firm to "bright line" technologically neutral rules to define the eligibility for operators to bid in certain performance tiers. These should be based on an assessment of the realistic capabilities of the technologies utilized by bidders, tied to Form 477 showings of the extent to which a given technology is actually used to deliver broadband service to consumers in real-world conditions. The failure to remain faithful to such an approach in all respects would be a gamble of billions of dollars that could leave millions of rural consumers

¹ NTCA represents approximately 850 small voice and broadband providers operating in the most sparsely populated areas of the United States.

² The Rural Digital Opportunity Fund, AU Docket No. 20-34, Rural Digital Opportunity Fund, WC Docket No. 19-126, Connect America Fund, WC Docket No. 10-90, Public Notice, FCC 20-21 (rel. Mar. 2, 2020) ("Public Notice").

sitting on networks that continue to lag behind the performance of those in many other areas if providers are unable to live up to their commitments.

NTCA also states below that the record supports the use of census block groups as the minimum bidding unit in the RDOF auction. This strikes the balance between seeking to make the auction as "manageable" as possible with the need to ensure that as many qualified participants as possible are able to participate in the process.

In addition, NTCA reiterates support for a weighting framework that provides all operators with a chance to prevail, but also recognizes the relative value of the delivery of higher speeds – the value of getting "the biggest bang for the universal service buck." The Commission should reject proposals to reorient the weighting framework to favor certain lower-performing technologies that are inconsistent with the goals of the auction and that pose the risk of substantially complicating the RDOF auction.

NTCA also urges the Commission to ensure that those seeking to bid in the RDOF auction are technically capable of performing as promised and that those promises are premised upon reasonable assumptions of network deployment and utilization. Doing so requires rejecting pleas to define downward what should be deemed to constitute "universal service" in rural America by presuming that fewer rural Americans will actually want and need access to broadband than those in urban areas.

Finally, NTCA urges the Commission to view the proposed bright-line eligibility rules as proposed herein with the early lessons to be discerned from the current crisis. Specifically, as pandemic-induced stay-at-home orders and other social-distancing measures throughout the nation have shifted consumers' access of the Internet to home connections,³ the importance of robust and

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See New York Times, The Virus Changed the Way We Internet, Ella Koeze and Nathaniel Popper, April 7,

reliable broadband connections necessary to enable Americans to continue work and education at home and to stay in contact with medical professionals as well as family and friends has only increased. As it determines how to invest limited ratepayer funds, the Commission's mantra here should be "do it right the first time" by investing in networks that are known to be capable of meeting consumer demands as they evolve. A gamble on networks that are not providing service at a certain level today – and indeed if deployed tomorrow may not even be able to keep up with escalating consumer demands of the kind we are witnessing now – could leave millions of rural Americans lacking sufficient service. With respect to the RDOF, the Commission's distribution of funds for the benefit of consumers that have long lacked access should therefore be done right from the start.

- II. THE RECORD SUPPORTS REASONABLE MEASURES TO ENSURE THAT ALL RDOF SUPPORT RECIPIENTS ARE IN FACT CAPABLE OF DELIVERING REASONABLY COMPARABLE BROADBAND SERVICE TO MILLIONS OF RURAL CONSUMERS LONG IN NEED OF ACCESS.
 - A. The Commission Should Not Adopt Pleas from Satellite Providers to Vary from a Technologically Neutral "Bright Line" Eligibility Framework that Utilizes Form 477 Data to Determine the Performance Tiers In Which Any Given Entity Can Bid.

NTCA has long supported more stringent upfront technical vetting for all potential RDOF bidders during the "short-form" application stage and before the auction commences. This long-standing position is driven by a desire to ensure that the rural consumers that are the intended beneficiaries of these funds will never again face a circumstance where the networks in their areas do not enable full participation in a society where high-speed and low-latency broadband is vital

^{2020 (}finding, among other things that Americans "have suddenly become reliant on services that allow us to work and learn from home"), available at: <a href="https://www.nytimes.com/interactive/2020/04/07/technology/coronavirus-internet-use.html?action=click&module=Well&pgtype=Homepage§ion=Technology; See also, Press Release, Federal Communications Commission, Chairman Pai Hears From Broadband and Telephone Service Providers that Traffic is Up But Networks are Performing Well, Network Traffic Has Increased with Spike in Suburban, Exurban, and Daytime Usage (rel. Apr. 2, 2020).

to life, work, and education. In the absence of such upfront safeguards, as supported by the record compiled in response to the Public Notice, the Commission should at least hold firm in all respects on a bright-line technologically neutral framework that defines the eligibility for operators to bid in certain performance tiers. These should be based on an assessment of the realistic capabilities of the technologies utilized by bidders, girded by Form 477 showings of the extent to which a given technology is actually used to deliver broadband service to consumers in real-world conditions. The Commission should therefore decline efforts to scale back or even jettison any such bright-line framework – especially if it will not then be replaced by a more stringent upfront vetting of *all* applications instead – as doing so would amount to a gamble of billions of dollars that could leave millions of rural consumers sitting on networks that continue to lag behind the performance of those in many other areas if providers are unable to live up to their commitments.

As an initial matter, it must be stated that nothing in the record supports departing in the RDOF from the "only bid on what is offered now" framework employed in the Connect America Fund ("CAF") Phase II auction. Unfortunately, with respect to this vital safeguard, while the Public Notice as originally drafted proposed to effectively preclude *any* technology from bidding in a particular performance tier where there was a "lack of widespread deployment" of that technology offering residential service in that tier based upon reported Form 477 data, a carve-out was proposed with respect to only one technology – low-earth orbit satellites ("LEOs") – between the initial and final drafts of the proposed procedures public notice.⁴ Such a backslide was

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In the draft procedures notice for this auction, the Commission proposed a technologically neutral framework that would have in effect precluded any technology from bidding in a particular performance tier to the extent residential service was not generally available in that tier based upon reported Form 477 deployment and subscription data. *Public Draft, The Rural Digital Opportunity Fund*, AU Docket No. 20-34, *Rural Digital Opportunity Fund*, WC Docket No. 19-126, *Connect America Fund*, WC Docket No. 10-90, Public Notice (rel. Feb. 7, 2020), ¶ 50 (stating that "we propose prohibiting satellite providers from bidding in the Gigabit performance tier and the Above Baseline performance tier."). The Public Notice as

unexpected, because as Geolinks notes, "[s]imilar to other satellite providers, to the best of GeoLinks knowledge, there are no Form 477 filings to show that any low-earth orbit satellite operators have successfully offered Gigabit or Above Baseline speeds."⁵

While it is true that the Public Notice proposes a "case-by-case" review process under which Commission staff will consider whether low-earth satellite providers "can reasonably be expected to meet the specific requirements," such a process would seem to fly in the face of the concept of technological neutrality, applying a different standard to one particular technology. Indeed, if the Commission wishes to pursue this approach, it should then adopt the approach that NTCA initially proposed and perform a more scrutinizing and detailed upfront review of *all* applications on a technology-neutral basis. In any case, as NTCA noted in initial comments, the Commission need not be concerned that application of this bright-line rule applicable to other technologies cements in place for all auctions to come LEOs' status as ineligible – as with any technology, at such time as there is widespread deployment of a given technology in a given performance tier, then that level of service would be reflected in Form 477 data and that technology would be eligible to bid at such a level.

With respect to the wisdom of holding firm to bright-line eligibility rules that would apply to all operators on a technologically neutral basis, the comments of the Fiber Broadband Association ("FBA") are compelling. As FBA correctly states, the same "predictive judgement" that led the Commission to apply a bright-line "only bid on what is offered now" eligibility rule to

finally approved inserted the word "geostationary" in front of "satellite providers" in paragraph 50, a change essentially welcoming low earth orbit satellite operators to bid in the highest speed performance tiers.

Comments of California Internet, L.P., DBA GeoLinks, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("GeoLinks"), at 3 (emphasis added).

geostationary satellite providers should apply to low-earth orbit satellite providers as well.⁶ This predictive judgment is, as FBA notes, based on each "bidder's evidence of operation and service capabilities" - in other words, looking at the fact that an operator has actually provided such service as a predictor of its future ability to do so and as the single most important data point. Indeed, this is in effect the only actual data point the Commission has to work with, and as FBA notes, any other approach is, at best, highly speculative. 8 As FBA points out, both the analysis of reputable financial firms⁹ and the fact that "SpaceX, the LEO provider that may be the furthest along in terms of operational development, has not yet launched a commercial service, much less operated a complete and fully loaded network," 10 would seem to lead inevitably to the "predictive judgement" that such providers should too fall under the "only bid on what is offered now" framework that should be applied to all providers. One person's "predictive judgment" can be another person's "speculation" – and, in this instance, an approach based on speculation or bad "predictive judgment" rather than available data could represent a gamble of billions of dollars. Most importantly, consumers stuck with inferior service – or maybe none at all – and whom could have benefited from another provider winning funds to actually provide robust connectivity will be the ones that take the brunt of that failed bet.

See Comments of the Fiber Broadband Association, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("FBA"), at 4-6.

⁷ *Id.*, at 4.

⁸ See FBA, at 4-6.

⁹ *Id.*, at 5.

¹⁰ *Id*.

While NTCA appreciates the ViaSat proposal to cap, at 10 percent, the total amount of RDOF Round 1 funds for nascent technologies, 11 this would be but a "half-measure," helpful on its own but hardly sufficient. The fact remains that 10 percent of \$16 billion is still a considerable amount of funds, representing public resources being bet for future developments in technology for consumers sitting here and now without sufficient access to broadband. More importantly – and this must not be overlooked – those consumers that are the intended beneficiaries of that ten percent of program funds may not find the gamble to be worth it if the only thing standing between them and "reasonably comparable" broadband service is a support recipient still attempting to "get it right" in terms of operating outside laboratory conditions or such an operator exiting the market entirely. Those consumers may be forced to wait again (perhaps for years) before finally receiving service that most urban consumers take for granted if a RDOF winner is unable to deliver on its commitment. Thus, the ViaSat proposal only highlights the need for a bright-line technologically neutral "only bid on what is offered now" framework to protect the integrity of the auction and, more specifically, to protect consumers desperately in need of reasonably comparable broadband and voice service.

In addition, firm, bright-line rules are critical to auction integrity. On this point, USTelecom correctly points out that, "[b]y participating [in the CAF II auction] in spite of its own compliance concerns, ViaSat may have effectively blocked proven providers from the opportunity to deliver the required voice and broadband services to rural America and influenced auction results." Should the Commission move forward with the Public Notice proposal to review

Comments of Viasat, Inc., AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("Viasat"), at 3.

Comments of USTelecom – The Broadband Association, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("USTelecom"), at 5.

providers' applications using nascent technology and then get it wrong – or adopt proposals to jettison any upfront eligibility safeguards for any provider, as discussed below – even if funds are never expended because the "winner" pulls out before completion of the long-form application, the consumers in those areas that must then wait "for the next auction" bear the brunt.

Conexon, in its initial comments, raises an important point, one that hits upon what should be the starting point for any discussions here. More specifically, as Conexon notes, '[r]ooted in Section 254(c) of the Communications Act, the Commission is to consider the extent to which services that are to be supported with high cost funds are being deployed in public telecommunications networks by telecommunications providers. The meaning of this section is clear enough on its face: no speculation with public funds." While the language referenced by Conexon may not function as a blanket ban on any particular technology, nascent or not, it is clear that Congress envisioned that the Commission would not use ratepayer dollars to bet on experimental technologies – the fundamental purpose of the funds is to deliver reasonably comparable services at reasonably comparable rates, rather than technology incubation. That standard, hit upon by the Public Notice but inexplicably then not applied across the board, is the simple "only bid on what is offered now" approach that is rooted in the evidence as made available to the Commission by Form 477. This is the exact type of standard that Congress clearly intended be part of the consideration, and thus it should be applied with equal force to all operators.

Leaving legal impediments and congressional intent aside for a moment, as Conexon also points out, even on an accelerated schedule, it is unlikely that Space X will be able to launch

Comments of Conexon, LLC, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("Conexon"), at 4.

enough satellites over the near-term to offer service to rural America. ¹⁴ The fact that "the difference between SpaceX and every other technology to be used by bidders in the RDOF Phase I auction is that every other bidder's standards and engineering assumptions are generally known" is an important consideration here, highlighting once again the speculative nature of eschewing a blanket "only bid on what is offered now" rule. ADTRAN, for its part, correctly observes that it is unclear "at this stage the extent to which the non-geostationary satellite systems' capacity will be impacted by the need for inter-system sharing of spectrum, because the systems were not assigned exclusive frequencies." All of this taken together raises a number of questions that a case-by-case review as envisioned by the Public Notice may not (and likely cannot) answer in full and likely leads to a "rolling of the dice" as on the hope that "nascent" technologies that have yet to successfully offer service on widespread basis (or at all) can do so over large swaths of rural America that even proven operators have not yet been able to serve.

The Commission should therefore reject the arguments brought forth by SpaceX¹⁷ and ViaSat¹⁸ that seek to effectively jettison any meaningful upfront safeguards. To begin with, the SpaceX invocation of "technological neutrality" is misapplied here. To the extent that SpaceX

Id., at 4-5. See also, Comments of ADTRAN, Inc., AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("ADTRAN"), at 3 ("Although the Commission has recently licensed numerous 'mega-constellations' of low-Earth orbit satellites, none of those systems are close to being fully deployed. It is not clear how many, if any, of these systems will be fully deployed in time to provide the RDOF services. ADTRAN observes that similar predecessor systems authorized by the Commission never were deployed, and it is not clear whether the economics of constructing, launching and operating such mega-constellations have changed significantly in the intervening years.").

Conexon, at 5.

ADTRAN, at 4.

Comments of Space Exploration Technologies Corp., AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("SpaceX"), at 5-11.

¹⁸ Viasat, at 5-8.

argues that the principle of technological neutrality means the Commission should not "choos[e] winners and losers of support at the outset," it is correct. Yet the Commission is not doing that here – it is, rather, applying a bright-line rule to *all operators without reference to technology*. In the initial draft of the Public Notice, all technologies were subject to the same rules and framework; it was only after SpaceX's last-minute lobbying that it alone secured a unique carve-out from that framework in the final draft of the proposed procedures. ¹⁹ The rule as proposed in the initial draft of the Public Notice and as applied in the CAF Phase II auction as well is not "barring providers or technologies from the opportunity to participate in the auction at performance levels consistent with their networks and capabilities." ²⁰ It is, rather, merely *judging* those "capabilities" by real-world performance – this is a consistent, technologically neutral standard that looks at the current capability to provide service as the best measure of future performance in place of speculating on what those capabilities might be based upon laboratory results, limited deployments, and press clips reporting on experiments with a single airplane.

Moreover, SpaceX's argument that the Commission has already proposed or has in place safeguards necessary to ensure performance should be rejected. For one, its reference (as well as Viasat's) to the short-form application glosses over the fact that the form as found in Appendix A is largely a questionnaire – including yes/no questions and references to "high-level" responses²¹

Ex Parte Letter from David Goldman, Director of Satellite Policy, Space Exploration Technologies Corp., to Marlene H. Dortch, Secretary, Commission, WC Docket No. 19-126, *et al.* (fil. Jan. 20, 2020); *Ex Parte* Letter from David Goldman, Director of Satellite Policy, Space Exploration Technologies Corp., to Marlene H. Dortch, Secretary, Commission, WC Docket No. 19-126, *et al.* (fil. Feb. 21, 2020), at Att. B.

SpaceX, at 6.

Public Notice, Appendix A, at 40 ("4. Network Performance: a. Can the applicant demonstrate that the technology and the engineering design will fully support the proposed performance tier, latency and voice service requirements for the requisite number of locations during peak periods (Yes/No)?").

- that does not require an individual provider to offer up much more than aspirational details. A yes/no question is far from requiring that an "applicant must be able to demonstrate that its network technology and design support the proposed performance tier for the requisite locations during peak periods."²² Again, if the Commission wants to engage in a scrutinizing upfront review of all bidders using any and all technologies by undertaking more technical review during the shortform stage by reference to well-defined objective technical standards, NTCA would welcome such an approach – it has recommended that in the past and still believes much more detailed review upfront is warranted when it comes to responsible stewardship of public resources prior to auction bidding qualification. Nonetheless, the Commission has refused to implement such an approach when asked by NTCA to do so, and has instead decided that a bright-line "only bid on what is offered now" framework constitutes an acceptable substitute at the short-form stage in advance of more detailed review to come during the long-form application. If the Commission will take that approach, it should then hold fast and faithfully to that approach with discipline, rather than jumping back and forth between upfront review in one case and employment of the bright-line rule in all others.

Moreover, the additional "safeguards" to which Space X refers are safeguards in name only. More specifically, the fact that "Commission staff will review submitted long-form applications to determine whether long-form applicants are qualified to receive support" might help to protect ratepayer funds, but it is meaningless for the consumers who are the intended beneficiaries of those funds. For those consumers in areas where SpaceX or a similarly situated provider "wins" the auction but is precluded from receiving support at the long-form application

SpaceX, at 9.

²³ *Id*.

stage, they are yet again left on the outside looking in – perhaps for years – when it comes to broadband connectivity. That another provider could have been awarded that support and actually moved forward with providing service will be a blow to consumers in those areas that could be forced to wait until the "next go-around" to finally obtain connectivity. The same is true despite the fact that "applicants know at the time that they place their bids that failure to meet their public interest obligations may subject them to stringent non-compliance measures." Again, consumers that are the intended beneficiaries of the RDOF that are left lacking high-quality service will find little comfort in "stringent non-compliance measures" against their provider.

Finally, with respect to the Viasat proposal to make eligibility determinations on case-bycase basis for all technologies, ²⁵ if the Commission wishes to pursue this approach, this can be
done via the process that NTCA initially proposed and which uses a more scrutinizing and detailed
upfront review of *all* applications. If however, Viasat is suggesting merely that the Commission
review and approve such determinations based solely upon the short-form application as currently
constituted, for the reasons articulated on page 11 and fn. 21, *supra*, such an approach simply does
not pass muster. Thus, to the extent Viasat is suggesting reliance on the short-form alone as the
basis to qualify anyone for any tier, the Commission should reject this transparently self-serving
argument to remove any and all safeguards affecting satellite providers across the board. ²⁶ While
the above discussion need not be repeated here in full, it must be stated again that the Commission
has before it two options to protect rural consumers from the ramifications of a "bad bet" – more
extensive technical vetting at the short-form application stage or a bright-line technologically

²⁴ *Id.*, at 10.

Viasat, at 8.

See generally Viasat, at 5-8.

neutral framework that is based on 477 data. The Commission chose the latter and nothing in the speculative arguments put forth by any party in response to the Public Notice undermines the need for auction integrity mechanisms.

B. The Commission Should Not Adopt Pleas from Fixed Wireless Providers to Vary from a "Bright Line" Eligibility Framework that Utilizes Form 477 Data to Determine the Performance Tiers in Which Any Given Entity Can Bid.

The Commission should likewise hold firm in the face of similar requests by a number of fixed wireless operators to modify or depart from the "only bid on what is offered now" framework. For the same reasons discussed above, this technologically neutral framework is necessary to ensure that RDOF funds have the greatest impact on rural consumers in need of connectivity.

With respect to the capabilities of various technologies and their ability to deliver to consumers broadband service in the higher speed performance tiers, Cambium and WISPA argue (with a line of reasoning identical to that advanced by Space X and Viasat above) that, notwithstanding what actual data depict, the Commission should bet on fixed wireless operators' future ability to offer Gigabit service. More specifically, referring to fixed wireless providers that do not and (in Cambium's seeming admission, cannot) offer such services today, Cambium argues for an academic application of Moore's law under the theory that "there *should be* ample time for applicants to meet this milestone with fixed wireless technology." WISPA similarly argues that "whether or not a provider actually offers Gigabit service today is different than whether or not a provider *could* provide Gigabit service." Each of these arguments essentially take the position

Comments of Cambium Networks, Ltd., LLC, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("Cambium"), at 5 (emphasis added).

Comments of Wireless Internet Service Providers Association, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("WISPA"), at 10 (emphasis in the original).

that the Commission should make the speculative bet that fixed wireless providers will *someday* offer Gigabit service in rural areas of the nation where there is no evidence that operators have yet been able to do so successfully.

As discussed above and as FBA references in terms of LEOs, the Commission has already made the "predictive judgement" that it is unreasonable to expect fixed wireless operators will be able provide service at the Gigabit level by the first service milestone unless it has already done so. In other words, it has already declined to rely on what "could" someday come to pass in favor of an evidence-based approach that looks at what has been done outside of a testing lab (i.e., actual service provided to consumers). Indeed, if WISPA believes that the evidence the Commission is relying upon for that predictive judgement is flawed, it can certainly propose more robust and scrutinizing short-form stage technical vetting to enable each fixed wireless operator that seeks to bid in the Gigabit tier to come forward with detailed evidence to "prove up" their assertions of the capability to offer such service. Yet, to date, WISPA has consistently opposed NTCA's proposals for every applicant – regardless of technology – to come forward with propagation maps and more detailed explanations of technical capabilities at the short-form stage.²⁹ In the absence of much more robust and detailed upfront technical vetting, the Commission cannot determine with any reasonable degree of accuracy whether any given fixed wireless provider that WISPA believes is "capable" of offering service in the Gigabit tier can actually deliver that service to wide swaths of rural America.

In short, WISPA/Cambium/Space X/Viasat cannot have it both ways – encouraging neither meaningful upfront technical vetting nor bright-line "only bid on what you offer now" rules – lest

Ex Parte Letter from Claude Aiken, President and CEO, WISPA, to Marlene H. Dortch, Secretary, Commission, WC Docket No. 10-90 (filed Dec, 4, 2018); Reply Comments of WISPA, WC Docket No. 19-126 and WC Docket No. 10-90 (fil. Oct. 21, 2019), at 35-37.

that the Commission has before it two options to protect rural consumers from the ramifications of a "bad bet" – more extensive technical vetting in the short-form application stage or a fact-based "predictive judgment" relying upon Form 477 data. The Commission chose the latter and nothing in the speculative arguments put forth by any party undermines the need for these important mechanisms that are necessary to protect both consumers and the integrity of the auction itself.

C. The Commission Should Adopt Additional Meaningful "Bright Lines" Upfront, Prior to Short-Form Submission, With Respect to The True Capabilities of the Spectrum Bands that Will be Utilized by RDOF Bidders.

The Public Notice seeks comment on a non-exhaustive list of spectrum bands that it anticipates could be utilized by RDOF bidders for the provision of service meeting the minimum service requirements for each speed performance tier. WISPA requests that the Commission permit RDOF applicants to "demonstrate in their short-form applications that the spectrum band or bands they identify can meet their proposed T+L,"³⁰ stating that "Commission staff should have the opportunity to determine whether 'an applicant is reasonably expected to be capable of meeting the relevant public interest obligations in a state."³¹ To be clear, NTCA does not oppose adding to Appendix B additional spectrum bands beyond those initially included, yet the designation process as proposed by WISPA is insufficient. The Commission should go beyond basic aspirational declarations by an applicant of its ability to meet performance metrics in whatever tier it chooses to bid.

³⁰ WISPA, at 5.

Id., citing Public Notice, \P 53.

Rather, as NTCA noted in initial comments, the Commission should require potential bidders to submit technical showings in their short-form application that would demonstrate their ability to meet the proposed speed and latency metrics in the face of terrain, distance, and other relevant factors. Operators need not submit painstakingly detailed engineering plans that depict the location of every antenna, pedestal, or handhole, but also must go a step further than mere declarations of network aspirations. Applicants' submissions should be measured against reasonable, commonly applied technical standards, such as those that might be employed in discerning whether a provider is claiming reasonable coverage capabilities in the broadband mapping context.

Absent the approach proposed immediately above, the Commission should at the very least once again draw "bright line" technical standards applicable to each spectrum band, both those reflected in Appendix B as it stands today as well as other bands that may be added. Rather than merely taking into account whether a particular band can achieve the *minimum* level of performance for the auction, the Commission should designate the *maximum* level of performance that its expert engineering staff concludes can be achieved by each spectrum band assuming a specified level of bandwidth and the kinds of deployment and subscription metrics otherwise contemplated for the auction. Such upfront guidance would provide all parties involved with clarity and certainty as to the Commission's technological expectations, and would thus help ensure *prior* to the long-form stage that parties are reasonably planning their networks to deliver services as promised.

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See USTelecom, at 10 (proposing to add C-Band spectrum once allocated by auction to the list in Appendix B of the Public Notice).

III. THERE IS SUBSTANTIAL CONSENSUS IN THE RECORD FOR USE OF CENSUS BLOCK GROUPS AS THE APPROPRIATE BIDDING UNIT FOR USE IN THE RDOF AUCTION.

In its initial comments, NTCA supported the use of census block groups as the minimum bidding unit in the RDOF auction, noting the importance of the Commission striking a balance between seeking to make the auction as "manageable" as possible with the need to ensure that as many qualified participants as possible are able to participate in the process.³³ NTCA observed that existing systems are already designed for census block group-based bidding, and that stakeholders of all sizes had obtained experience with this unit of measure through the CAF Phase II auction.³⁴

This position is supported nearly unanimously by commenters in this proceeding. As FBA notes "establishing the minimum geographic bidding unit at the census group block will encourage participation in the RDOF auction, as bidders will have 'greater flexibility' in identifying geographic areas for which the bidder can make a rational business case for bidding."³⁵ Meanwhile, as FBA highlighted, "[i]f the minimum geographic bidding unit is established at a census tract level, rather than the smaller census group block level, the potential for a bidder to encounter census blocks that are uneconomic to serve will almost certainly increase significantly."³⁶ These sentiments were echoed by nearly every other party representing nearly every kind of likely bidder.³⁷

³³ NTCA, at 2-3.

³⁴ *Id*.

³⁵ FBA, at 11.

Id., at 11-12 (citing public notice \P 81).

See, e.g., US Telecom, at 6; WISPA, at 3-4; Comments of AT&T Services, Inc., AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020) ("AT&T"), at 2-3; Comments

By contrast, the prospect of using census tracts as the minimum bidding unit enjoyed scant support from parties with little in the way of meaningful substantive supporting arguments. For example, the *entirety* of Hughes' case for use of census tracts is repeated here:

As the Commission notes, the use of smaller bidding areas "may create greater complexity as bidders develop their bidding strategies and submit bids." As a result, Hughes supports the use of census tracts as the bidding area, as opposed to smaller areas that would be harder for bidders and the Commission to administer.³⁸

NTCA appreciates Hughes' professed concern for other bidders, but this concern is apparently misplaced and unnecessary as nearly every other bidder shares no such concern. Moreover, the Commission itself is now quite familiar with the administration of auctions at a census block group level, and there is no indication that the Commission's systems (which are already designed for census block groups) are unprepared or incapable of accommodating the use of census block groups here. The record therefore provides no basis for the adoption of census tracts, and instead reflects substantial support for the use of census block groups in the RDOF auction.

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of ACA Connects – America's Communications Association, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020), at 3-8; Comments of the National Rural Electric Cooperative Association, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020), at 3-7; NCTA – The Internet & Television Association, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020), at 2-5.

Comments of Hughes Network Systems, LLC, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90, (fil. Mar. 27, 2020), at 6 (citing Public Notice, ¶ 11); see also Viasat, at 14 (expressing concern about "efficient bid processing by the bidding system" if census tracts are not used).

IV. THE COMMISSION SHOULD REJECT PROPOSALS THAT WOULD UNDERMINE THE CAREFULLY BALANCED WEIGHTING FRAMEWORK ADOPTED IN THE RDOF ORDER, AND SHOULD INSTEAD FOCUS UPON ADOPTING PROPOSALS THAT WOULD PROMOTE TRANSPARENCY AND SIMPLICITY IN BIDDING.

In both the CAF Phase II auction and now here, the Commission has taken careful steps to design a weighting framework that provides all operators with a chance to prevail, but also recognizes the relative value of the delivery of higher speeds – the value of getting "the biggest bang for the universal service buck." These provisions worked reasonably well in the CAF Phase II auction, and by and large, the Commission carried those measures forward here. Viasat in particular, however, continues to litigate or otherwise seek to reorient the weighting framework to favor certain lower-performing technologies. These pleas should be rejected as inconsistent with the goals of the auction and because they pose the risk of substantially complicating the RDOF auction.

For example, Viasat argues that the Commission seeking comment now on the implied support formula constitutes an explicit and specific interest in the potential of "multiplicative weighting," a concept proposed by Viasat previously and cited in passing as part of a string citation in the RDOF Order along with a series of proposals from many other parties on possible changes to the competitive bidding rules.³⁹ While Viasat attempts to craft it as a "logical" position yielding "a better auction result,"⁴⁰ the actual result is illogically to mute the impact of the weighting framework and thereby give those that promise to do much less for the funding available a chance to remain in the auction for a longer period of time. Moreover, although

Rural Digital Opportunity Fund, WC Docket No. 19-126, Connect America Fund, WC Docket No. 10-90, Report and Order, FCC 20-5 (rel. Feb. 7, 2020) ("RDOF Order"), ¶ 22 & n.63 (citing Reply Comments of Viasat, Inc., WC Docket Nos. 19-126, 10-90, at 23-24 (filed Oct. 21, 2019)).

Viasat, at 9.

Viasat attempts to justify this proposal by an analogy involving two runners – one weighted down and the other not – what Viasat misses is that there are third party beneficiaries (consumers) dependent upon who wins the race, and sponsors (the Commission) ready to award "prize money" to the winner. For these other stakeholders, the weighting is important to make sure that the party capable of delivering the best result in the end has a chance to win, and as the CAF Phase II auction has already demonstrated, everyone has a reasonable chance to win the race under the weighting as previously calculated and applied. The Commission should therefore decline Viasat's attempt to reconfigure and mute (if not moot) the already-tested weighting framework used in the CAF Phase II auction.

Likewise, the Commission should reject Viasat's proposal to allow bidders to "hopscotch" between various Tier and Latency (T+L) combinations over the course of the RDOF auction. ⁴¹ Ironically, even as Viasat urges the Commission to take steps in other contexts to help mitigate complexity in the auctions, ⁴² this "hopscotch" proposal would inject massive amounts of uncertainty and complexity into the RDOF auction. Stepping back, as it did in the CAF Phase II auction, the Commission has proposed to preclude bidders from making changes in T+L combinations from round to round. ⁴³ This prudent approach, especially if paired with the kind of much greater transparency into full information about all bids as recommended by AT&T, ⁴⁴ will help to mitigate the kinds of gaming and "moving targets" that *will* in fact exacerbate uncertainty and complexity in the auction process. To promote an efficient auction, the Commission should

Id., at 12-13.

⁴² *Id.*, at 14.

RDOF Order, at ¶ 85.

⁴⁴ AT&T, at 4-5.

therefore provide both greater transparency into the bids being placed and then limit the ability for bidders to engage in undesirable strategic bidding behavior using that information.

Finally, NTCA supports the comments submitted by Frontier with respect to clarification of the interplay between the "clearing round" provision adopted in the RDOF order and the proposed bid processing rules. In the interest of making sure that it is "buying the best networks for the budget," the Commission adopted the "clearing round" provision that will award RDOF support to the bidder promising the best level of performance in a given area at the clearing round. 45 As Frontier highlights, however, to effectuate this change from the CAF Phase II auction approach, the Commission should make a corresponding change to the bid processing system – either by processing relative weights before price points at the clearing round, or by narrowing the price point decrement per round as the clearing round approaches.⁴⁶ In the absence of such approaches, the Chairman's intent to "assign support to the bidder offering the best combination of speed and latency, once the combined price of bids in each area in the auction falls below the available budget",47 will be frustrated, if not undermined – with lowerperforming bids receiving an award simply because a provider offering much better performance placed an intra-round bid. NTCA therefore urges the Commission to ensure that the goal of the "clearing round" provision is carried out faithfully throughout the auction process through the adoption of clarifying measures such as those recommended by Frontier.

RDOF Order, at ¶ 6.

⁴⁶ Comments of Frontier, Au Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (fil. Mar. 27, 2020), at 4-5.

RDOF Order, at Statement of Chairman Pai.

V. TO ENSURE THAT NETWORKS ARE CAPABLE OF FULFILLING THE MISSION OF UNIVERSAL SERVICE, THE COMMISSION SHOULD NOT REDUCE ASSUMPTIONS WITH RESPECT TO SUBSCRIPTION.

As discussed at length above and in NTCA's initial comments, the Commission should ensure that those seeking to bid in the RDOF auction are technically capable of performing as promised and that those promises are premised upon reasonable assumptions of network deployment and utilization. In the end, given that the goal is not to build networks merely for networks' sakes, but rather to deliver services for consumers' sakes, the Commission cannot look at mere deployment alone as the end game and an opportunity for declarations of victory.

To this end, NTCA urges the Commission to reject USTelecom's pleas to define downward what should be deemed to constitute "universal service" in rural America by presuming that fewer rural Americans will actually want and need access to broadband than those in urban areas. Specifically, USTelecom argues that "the Commission should lower the assumed 70% subscription rate in determining a provider's ability to meet the public interest obligations for its selected performance tier and latency combinations." USTelecom reasons that the 70% metric is "unworkable," and that the presumed subscription "should be lowered to 40% based on existing data."

In making such arguments, USTelecom looks at "actual take rates" in rural areas today, and claims that these indicate "larger broadband adoption forces at work in rural America" that justify a much lower assumed adoption rate. ⁵⁰ NTCA submits, however, that the largest broadband adoption force at work in rural America today may be the lack of quality broadband

USTelecom, at 8-9.

⁴⁹ *Id.*, at 9.

⁵⁰ *Id*.

available in many of these areas; while adoption and migration to higher-speed services unquestionably takes time, when consumers who have been waiting for years for broadband are presented only now with the prospect of relatively lower-speed broadband in areas served by some operators, it is perhaps not surprising that adoption rates are lower in those areas. By contrast, NTCA's most recent member survey indicates that, over time, consumers presented with good choices for broadband service are increasingly opting to take those services. Indeed, just from 2018 to 2019, NTCA members report that consumer adoption of broadband services with speeds between 25 Mbps and 100 Mbps increased from 24% to 32%, and that adoption of speeds of 100 Mbps or higher increased from just under 16% to 18%. In other words, as of 2019, NTCA members reported that 50% of their customers were purchasing broadband of 25 Mbps or greater – a particularly noteworthy figure when the same survey conducted just three years earlier found that only 17% of customers were purchasing these higher-speed services. Services of the province of the same survey conducted services are provinced to the same survey conducted services.

USTelecom ultimately acknowledges that the 70% subscription threshold is simply an "assumed metric" for purposes of confirming whether a network is capable of performing at its selected T+L combinations, but still contends it is too high a threshold to be used in defining the expectations of what a network should be able to achieve. ⁵³ But if anything – within the auspices of an ostensibly *universal* service program – the Commission should be able to expect that recipients of millions of dollars in support will be prepared to serve any and all that come to request service. Short of compelling providers to plan for the capability to serve *all* consumers

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⁵¹ 2019 Broadband/Internet Availability Survey Report, NTCA, at 7, available at: https://www.ntca.org/sites/default/files/documents/2019-12/2019%20Broadband%20Survey%20 Report.pdf.

⁵² 2019 Broadband/Internet Availability Survey Report, NTCA, at 8, available at https://www.ntca.org/sites/default/files/documents/2018-01/2016ntcabroadbandsurveyreport.pdf.

USTelecom, at 9.

and locations, however, the Commission should at the very least hold fast to a presumed 70% subscription metric in defining what demands winning bidders should reasonably be able to expect and accommodate for in planning the deployment of their networks. Particularly now, at a time when Americans are recognizing more than ever the significance of connectivity at home and when policymakers are placing an urgent premium on enabling such access, the Commission should decline to adopt a policy that would promote the deployment of networks capable of serving no more than a small fraction of those Americans at any one time.

VI. CONCLUSION

For the reasons discussed above, the Commission should adopt the auction integrity mechanisms as proposed by NTCA to ensure that rural consumers lacking access to high-speed connectivity are not left with at the conclusion of the RDOF auction.



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