

FCC FACT SHEET^{*}
Rural Digital Opportunity Fund Phase I Auction Procedures Public Notice
Public Notice – AU Docket No. 20-34

Background: Closing the digital divide—and bringing digital opportunity to every American no matter where he or she lives—continues to be the Commission’s top priority. In January 2020, the Commission adopted the Rural Digital Opportunity Fund, allocating up to \$20.4 billion through a two-phase competitive auction to help connect millions of unserved rural homes and small businesses to high-speed broadband. The Rural Digital Opportunity Fund Phase I auction (Auction 904) will provide up to \$16 billion to target areas that current data undisputedly show are unserved, including nearly six million unserved rural homes and businesses. The Rural Digital Opportunity Fund will support the future needs of rural Americans by more than doubling the minimum speeds the Commission required in 2018’s successful Connect America Fund Phase II auction to 25/3 Mbps, weighting bids for services with faster speeds (up to gigabit) and lower latency more heavily in the auction, and awarding support to the bidder offering the best-performing network once the total price of all bids falls below the auction’s budget. In the *Rural Digital Opportunity Fund Comment Public Notice*, the Commission proposed specific application and bidding procedures for Auction 904 to ensure robust participation and competition in Auction 904. This *Public Notice* would take the next step toward kicking off bidding in October 2020 by adopting procedures for Auction 904.

What the Public Notice Would Do:

- Schedule the auction to commence on October 29, 2020, open the short-form filing window on July 1, 2020, and establish a short-form application deadline of July 15, 2020.
- Adopt census block groups as the minimum geographic area in which areas eligible for support can be grouped for bidding in the auction.
- Conclude that applicants may not bid for support using network technologies that have not shown demonstrated success in providing mass market retail broadband to consumers.
- Adopt pre-auction short-form application procedures to ensure that potential bidders have the business experience and financial means to participate in the auction and intend to use a network technology that will allow them to meet performance requirements.
- Adopt post-auction long-form application procedures and collect information from winning bidders demonstrating that they will have the technical and financial ability to deploy their planned broadband networks and meet other public interest obligations in the areas where they win support.
- Adopt a simplified multi-round, descending clock auction where bidders will indicate in each round whether they will bid to provide service to an area at a given performance tier and latency. The auction will end after the aggregate support amount of all bids is less than or equal to the total budget and there is no longer competition for support in any area.

* This document is being released as part of a “permit-but-disclose” proceeding. Any presentations or views on the subject expressed to the Commission or its staff, including by email, must be filed in AU Docket No. 20-34, which may be accessed via the Electronic Comment Filing System (<https://www.fcc.gov/ecfs>). Before filing, participants should familiarize themselves with the Commission’s *ex parte* rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s meeting. See 47 CFR § 1.1200 *et seq.*



PUBLIC NOTICE

Federal Communications Commission
445 12th St., S.W.
Washington, D.C. 20554

News Media Information: 202-418-0500
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TTY: 888-835-5322

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RURAL DIGITAL OPPORTUNITY FUND PHASE I AUCTION SCHEDULED FOR OCTOBER 29, 2020

NOTICE AND FILING REQUIREMENTS AND OTHER PROCEDURES FOR AUCTION 904*

AU Docket No. 20-34
WC Docket No. 19-126
WC Docket No. 10-90

By the Commission:

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* This document has been circulated for tentative consideration by the Commission at its June 2020 open meeting. The issues referenced in this document and the Commission’s ultimate resolution of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairman has determined that, in the interest of promoting the public’s ability to understand the nature and scope of issues under consideration, the public interest would be served by making this document publicly available. The FCC’s *ex parte* rules apply and presentations are subject to “permit-but-disclose” *ex parte* rules. See, e.g., 47 CFR §§ 1.1200(a), 1.1206. Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s meeting. See 47 CFR §§ 1.1200(a), 1.1203.

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I. GENERAL INFORMATION

A. Introduction

1. By this Public Notice, we establish procedures for Phase I of the Rural Digital Opportunity Fund auction (auction or Auction 904). The auction will award up to \$16 billion over 10 years to service providers that commit to offer voice and broadband services to fixed locations in eligible unserved high-cost census blocks.¹ The bidding in the auction is now scheduled to begin on October 29, 2020.

2. Auction 904 will be the Commission’s second auction to award ongoing high-cost universal service support through competitive bidding in a multiple-round, reverse auction and follows the successful Connect America Fund Phase II auction (Auction 903) in 2018. As before, we intend to maximize the value the American people receive for the universal service funds we spend, balancing the need to support future-proofed networks and higher-quality services against the need to consider cost efficiencies and maximize the number of locations that receive service. Therefore, we will again use an auction mechanism designed to select bids from providers that would deploy high-speed broadband and voice services in unserved communities for lower relative levels of support. The bidding procedures we adopt, including some modifications to our proposals, will be implemented through the Auction 904 bidding system, which will enable a bidder to express in a simple and orderly way the amount of support it needs to provide a specified level of service to a specified set of eligible areas.

3. Auction 904 will be the Commission’s single largest step toward bridging the rural digital divide, potentially bringing voice and broadband to millions of unserved homes and businesses in rural areas and fulfilling our commitment to universal service.

B. Background and Relevant Authority

4. In 2011, the Commission adopted a new universal service funding approach in areas served by price cap incumbent local exchange carriers that would provide support through a combination of a “new forward-looking model of the cost of constructing modern multi-purpose networks” and a

¹ See generally *Rural Digital Opportunity Fund; Connect America Fund*, Order, 35 FCC Rcd 686 (2020) (*Rural Digital Opportunity Fund Order*).

competitive bidding process.² The Commission delegated to the Wireline Competition Bureau (Bureau) the task of developing a specific engineering cost model that would estimate, at a granular level, the support needed to serve areas where costs exceed a specified cost benchmark, but fall below an extremely high-cost benchmark.³

5. In 2015, following the development of the Connect America Cost Model (CAM), the Commission provided the incumbent price cap carriers an opportunity to accept fixed support based on the CAM in exchange for defined deployment obligations in each state where they were providing service. Nine price cap carriers accepted over \$1.5 billion in annual support to deploy broadband networks serving more than 3.6 million homes and businesses by the end of 2020 in 45 states and one U.S. territory.⁴ Price cap carriers receiving model-based support were required to deploy broadband of at least 10/1 Mbps by the end of 2020, when the six-year support term ends.⁵ In areas where the price cap carriers declined the model-based support, and for certain other high-cost areas nationwide, support was to be allocated through the subsequent CAF Phase II auction,⁶ which was “a competitive bidding process in which all eligible providers [were] given an equal opportunity to compete.”⁷ The CAF Phase II auction yielded 103 winning bidders, with the 10-year support awarded totaling \$1.488 billion and covering 713,176 locations in 45 states.⁸ As of May 2020, the Commission has authorized the Universal Service Administrative Company (USAC) to obligate and disburse funding totaling over \$1.443 billion over the ten-year term to support over 630,000 locations in 45 states for which support was made available in the CAF Phase II auction.

6. In January 2020, we adopted a framework and rules for the Rural Digital Opportunity Fund auction to connect millions more rural homes and small businesses to fixed high-speed broadband networks. In the *Rural Digital Opportunity Fund Order*, we established a total budget of \$20.4 billion, including \$16 billion for the Phase I auction to target wholly unserved census blocks; the methodology for compiling a list of eligible areas; the approach for calculating reserve prices in eligible areas; public interest obligations for recipients; the eligibility requirements; and the post-auction obligations and oversight measures.⁹ We also decided that the Part 1 rules on competitive bidding for distributing

² *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17725, para. 156 (2011) (*USF/ICC Transformation Order*), *aff’d sub nom. In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014).

³ *Id.* at 17725, paras. 156-57; *see also Connect America Fund et al.*, WC Docket Nos. 10-90 et al., Report and Order, 28 FCC Rcd 5301 (WCB 2013) (adopting cost model platform); *Connect America Fund et al.*, WC Docket Nos. 10-90 et al., Report and Order, 29 FCC Rcd 3964 (WCB 2014) (finalizing cost model’s engineering assumptions and adopting inputs).

⁴ *FCC News Release*, August 27, 2015, <https://www.fcc.gov/document/carriers-accept-over-15-b-support-expand-rural-broadband>; *see also USF/ICC Transformation Order*, 26 FCC Rcd at 17725, paras. 156-57.

⁵ Price cap carriers that elected the offer of model-based support in exchange for meeting defined service obligations will have the opportunity to elect whether to receive an additional seventh year of support. *See Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 740-41, para. 127.

⁶ *See generally Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949 (2016) (*CAF Phase II Auction Order and/or FNPRM*); *Connect America Fund Phase II Auction Scheduled for July 24, 2018; Notice and Filing Requirements and Other Procedures for Auction 903*, AU Docket No. 17-182, WC Docket No. 10-90, Public Notice, 33 FCC Rcd 1428 (2018) (*Auction 903 Procedures Public Notice*); *Connect America Fund Phase II Auction (Auction 903) Closes; Winning Bidders Announced; FCC Form 683 Due October 15, 2018*, AU Docket No. 17-182, WC Docket No. 10-90, Public Notice, 33 FCC Rcd 8257 (WTB/WCB 2018) (*Auction 903 Closing Public Notice*).

⁷ *USF/ICC Transformation Order*, 26 FCC Rcd at 17732, para. 178.

⁸ *Auction 903 Closing Public Notice*, 33 FCC Rcd at 8257, para. 1.

⁹ *See generally Rural Digital Opportunity Fund Order*.

universal service support would apply to the Rural Digital Opportunity Fund auction and provided basic guidance about the procedures that we would use in the auction process.¹⁰ Consistent with prior practice, we left the specific details of the auction to be developed as part of the pre-auction process,¹¹ which we commenced with the *Auction 904 Comment Public Notice* in March 2020.¹² We now resolve the issues raised in the *Auction 904 Comment Public Notice* and provide guidance on other application and bidding procedures.

7. Nothing in this Public Notice is intended to amend the requirements set forth in the *Rural Digital Opportunity Fund Order* or the Commission's rules.¹³ We urge prospective applicants to review carefully the Commission's orders and public notices relating to the Rural Digital Opportunity Fund cited above. Prospective applicants in Auction 904 should also familiarize themselves with the Commission's general universal service rules, contained in 47 CFR Part 54, including §§ 54.313, 54.316, and 54.320; the rules for the Rural Digital Opportunity Fund specifically, contained in 47 CFR §§ 54.801-54.806; and the competitive bidding rules for universal service support contained in 47 CFR §§ 1.21000-1.21004. Additionally, prospective Auction 904 bidders may find it helpful to familiarize themselves with the Commission's generally applicable competitive bidding rules, including recent amendments and clarifications, as well as Commission decisions in proceedings regarding competitive bidding procedures, application requirements, and obligations of Commission licensees and authorization holders.¹⁴ Copies of Rural Digital Opportunity Fund auction-related Commission documents, including public notices, can be retrieved from the Commission's Auction 904 website at www.fcc.gov/auction/904.¹⁵

8. The terms contained in the Commission's rules, relevant orders, and public notices are generally applicable to all bidders. The Commission may amend or supplement the information contained in its public notices at any time and will issue public notices to convey any new or supplemental information to interested parties. In addition, we affirm the well-established authority of the Office of Economics and Analytics (OEA) and the Bureau to establish further procedures during the

¹⁰ *Id.*

¹¹ *Id.* at 694, para. 17.

¹² See generally *Comment Sought on Competitive Bidding Procedures and Certain Program Requirements for the Rural Digital Opportunity Fund Auction (Auction 904)*, Public Notice, 35 FCC Rcd 2295 (2020) (*Auction 904 Comment Public Notice*).

¹³ Several commenters discuss issues that were settled in the *Rural Digital Opportunity Order* and not raised in the *Auction 904 Comment Public Notice*. To the extent these parties filed timely Petitions for Reconsideration of the *Rural Digital Opportunity Fund Order* on these issues, we will address their arguments in the context of addressing those petitions. Otherwise, attempts to raise issues already settled in the *Rural Digital Opportunity Fund Order* will not be addressed herein.

¹⁴ See, e.g., 47 CFR §§ 1.2101-1.2114; *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Order on Reconsideration of the Third Report and Order et al., 15 FCC Rcd 15293 (2000), modified by *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Erratum, DA 00-2475 (rel. Nov. 3, 2000); *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Seventh Report and Order, 16 FCC Rcd 17546 (2001); *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Eighth Report and Order, 17 FCC Rcd 2962 (2002); *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Second Order on Reconsideration of the Third Report and Order and Order on Reconsideration of the Fifth Report and Order, 18 FCC Rcd 10180 (2003); *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Second Order on Reconsideration of the Fifth Report and Order, 20 FCC Rcd 1942 (2005).

¹⁵ Typically, the Commission makes paper copies of documents available at its headquarters. However, the Commission's headquarters is currently closed due to the COVID-19 pandemic.

course of this auction.¹⁶ It is the responsibility of all applicants to remain current with all Commission rules and with all public notices pertaining to this auction.

C. Auction Specifics

1. Auction Title and Start Date

9. The auction will be referred to as “Auction 904 – Rural Digital Opportunity Fund Phase I.”

10. Bidding in Auction 904 will begin on **October 29, 2020**.

11. The initial schedule for bidding rounds will be announced by public notice approximately one week before the start of the auction.

2. Auction 904 Dates and Deadlines

12. The following dates and deadlines apply:

Auction Application Tutorial Available (via Internet).....By June 15, 2020

Short-Form Application (FCC Form 183)

Filing Window OpensJuly 1, 2020; 12:00 noon EDT

Short-Form Application (FCC Form 183)

Filing Window ClosesJuly 15, 2020; 6:00 p.m. EDT

Auction Bidding Tutorial Available (via Internet).....By October 14, 2020

Mock Auction BeginsOctober 26, 2020

Auction Begins.....October 29, 2020

13. The CPUC argues that we should postpone these dates by at least 120 days due to the COVID-19 pandemic.¹⁷ We do not agree. While we have extended the start of bidding by one week from the date set forth in the *Auction 904 Comment Public Notice*, we do not believe it is in the public interest to delay further the deployment of fixed broadband service to unserved areas. The COVID-19 pandemic demonstrates how essential it is that all Americans have access as soon as possible to high-speed broadband to telework, attend online classes, communicate with family and friends, and obtain healthcare remotely. Notably, potential bidders—i.e., those entities that would have to apply and develop bidding strategies—widely oppose a delay. In particular, Canadian Valley, Gibson, NRECA/UTC, TECA, NTCA, WISPA, USTelecom, Conexon, and GeoLinks urge us to proceed with the auction as scheduled.¹⁸ Accordingly, we will commence the auction in accord with the dates and deadlines indicated above.

3. Requirements for Participation

14. Those wishing to participate in this auction must:

¹⁶ See generally 47 CFR §§ 0.21(m), 0.271(a), 0.91(p), 0.291.

¹⁷ See CPUC Comments at 2-4.

¹⁸ See Canadian Valley Comments at 10; Gibson Comments at 4; NRECA/UTC Comments at 10; TECA Comments at 4; Letter from Michael R. Romano, Senior Vice President – Industry Affairs & Business Development, NTCA, to Marlene H. Dortch, Secretary, FCC, AU Docket No. 20-34 et al., at 1 (filed Apr. 7, 2020); WISPA Reply at 2; USTelecom Reply at 2-3; Conexon Reply at 1-2; GeoLinks Reply at 7; *but see* Letter from Tony Neal-Graves, Executive Director, Colorado Broadband Office, to Ajit Pai, Chairman, FCC, WC Docket No. 19-126 et al., at 1 (filed Apr. 24, 2020) (urging 180-day extension); Letter from Kevin J. Allis, Chief Executive Officer, National Congress of American Indians, to Ajit Pai, Chairman, FCC (filed Apr. 22, 2020) (same); Letter from The Honorable Deb Haaland and the Honorable Tom Cole, House of Representatives, U.S. Congress, to Ajit Pai, Chairman, FCC, at 2 (filed Apr. 9, 2020) (same).

- Submit a short-form application (FCC Form 183) electronically prior to 6:00 p.m. EDT, July 15, 2020, following the electronic filing procedures that will be provided in a public notice to be released in advance of the opening of the short-form application filing window; and
- Comply with all provisions outlined in this Public Notice and applicable Commission rules.

D. Public Interest Obligations

15. Each long-form applicant that is authorized to receive Rural Digital Opportunity Fund support after the close of the auction will be required to offer voice and broadband services meeting the relevant performance requirements to fixed locations in exchange for receiving monthly payments of support over the 10-year support term.¹⁹ It must make these services available to the required number of locations associated with the eligible census blocks covered by its winning bids along with certain other newly built locations upon reasonable request. The initial number of locations that a support recipient is required to serve in the eligible census blocks is aggregated to the census block group (CBG) level, which is the minimum biddable area for the auction. In the auction, the Commission will accept bids for service at one of four performance tiers, each with its own minimum download and upload speed and usage allowance, and for either high or low latency service, as shown in the tables below. Long-form applicants that become authorized to receive Rural Digital Opportunity Fund support must deploy broadband service that meets the performance tier and latency requirements associated with their winning bids. The performance requirements for authorized winning bidders are described in more detail in the *Rural Digital Opportunity Fund Order*.²⁰ Support recipients must also test and certify compliance with the relevant performance requirements in accordance with the uniform framework that has been adopted for measuring and reporting on the performance of high-cost support recipients' service.²¹

Performance Tier	Speed	Monthly Usage Allowance	Weight ²²
Minimum	≥ 25/3 Mbps ²³	≥ 250 GB or U.S. median, whichever is higher	50
Baseline	≥ 50/5 Mbps	≥ 250 GB or U.S. median, whichever is higher	35
Above Baseline	≥ 100/20 Mbps	≥ 2 terabytes (TB)	20

¹⁹ For purposes of this Public Notice, we may also refer to authorized long-form applicants as support recipients. A support recipient will be required to offer service to fixed locations, regardless of the technology to be employed. Each Rural Digital Opportunity Fund support recipient must meet certain public interest obligations as a condition of receiving support. While we are providing herein a summary of various rules, orders, and public notices that describe the public interest obligations for Rural Digital Opportunity Fund recipients generally, we are not amending the requirements set forth in the *Rural Digital Opportunity Fund Order* or our rules.

²⁰ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 702-04, paras. 31-36; *see also* 47 CFR § 54.805.

²¹ 47 CFR § 54.313(a)(6). *See also Connect America Fund*, Order, 33 FCC Rcd 6509 (WCB/WTB/OET 2018) (*CAF Performance Measures Order*). Further modifications were made to the performance measures requirements in subsequent reconsideration orders. *See Connect America Fund*, Order on Reconsideration, 34 FCC Rcd 8081 (WCB/WTB/OET 2019) (*CAF Performance Measures First Reconsideration Order*); *Connect America Fund*, Order on Reconsideration, 34 FCC Rcd 10109 (2019) (*CAF Performance Measures Second Reconsideration Order*).

²² *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 706, para. 39 (adopting weights for each performance tier and low/high latency).

²³ The speeds listed for each performance tier are the required minimum downstream/upstream speeds.

Gigabit	≥ 1 Gbps/500 Mbps	≥ 2 TB	0
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Latency	Requirement²⁴	Weight
Low Latency	≤ 100 ms	0
High Latency	≤ 750 ms & MOS ≥ 4 ²⁵	40

16. Rural Digital Opportunity Fund support recipients are permitted to offer a variety of broadband service offerings as long as they offer at least one standalone voice plan and one service plan that provides broadband at the relevant performance tier and latency requirements, and these plans must be offered at rates that are reasonably comparable to rates offered in urban areas.²⁶ For voice service, a support recipient will be required to certify that the pricing of its service is no more than the applicable reasonably comparable rate benchmark that the Bureau releases each year.²⁷ For broadband services, a support recipient will be required to certify that the pricing of a service that meets the required performance tier and latency performance requirements is no more than the applicable reasonably comparable rate benchmark, or that it is no more than the non-promotional price the support recipient charges for a comparable fixed wireline broadband service in urban areas in the state or U.S. territory where the eligible telecommunications carrier (ETC) receives support.²⁸

²⁴ For the latency requirement, at least 95 percent or more of all peak period measurements of network roundtrip latency must be at or below 100 milliseconds (ms) (low latency) or 750 ms (high latency). *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 703, para. 32.

²⁵ With respect to voice performance, bidders placing high latency bids must also commit to demonstrate a score of four or higher using the Mean Opinion Score (MOS). *Id.*

²⁶ Each Rural Digital Opportunity Fund support recipient must offer voice as a standalone service, but it may separately bundle its broadband offerings with a voice service. *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 707-08, paras. 42-43. All ETCs must also offer qualifying voice service using their own facilities, at least in part. *See infra* Section II.E.6 (Eligible Telecommunications Carrier Certification).

²⁷ 47 CFR § 54.313(a)(2); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 707-08, para. 42; *see also Wireline Competition Bureau and Office of Economics and Analytics Announce Results of 2020 Urban Rate Survey for Fixed Voice and Broadband Services, Posting of Survey Data and Explanatory Notes, and Required Minimum Usage Allowance for Eligible Telecommunications Carriers*, Public Notice, 34 FCC Rcd 11189 (WCB 2019). Rural Digital Opportunity Fund support recipients, like all ETCs, have annual reporting and certification obligations. *See, e.g.*, 47 CFR §§ 54.313, 54.314, 54.316, 54.806(a).

²⁸ 47 CFR § 54.313(a)(3); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 707, para. 42. Only ETCs designated by the relevant state(s) or the Commission, as applicable, are eligible to receive Auction 904 support. *See infra* section II.E.6 (Eligible Telecommunications Carrier Certification). The reasonably comparable broadband benchmark varies, depending on the supported service’s download and upload bandwidths and usage allowance. A

(continued....)

17. The Commission has adopted specific service milestones that require each long-form applicant authorized to receive Rural Digital Opportunity Fund support to offer service to a portion of the number of locations associated with the eligible census blocks included in its authorized winning bids in a state. Specifically, each support recipient must begin commercially offering service to 40% of the CAM-calculated number of locations covered by authorized winning bids in a state by the end of the third full calendar year following the funding authorization, and to an additional 20% each year thereafter.²⁹ A support recipient is deemed to be commercially offering voice and/or broadband service to a location if it provides service to the location or could provide it within 10 business days upon request.³⁰ All ETCs must advertise the availability of their voice services throughout their service areas, and we require support recipients also to advertise the availability of their broadband services within their service areas.³¹

18. We directed the Bureau to publish revised location counts before the end of service milestone year six.³² In areas where the revised location total is higher than the number of CAM-calculated locations, support recipients will be required to have begun commercially offering service to 100% of the CAM-calculated location count by the end of the sixth calendar year.³³ Such support recipients must then offer service to 100% of the revised location count by the end of the eighth calendar year.³⁴ In areas where there are fewer locations than calculated by the CAM, support recipients must notify the Bureau no later than March 1 following the fifth year of deployment.³⁵ Upon confirmation by the Bureau, such a support recipient will be required to reach 100% of the new number by the end of the sixth calendar year.³⁶ All support recipients must also offer service on reasonable request to locations

(Continued from previous page) _____

support recipient must offer service at a rate that is no more than the benchmark that corresponds at a minimum with the required speeds and usage for the performance tier and latency combination(s) applicable to its authorized bids. So, if a support recipient has an authorized bid in the Above Baseline performance tier, it must, at a minimum, offer service meeting the relevant performance requirements to the number of locations it has committed to serve at the Above Baseline performance tier at rates that do not exceed the benchmark for 100/20 Mbps broadband speeds and a 2 TB monthly data usage allowance.

²⁹ 47 CFR § 54.802(c); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 709-12, paras. 45-55. The location totals include housing units and small businesses (i.e., businesses to which mass market services have been made available). The CAM is the Commission's cost model that is used to estimate the forward-looking cost of building voice and broadband-capable networks. The CAM Methodology describes how the CAM identified locations in each census block. CostQuest Associates, Inc., Connect America Cost Model (CACM): Model Methodology 12-15 (Dec. 22, 2014), <https://transition.fcc.gov/wcb/CAM v.4.2 Methodology.pdf> (CAM Methodology). For guidance on location reporting, see *Wireline Competition Bureau Provides Guidance to Carriers Receiving Connect America Fund Support Regarding their Broadband Location Reporting Obligations*, Public Notice, 31 FCC Rcd 12900 (WCB 2016) (*WCB Location Guidance Public Notice*).

³⁰ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 711-12, para. 54.

³¹ *Id.* at 712, para. 54.

³² *Id.* at 709, para. 45.

³³ *Id.* at 710, para. 49. Carriers for which the new location count exceeds the CAM locations within their area in each state by more than 35% will have the opportunity to seek additional support or relief from the Commission. *Id.*

³⁴ *Id.* Any such support recipient with increased deployment obligations may also seek to have its new location count adjusted to exclude additional locations, beyond the number identified by the CAM, that it determines before the end of year eight are ineligible (e.g., are not habitable), unreasonable to deploy to (e.g., if it would require a carrier to install new backhaul facilities or other major network upgrades solely to provide broadband to that location), or part of a development newly built after year six for which the cost and/or time to deploy before the end of the support term would be unreasonable. *Id.* at 710-711, para. 50.

³⁵ *Id.* at 711, para. 51. Carriers for which the new location count is less than 65% of the CAM locations within their area in each state shall have their support amount reduced on a pro rata basis by the number of reduced locations. *Id.*

³⁶ *Id.*

built subsequently to the revised location count announced by the Bureau but prior to the end of service milestone year eight.³⁷

19. Compliance with service milestones will be determined at the state level.³⁸ The Commission will verify that the support recipient offers the required service to the total number of locations across all the eligible census blocks included in all of the support recipient's authorized bid areas (i.e., CBGs) in a state.³⁹ If a support recipient is authorized to receive support in a state for different performance tier and latency combinations, it will be required to demonstrate that it is offering service meeting the relevant performance requirements to the required number of locations for each performance tier and latency combination within that state.⁴⁰

20. To monitor each support recipient's compliance with the public interest obligations, the Commission has adopted reporting requirements described in detail in the *Rural Digital Opportunity Fund Order*.⁴¹ These include reporting a list of geocoded locations each year to which the support recipient is offering the required voice and broadband services,⁴² making a certification when the support recipient has met service milestones,⁴³ and submitting the annual FCC Form 481 report.⁴⁴ A support recipient that fails to offer service to the required number of locations by a service milestone will be subject to non-compliance measures.⁴⁵ A support recipient will also be subject to any non-compliance measures that have been adopted in conjunction with the methodology for high-cost support recipients to measure and report network performance.⁴⁶

21. We also remind applicants that all Auction 904 support recipients will be subject to the Commission's National Security Supply Chain proceeding, including the rule that "no universal service support may be used to purchase, obtain, maintain, improve, modify, or otherwise support any equipment or services produced or provided by any company posing a national security threat to the integrity of communications networks or the communications supply chain."⁴⁷ The prohibition on using universal

³⁷ *Id.* at 711, para. 52. Support recipients are not obligated to offer service to newly built locations that do not request service, or to those with exclusive arrangements with other providers. *Id.* See also *Connect America Fund et al.*, Report and Order et al., 29 FCC Rcd 7051, 7070, paras. 59-72 (2014) (issuing declaratory ruling regarding which requests should be deemed unreasonable under our current rules and policies to provide greater clarity to all affected stakeholders).

³⁸ *Id.* at 712, para. 54.

³⁹ Winning bidders must use Rural Digital Opportunity Fund support to deploy service to locations in only the eligible census blocks, not to the other, ineligible census blocks within a CBG won in the auction.

⁴⁰ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 712, para. 54.

⁴¹ 47 CFR §§ 54.313, 54.314, 54.316, 54.806(a); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 712-13, paras. 56-57.

⁴² 47 CFR § 54.316(a)(8). Each support recipient is required to submit its locations to the Universal Service Administrative Company's (USAC) High Cost Universal Service Broadband (HUBB) portal and is encouraged to do so on a rolling basis. *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 712, para. 56.

⁴³ 47 CFR § 54.316(b)(5).

⁴⁴ *Id.* § 54.313.

⁴⁵ *Id.* §§ 54.804(c)(4)(i), 54.320, 54.806; *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 713-16, paras. 58-64.

⁴⁶ *CAF Performance Measures Order*, 33 FCC Rcd at 6530-34, paras. 56-67. A support recipient will be required to test its networks for compliance and certify and report the results on an annual basis. 47 CFR § 54.313(a)(6).

⁴⁷ 47 CFR § 54.9(a).

service funds applies “to upgrades and maintenance of existing equipment and services.”⁴⁸

E. Eligible Areas

22. We will use CBGs containing one or more eligible census blocks as the minimum biddable area in the auction.⁴⁹ In the *Rural Digital Opportunity Fund Order*, we concluded that support would be available only to specific eligible census blocks, but indicated that the minimum biddable area would be no smaller than a CBG containing one or more eligible census blocks, and we reserved the option to select census tracts, or other groupings of areas, when we finalized the auction design to limit the number of discrete minimum biddable areas.⁵⁰ The Bureau released an initial list of eligible census blocks for Auction 904 on March 17, 2020, based on June 30, 2019 FCC Form 477 data.⁵¹ The list includes just under 65,000 CBGs containing eligible census blocks and just over 33,000 census tracts containing eligible census blocks based on FCC Form 477 data as of June 30, 2019. In comparison, for the CAF Phase II auction, where the Commission adopted the CBG as the minimum biddable area, there were approximately 30,300 CBGs containing eligible census blocks.⁵²

23. Commenters overwhelmingly support adopting CBGs as the minimum biddable area.⁵³ Commenters argue that CBGs would provide greater flexibility than census tracts or some other larger geographic area and are more likely to align with service providers’ existing service territories or expansion plans.⁵⁴ Multiple commenters claim that larger geographic areas are likely to be less attractive to many bidders due to the varying costs of deploying in eligible census blocks within larger areas, the potential difficulty of having to build within multiple jurisdictions or in eligible census blocks that are sprinkled throughout the larger area, and the increased risk of eligible areas being spread far apart within a larger area.⁵⁵ While Hughes and Viasat support the use of census tracts because they claim census tracts are easier to administer, they do not adequately address the relative benefits of using a larger minimum biddable area other than to cite the *Auction 904 Comment Public Notice* where we noted that a larger minimum biddable area could promote efficient bid processing by the bidding system and we sought comment on whether potential bidders could foresee any difficulties in manipulating and uploading large

⁴⁸ *Protecting Against National Security Threats to the Communication Supply Chain through FCC Programs et al.*, Report and Order et al., 34 FCC Rcd 11423, 11453, para. 77 (2019).

⁴⁹ In this Public Notice, the census block group-level aggregations of eligible census blocks are interchangeably called “CBGs” or “minimum biddable areas.”

⁵⁰ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 702, para. 30.

⁵¹ *Wireline Competition Bureau Releases Preliminary List and Map of Eligible Areas for the Rural Digital Opportunity Fund Phase I Auction*, Public Notice, DA 20-275 (WCB Mar. 17, 2020) (*Auction 904 Preliminary Eligible Areas Public Notice*).

⁵² *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1493-94, para. 203. See also *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 690-94, paras. 9-16 (describing how the eligible areas were determined for Auction 904).

⁵³ See, e.g., ACA Comments at 3-9; AT&T Comments at 2-3; Canadian Valley Comments at 4-8; FBA Comments at 11-12; Frontier Comments at 5-6; Gibson Comments at 3; NRECA/UTC Comments at 4-8; NTCA Comments at 2-4; SBI Comments at 2-4; TECA Comments at 4; USTelecom Comments at 6; WISPA Comments at 3-5; WTA Comments at 2-4; FBA Reply at 12-13; NTCA Reply at 17-18; VTDPS Reply at 1; USTelecom Reply at 2; WISPA Reply at 3-5.

⁵⁴ See, e.g., ACA Comments at 7; Canadian Valley Comments at 5; FBA Comments at 11; NCTA Comments at 2; NRECA/UTC Comments at 5; NTCA Comments at 2-4; SBI Comments at 3-4; USTelecom Comments at 6; WISPA Comments at 4; WTA Comments at 2; VTDPS Reply at 1.

⁵⁵ See, e.g., ACA Comments at 3-6; AT&T Comments at 3; Canadian Valley Comments at 5-6, 7-8; FBA Comments at 11-12; NCTA at 3; NRECA Comments at 5-6, 7-8; SBI Comments at 3-4; WTA Comments at 2-4.

bidding files if we adopted a smaller minimum biddable area.⁵⁶ A number of other commenters, on the other hand, claim that they do not expect that having more minimum biddable areas will materially increase the complexity for bidders as they develop their bidding strategies, or they claim that the benefits of using a smaller minimum biddable unit would outweigh any increase in complexity.⁵⁷ Commenters also suggest that bidders that want to serve larger areas can take advantage of package bidding.⁵⁸ Given that commenters generally do not anticipate undue difficulties with the increase in minimum biddable areas, we conclude that any potential advantage of processing bids for a smaller number of minimum biddable areas is outweighed by the benefits of using CBGs as discussed in the record. For these reasons, we will use CBGs as the minimum biddable area in Auction 904.

24. For administrative simplicity, we adopt our proposal to round the reserve price for each CBG to the nearest dollar consistent with our rounding approach for the CAF II auction.⁵⁹ In the *Rural Digital Opportunity Fund Order*, we adopted a methodology for calculating area-specific reserve prices.⁶⁰ Because auction participants will place bids for annual support amounts, we will multiply the monthly reserve price for a CBG by 12 and round that figure to the nearest dollar.⁶¹ Thus, any CBG that has an annual reserve price of less than \$0.50 would be rounded down to \$0 and will be ineligible for Auction 904. No commenters addressed this issue.

25. Prior to the short-form application deadline, the Bureau will release a list and map of eligible census blocks based on the most recent publicly available FCC Form 477 data and incorporating comments received during the limited challenge process.⁶² The list will include the reserve price for each CBG containing eligible census blocks and the number of locations associated with each CBG as determined by the CAM.

26. The U.S. Department of Agriculture (USDA) announced that April 15, 2020 was the application deadline for Round 2 of its ReConnect Program.⁶³ The Commission directed the Bureau to consult with the USDA's Rural Utilities Service prior to the publication of the final eligible areas for the Rural Digital Opportunity Fund Phase I auction and to exclude the portions of any census blocks from eligibility for the auction that are substantially overlapped by a ReConnect awardee.⁶⁴ We now direct the Bureau to remove from that list any areas that will be substantially overlapped by an announced ReConnect Program awardee and to publish a final list of eligible areas at least 14 days prior to the October 29 auction start date.

⁵⁶ Hughes Comments at 6; Viasat at 14 (quoting *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2298-99, paras. 10-11). See also NTCA Reply at 18 (noting that while it "appreciates Hughes' professed concern for other bidders . . . this concern is apparently misplaced and unnecessary as nearly every other bidder shares no such concern").

⁵⁷ See, e.g., AT&T Comments at 2-3; Canadian Valley Comments at 6-7; NRECA/UTC Comments at 6-7; NTCA Comments at 3; SBI Comments at 3; USTelecom Comments at 6; WISPA Comments at 4-5; WTA Comments at 2; NTCA Reply at 18; USTelecom Reply at 2; WISPA Reply at 4.

⁵⁸ ACA Comments at 8; WISPA Comments at 4.

⁵⁹ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2299, para. 13.

⁶⁰ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 697-701, paras. 23-28. The methodology we adopted prioritizes areas entirely lacking 10/1 Mbps and Tribal areas. *Id.* at 699-701, paras. 27-28. See *infra* Section IV.B.2 (Reserve Prices).

⁶¹ The reserve price is based on the cost-per-location-per-month as calculated by the CAM.

⁶² *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 692-93, para. 14.

⁶³ Rural Utilities Service, U.S. Department of Agriculture, Notice; Amendment to Funding Opportunity Announcement for the Second Round of the ReConnect Program, 85 Fed. Reg. 17530 (Mar. 30, 2020).

⁶⁴ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 692, para. 13 & n.31.

II. APPLYING TO PARTICIPATE IN AUCTION 904

A. General Information Regarding Short-Form Applications

27. An application to participate in Auction 904, referred to as a short-form application or FCC Form 183, provides information used to determine whether the applicant has the legal, technical, and financial qualifications to participate in a Commission auction for universal service support.⁶⁵ The short-form application is the first part of the Commission's two-phased auction application process. In the first phase, eligibility to participate in the auction is based on an applicant's short-form application and certifications.⁶⁶ A potential applicant must take seriously its duties and responsibilities and carefully determine before filing a short-form application that it is able to meet the public interest obligations associated with Rural Digital Opportunity Fund support if it ultimately becomes a winning bidder in the auction. The Commission's determination that an applicant is qualified to participate in Auction 904 does not guarantee that the applicant will also be deemed qualified to receive support if it becomes a winning bidder. In the second phase of the process, each winning bidder (or its designee) must file a more comprehensive long-form application (FCC Form 683), which the Commission will review to determine if the applicant should be authorized to receive support for the winning bids.

28. An entity seeking to participate in Auction 904 must file a short-form application electronically via the Auction Application System prior to 6:00 p.m. EDT on July 15, 2020, following the procedures prescribed in the FCC Form 183 Instructions. Among other things, an applicant must submit operational and financial information demonstrating that it can meet the public interest obligations associated with the performance tier and latency combination(s) for which it intends to bid. Below we describe more fully the information disclosures and certifications required in the short-form application. Moreover, an applicant that files a short-form application is subject to the Commission's rule prohibiting certain communications.⁶⁷ An applicant is subject to the prohibition beginning at the deadline for filing short-form applications—6:00 p.m. EDT on July 15, 2020.⁶⁸

29. An applicant bears full responsibility for submitting an accurate, complete, and timely short-form application. An applicant should consult the Commission's rules to ensure that, in addition to the materials described below, all required information is included in its short-form application. To the extent the information in this Public Notice does not address a potential applicant's specific operating structure, or if the applicant needs additional information or guidance concerning the following disclosure requirements, the applicant should review the educational materials for Auction 904 and/or use the contact information provided in this Public Notice to consult with Commission staff well in advance of the application deadline.

30. Each applicant must make a series of certifications under penalty of perjury on its FCC Form 183 related to the information provided in its application and its participation in the auction, and each applicant must confirm that it is legally, technically, financially, and otherwise qualified to receive Rural Digital Opportunity Fund support.⁶⁹ If an Auction 904 applicant fails to make the required certifications in its FCC Form 183 by the filing deadline, its application will be deemed unacceptable for filing and cannot be corrected after the filing deadline.⁷⁰

⁶⁵ 47 CFR §§ 1.21001, 54.804. As a reminder, CAF Phase II auction participants that defaulted on their entire CAF Phase II auction award should not submit a short-form application as they are barred from participating in the Rural Digital Opportunity Fund. *Rural Digital Opportunity Fund Order*, 34 FCC Rcd at 721, para. 77.

⁶⁶ 47 CFR §§ 1.21001, 54.804.

⁶⁷ See *infra* Section II.G (Prohibited Communications and Compliance with Antitrust Laws).

⁶⁸ *Id.*

⁶⁹ 47 CFR § 54.804(a)(2).

⁷⁰ See *id.* § 1.21001(d)(2).

31. An applicant should note that submitting a short-form application (and any amendments thereto) constitutes a representation by the certifying official that he or she is an authorized representative of the applicant with authority to bind the applicant, that he or she has read the form's instructions and certifications, and that the contents of the application, its certifications, and any attachments are true and correct. Submitting a false certification to the Commission may result in penalties, including monetary forfeitures, the forfeiture of universal service support, license forfeitures, ineligibility to participate in future auctions, and criminal prosecution.

32. The same entity may not bid based on more than one auction application, i.e., as more than one applicant. Therefore, an entity should not submit more than one short-form application for Auction 904. If an entity submits multiple short-form applications, only one application may be the basis for that entity to become qualified to bid. Similarly, the filing of applications in Auction 904 by multiple entities controlled by the same individual or set of individuals will not be permitted.

33. After the initial short-form application filing deadline, Commission staff will review all timely submitted applications to determine whether each application complies with the application requirements and contains all required information concerning the applicant's qualifications for bidding.⁷¹ After this review is completed, a public notice will be released announcing the status of applications and identifying the applications that are complete and those that are incomplete. This public notice also will establish an application resubmission filing window, during which an applicant may make permissible minor modifications to its application to address identified deficiencies.⁷² After the review of resubmitted applications is complete, a public notice will be released identifying the applicants that are qualified to bid in the auction.

B. Disclosure of Agreements and Bidding Arrangements

34. An applicant must identify in its short-form application all real parties in interest to any agreements relating to the participation of the applicant in the competitive bidding for Rural Digital Opportunity Fund support.⁷³ This disclosure requirement applies to any arrangements with parties that are applying to participate in Auction 904 as well as parties that are not. As proposed in the *Auction 904 Comment Public Notice*, we require an applicant that discloses any such agreement(s) to provide in its short-form application a brief description of each agreement.⁷⁴ This brief description, which was required for Auction 903 applications,⁷⁵ provides useful information to Commission staff regarding the nature of the agreement and the relationship between the parties.

35. An applicant must certify under penalty of perjury in its short-form application that it has disclosed all real parties-in-interest to any agreements involving the applicant's participation in Auction 904.⁷⁶ We adopt the proposal to require an applicant also to certify under penalty of perjury that it has not entered into any explicit or implicit agreements, arrangements, or understandings of any kind related to the support to be sought through Auction 904, other than those disclosed in its application.⁷⁷

36. For purposes of making the required agreement disclosures, if parties agree in principle on all material terms prior to the application filing deadline, each party to the agreement that is submitting an auction application must provide a brief description of, and identify the other party or parties to, the

⁷¹ See *id.* § 1.21001(d)(1).

⁷² See *id.* § 1.21001(d)(5).

⁷³ *Id.* § 1.21001(b)(3).

⁷⁴ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2303, para. 24.

⁷⁵ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1439-40, para. 26.

⁷⁶ 47 CFR § 1.21001(b)(4).

⁷⁷ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2303, para. 26.

agreement on its respective FCC Form 183, even if the agreement has not been reduced to writing. However, if the parties have not agreed in principle by the FCC Form 183 filing deadline, a party should not describe, or include the names of parties to, the discussions on its application.

C. Ownership Disclosure Requirements

37. Each applicant must comply with the ownership disclosure requirements in sections 1.2112(a) and 54.804(a)(1) of the Commission's rules.⁷⁸ Specifically, in completing the short-form application, an applicant must fully disclose information regarding the real party- or parties-in-interest in the applicant or application and the ownership structure of the applicant, including both direct and indirect ownership interests of 10% or more.⁷⁹ Each applicant is responsible for ensuring that ownership information submitted in its short-form application is complete and accurate.

38. An applicant may have previously filed an FCC Form 602 ownership disclosure information report or filed an application for a previous auction in which the applicant disclosed ownership information. The most current ownership information contained in any FCC Form 602 or previous auction application on file with the Commission that used the same FRN the applicant is using to submit its FCC Form 183 will automatically be pre-filled into certain ownership sections on the applicant's FCC Form 183 if such information is in an electronic format compatible with FCC Form 183. Each applicant must carefully review any ownership information automatically entered into its FCC Form 183, including any ownership attachments, to confirm that all information supplied on FCC Form 183 is complete and accurate as of the application filing deadline for Auction 904. Any information that needs to be corrected or updated must be changed directly in FCC Form 183.

D. Specific Universal Service Certifications

39. An applicant must certify that it is in compliance with all statutory and regulatory requirements for receiving the universal service support it seeks.⁸⁰ Alternatively, as expressly allowed by the Rural Digital Opportunity Fund rules,⁸¹ an applicant may certify that it acknowledges that it must be in compliance with such requirements before being authorized to receive Rural Digital Opportunity Fund support.⁸²

40. In addition, an applicant must certify that it will make any default payment that may be required pursuant to section 1.21004,⁸³ and that it is aware that if its application is shown to be defective, the application may be dismissed without further consideration and penalties may apply.⁸⁴

E. Specific Auction 904 Eligibility Requirements and Certifications

1. Applicants and State Selections

41. We adopt our proposal to require each applicant to identify in its short-form application

⁷⁸ See 47 CFR §§ 1.2112(a), 54.804(a)(1) (requiring the disclosure on the short-form application of the applicant's ownership information as set forth in 47 CFR § 1.2112(a)).

⁷⁹ 47 CFR § 1.2112(a).

⁸⁰ *Id.* § 1.21001(b)(6).

⁸¹ *Id.* § 54.803(b) (permitting an applicant to wait until it is announced as a winning bidder to obtain an ETC designation).

⁸² *Id.* § 1.21001(b)(6).

⁸³ *Id.* § 1.21001(b)(7).

⁸⁴ *Id.* § 1.21001(d).

each state in which it intends to bid for support in Auction 904.⁸⁵ An applicant will be able to place bids for eligible areas only in the states identified in its application.⁸⁶ An applicant should take appropriate steps to ensure that the state(s) it selects fully reflect its bidding intentions because an applicant may not select any additional states in which to bid after the initial short-form application filing window closes.

42. Furthermore, to simplify the application process for applicants, reduce the administrative burden on Commission staff, and align with the Commission's rule for spectrum auctions, we prohibit the submission of more than one application by commonly controlled entities for Auction 904 under any circumstances.⁸⁷ To identify commonly controlled entities, as proposed, we define a "controlling interest" for purposes of the auction as an individual or entity with positive or negative *de jure* or *de facto* control of the applicant.⁸⁸

43. To ensure that this requirement will not deter entities with more than one operating company from participating in the auction, we adopt a Divide Winning Bids process similar to that employed in Auction 903.⁸⁹ That process permits a winning bidder to assign some or all of its winning bids to related entities or individual members of a consortium.

44. If, during short-form application review, Commission staff identifies separate applicants that are commonly controlled, all such applications would be deemed incomplete on initial review.⁹⁰ The applicants would be informed of the issue, and at most one of the commonly controlled applicants would ultimately be deemed qualified to bid, assuming that there were no remaining issues with its application. Because the rule prohibiting certain auction-related communications in section 1.21002(b) would prohibit the affected applicants from communicating with respect to their determination of which entity would be the single applicant,⁹¹ commonly controlled entities should coordinate on the submission of *one* application *before* the short-form application deadline.

45. Furthermore, for the reasons proposed in the *Auction 904 Comment Public Notice*, we

⁸⁵ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2301, para. 18; see also *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1441, para. 32. This selection shall also include all U.S. territories to the extent they contain eligible areas.

⁸⁶ Nonetheless, during the auction, bidders will receive certain information pertaining to bidding in all eligible areas—not just eligible areas in the state(s) that bidders select.

⁸⁷ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2301, para. 20. Only one commenter, NCTA, suggests that we allow commonly controlled entities to submit separate applications to "allow . . . flexibility in bidding." NCTA Comments at 4. Yet, NCTA provides no further description of the purported benefits and does not explain why such benefits cannot be achieved via the Divide Winning Bids process after the close of the auction. We also disagree with NCTA's assertion that this modification to our proposal "would not be burdensome for the Commission staff." *Id.* Allowing separate applications from commonly controlled entities could undermine our bright line prohibition of joint bidding arrangements or communications related to bids or bidding strategies among separate applicants. Any exceptions to our prohibitions would make more difficult Commission staff's efforts to protect auction integrity through monitoring and enforcement. Moreover, any extra applications would increase the burden on Commission staff to timely complete its review.

⁸⁸ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2301, para. 21; see also *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1441, para. 34; 47 CFR § 1.2105(a)(4)(i). "In the case of a consortium, each member of the consortium shall be considered to have a controlling interest in the consortium." *Id.* As a result, smaller providers can enter into one joint venture or bidding consortium for Auction 904 in order to combine resources and achieve other efficiencies only if the providers do not also individually submit short-form applications.

⁸⁹ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2301-02, para. 22; *Auction 903 Closing Public Notice*, 33 FCC Rcd at 8259-60, paras. 8-13.

⁹⁰ Cf. 47 CFR § 1.2105(a)(3).

⁹¹ *Id.* § 1.21002(b). Such applicants are not able to take advantage of the exception for joint bidding arrangements in the rule.

prohibit parties submitting separate applications from entering into joint bidding arrangements for Auction 904, consistent with our practice in spectrum auctions.⁹² For purposes of this prohibition, we define “joint bidding arrangements” as arrangements between or among applicants that (1) relate to any eligible area in Auction 904, and (2) address or communicate bids or bidding strategies, including arrangements regarding Rural Digital Opportunity Fund support levels (i.e., price point percentages) and specific areas on which to bid, as well as any arrangements relating to the post-auction market structure in an eligible area.⁹³ As a result, if two or more applicants are parties to an agreement that falls within this definition, they would be prohibited from bidding in Auction 904.⁹⁴

46. Only two parties—NTCH and Flat Wireless, in jointly filed comments—even address the proposed ban on joint bidding arrangements and then only to seek a limited exception.⁹⁵ In particular, the commenters ask that if certain conditions are met, we permit parties with a mutual non-controlling principal “to agree before the short form filing date that they will not bid in the same markets.”⁹⁶ This type of market division or allocation agreement is antithetical to the notion of competitive bidding for support, even under the limited conditions proposed by these commenters. In addition, such agreements could be illegal under antitrust law,⁹⁷ and we are not inclined to adopt a provision that would conflict with the principles of competition enforced through those laws. We further observe that the commenters’ claim that the pro-competitive benefit of an agreement—i.e., increased bidding in broader areas because bidders can “guard against bidding against each other”—would outweigh any “diminution of bidders in a given market” is wholly speculative.⁹⁸ Finally, NTCH and Flat Wireless ask that we clarify that if applicants that have the same non-controlling principal merely share the markets in which each plans to bid, that is not sufficient evidence for us to conclude that an impermissible joint bidding arrangement exists.⁹⁹ But we cannot provide commenters with the safe harbor they request in the absence of further details of the communication.¹⁰⁰ We caution applicants that the communication of such information—by

⁹² See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2302-03, para. 24; see also *Updating Part 1 Competitive Bidding Rules*, Report and Order; Order on Reconsideration of the First Report and Order; Third Order on Reconsideration of the Second Report and Order; Third Report and Order, 30 FCC Rcd 7493, 7573, para. 187 (*Part 1 Report and Order*). The term “applicant” includes any entity that controls or is controlled by the entity that submitted the application. While there is an exception in our general rule prohibiting certain communications in universal service support auctions related to applicants in joint bidding arrangements, see 47 CFR § 1.21002(b), our prohibition on joint bidding arrangements in Auction 904 renders that exception inapplicable here.

⁹³ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2302-03, para. 24; *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1441, para. 33. For ease of reference, we adopt the same nomenclature and refer to those agreements as “joint bidding arrangements.”

⁹⁴ To be clear, not all agreements relating to participation in Auction 904 necessarily fall within the definition of a joint bidding arrangement. All such agreements, however, must be disclosed in the short-form application.

⁹⁵ See NTCH/Flat Comments at 1-6.

⁹⁶ *Id.*

⁹⁷ See, e.g., Federal Trade Commission, Market Division or Customer Allocation, <https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/dealings-competitors/market-division-or>; U.S. Dept. of Justice, Archived Antitrust Resource Manual, Identifying Sherman Act Violations, <https://www.justice.gov/archives/jm/antitrust-resource-manual-2-antitrust-division-field-offices>.

⁹⁸ NTCH/Flat Comments at 4.

⁹⁹ *Id.* at 5-6.

¹⁰⁰ In addition, any such communication must occur prior to the short-form deadline to avoid running afoul of the prohibited communications rule. 47 CFR § 1.21002(b). We further caution commenters and similarly situated entities with a mutual non-controlling principal to take appropriate measures to ensure they are complying with the prohibited communications rule. *Cf. id.* § 1.2105(c)(2) (requiring such applicants in spectrum auctions to implement internal controls to screen the common individual).

itself—risks being viewed as evidence of an implicit illegal agreement.

47. Because joint ventures and bidding consortia that do not involve two or more entities that are individual applicants (or control or are controlled by an applicant) may result in pro-competitive efficiencies, these arrangements are permitted for Auction 904. Only joint bidding arrangements where the parties include two or more individual auction applicants are prohibited. Nonetheless, we caution non-applicant entities that any joint venture, consortium, or other arrangement into which they enter must be consistent with the antitrust laws and must not be otherwise prohibited by law.

48. Finally, we adopt our proposal to require each winning bidder to submit in its long-form application any updated information regarding the agreements, arrangements, or understandings related to its Auction 904 support disclosed in its short-form application.¹⁰¹ A winning bidder may also be required to disclose in its long-form application the specific terms, conditions, and parties involved in any agreement into which it has entered and the agreement itself.

2. Operational History and Submission of Financial Statements

49. In the *Rural Digital Opportunity Fund Order*, the Commission established two pathways for an applicant to demonstrate its operational experience and financial qualifications to participate in Auction 904. These pathways vary depending on whether the applicant has at least two years of operational experience in the provision of voice, broadband, and/or electric distribution or transmission services.¹⁰²

50. *First Eligibility Pathway.* With the first pathway, an applicant can certify, if applicable, on its FCC Form 183 that it has provided voice, broadband, and/or electric distribution or transmission services for at least two years prior to the short-form application filing deadline (or that the applicant is the wholly owned subsidiary of an entity that has done so), specify the number of years it has been operating, and identify the services it has provided.¹⁰³ An applicant will be deemed to have started providing a service on the date it began commercially offering that service to end users.

51. If an applicant certifies that it has been providing voice and/or broadband services for at least two years, it must certify that it (or its parent company, if it is a wholly owned subsidiary) has filed FCC Form 477s as required during that time period. And it must identify the FRNs it (or its parent company) used to file the FCC Form 477s for the relevant filing periods.¹⁰⁴ The relevant FCC Form 477 filing periods include data as of December 31, 2019; June 30, 2019; and December 31, 2018.

52. If the applicant certifies that it has been providing only electric distribution or transmission services for at least two years (i.e., it has not also been providing voice or broadband service for at least two years), it must submit with its short-form application qualified operating or financial reports that it (or its parent company, if it is a wholly owned subsidiary) filed with the relevant financial institution (i.e., the Rural Utilities Service (RUS), the National Rural Utilities Cooperative Finance Corporation (CFC), or CoBank) in 2018 and 2019 that demonstrate that the applicant (or its parent company) has been operating for at least two years. The applicant must also submit a certification that the submission is a true and accurate copy of the forms that were submitted to the relevant financial

¹⁰¹ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2303, para. 26.

¹⁰² 47 CFR § 54.804(a)(7)(i) & (ii); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 719-20, paras. 73-75.

¹⁰³ 47 CFR § 54.804(a)(7)(i); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 719, para. 73.

¹⁰⁴ 47 CFR § 54.804(a)(7)(i)(A); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 719, para. 73. If the applicant is making this certification as a wholly owned subsidiary of a company that has provided service for at least two years, it must also identify the parent company's name in the short-form application. If the applicant is a holding company, it must make this certification on behalf of one of the operating companies that is identified in the application. If the applicant is a consortium or joint venture, it must make this certification on behalf of one of the entities that is part of the consortium or joint venture.

institution.¹⁰⁵ We will accept the RUS Form 7, Financial and Operating Report Electric Distribution; the RUS Form 12, Financial and Operating Report Electric Power Supply; the CFC Form 7, Financial and Statistical Report; the CFC Form 12, Operating Report; the CoBank Form 7; or the functional replacement of one of these reports.¹⁰⁶

53. If an applicant meets the foregoing requirements and it (or its parent company) is audited in the ordinary course of business, the applicant must also submit its (or its parent company's) financial statements from the prior fiscal year, including balance sheets, net income, and cash flow, along with an opinion letter from an independent certified public accountant and the accompanying notes.¹⁰⁷ Because the short-form application filing window opens in the beginning of the third quarter of 2020, we require that an applicant submit its (or its parent company's) 2018 audited financial statements. However, an applicant may, and is encouraged to, instead submit its fiscal year-end 2019 audited financial statements if they are finalized before the short-form application deadline.

54. If an applicant (or its parent company) is not audited in the ordinary course of business and the applicant does not submit its audited financial statements with the short-form application, it must submit its (or its parent company's) fiscal year-end 2018 unaudited financial statements with its short-form application, including balance sheet, net income, and cash flow, and certify that the long-form applicant will obtain and submit its (or its parent company's) audited financial statements from the prior fiscal year within 180 days after being announced as a winning bidder.¹⁰⁸ If an applicant certifies in its short-form application that it will submit audited financial statements during the long-form application process, but such audited financial statements are not submitted when required, the winning bidder or long-form applicant will be deemed to be in default and subject to a base forfeiture of \$50,000.¹⁰⁹

¹⁰⁵ *Id.* § 54.804(a)(7)(i)(B); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 719, para. 73 n.202. If the applicant is a holding company or consortium/joint venture, it must submit the electric distribution or transmission documents of the operating company that is the subject of the at least two-year operational certification.

¹⁰⁶ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 719, para. 73 n.202. A report will be considered a functional replacement if it is a report that RUS, CoBank, or CFC has adopted to replace one of the reports identified. Given that these forms will be disclosed publicly absent a request for confidentiality that is filed pursuant to section 0.459 of the Commission's rules, portions of these reports may be redacted so that only relevant operating data is provided. *See* 47 CFR § 0.459; *infra* Section II.F (Procedures for Limited Disclosure of Application Information); Letter from C. Douglas Jarrett, Counsel to the National Rural Electric Cooperative Association and Utilities Telecom Counsel, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 (filed Oct. 5, 2015) (identifying the relevant operating sections of these forms).

¹⁰⁷ 47 CFR § 54.804(a)(7)(i); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 722-23, para. 80 & n.221. If the applicant is a holding company, it must submit its own audited financial statements. If the applicant is a consortium or a joint venture, it must submit the audited financial statements of the entity that is the subject of the at least two-year operational certification. If the applicant is a wholly owned subsidiary and has certified that its parent company has provided service for at least two years, it must submit the audited financial statements of its parent company.

¹⁰⁸ 47 CFR § 54.804(a)(7)(i); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 722-23, para. 80. An applicant is encouraged to submit fiscal year-end 2019 unaudited financial statements instead if they are available before the short-form application deadline. If the applicant is a holding company, it must submit its own financial statements. If the applicant is a consortium or a joint venture, it must submit the financial statements of the entity that is the subject of the at least two-year operational certification. If the applicant is a wholly owned subsidiary and has certified that its parent company has provided service for at least two years, it must submit the financial statements of its parent company.

¹⁰⁹ *See Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 722-23, para. 80. Such forfeiture would be subject to adjustment upward or downward as appropriate based on the criteria set forth in the Commission's forfeiture guidelines. *See* 47 U.S.C. § 503(b)(2)(B); 47 CFR § 1.80(b)(8), note to paragraph (b)(8). Audited financial statements must be submitted within 180 days after the release of the Auction 904 closing public notice.

55. *Second Eligibility Pathway.* An applicant that does not have at least two years of operational experience must submit with its short-form application its (or its parent company's) financial statements that are audited by an independent certified public accountant from the three most recent fiscal years (i.e., 2016, 2017, and 2018), including balance sheets, net income, and cash flow as well as the audit opinion and accompanying notes.¹¹⁰ Such an applicant must also submit with its short-form application a letter of interest from a qualified bank stating that the bank would provide a letter of credit to the applicant if the applicant becomes a winning bidder and is selected for bids of a certain dollar amount.¹¹¹ The letter should include the maximum dollar amount for which the bank would be willing to issue a letter of credit to the applicant and a statement that the bank would be willing to issue a letter of credit that is substantially in the same form as set forth in the model letter of credit provided in Appendix C of the *Rural Digital Opportunity Fund Order*.¹¹²

3. Financial Qualifications

56. We adopt our proposals for reviewing financial statements that are submitted with the short-form application.¹¹³ No commenters opposed this approach.¹¹⁴ Specifically, an applicant submitting audited financial statements with its short-form application will be required to identify whether it has a clean opinion letter on its submitted audited financial statements. We will consider an opinion letter to be clean if it has an unmodified opinion without an emphasis-of-matter paragraph about the entity's ability to continue as a going concern. An unmodified opinion is one where "the auditor concludes that the [audited] financial statements are presented fairly, in all material respects, in accordance with the applicable financial reporting framework."¹¹⁵ An auditor's findings regarding an entity's inability to remain in business for a reasonable period of time would be reflected in a modified opinion or the opinion letter would include an emphasis-of-matter paragraph regarding going concern.¹¹⁶

¹¹⁰ 47 CFR § 54.804(a)(7)(ii); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 720, para. 75. Given the lack of operating history of such bidders, the Commission did not extend the option of submitting audited financial statements during the long-form application stage to bidders that qualify pursuant to this second set of eligibility standards. See *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 722-23, para. 80. If the applicant is a holding company, it must submit its own audited financial statements. If the applicant is a consortium or joint venture, it must submit the audited financial statements of one of the entities that is part of the consortium/joint venture. If the applicant is an operating company, it may submit its own audited financial statements or the financial statements of its parent company. An applicant is encouraged to instead submit fiscal year-end 2017, 2018, and 2019 audited financial statements if the 2019 audited financial statements are finalized in time to submit them before the short-form application deadline.

¹¹¹ 47 CFR § 54.804(a)(7)(ii). The bank issuing the letter of credit must meet the requirements set forth in 47 CFR § 54.804(c)(2).

¹¹² *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 773-77, Appx. C.

¹¹³ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2311-14, paras. 56-63.

¹¹⁴ See SBI Comments at 6 (supporting the Commission's proposal).

¹¹⁵ American Institute of CPAs, Clarified Statements on Auditing Standards, AU-C Section 700A: Forming an Opinion and Reporting on Financial Statements, "Form of Opinion," .19-.21, <https://www.aicpa.org/content/dam/aicpa/research/standards/auditattest/downloadabledocuments/au-c-00700-a.pdf> (last visited Feb. 4, 2020). See also American Institute of CPAs, Clarified Statements on Auditing Standards, AU-C Section 705A: Modifications to the Opinion in the Independent Auditor's Report, "Determining the Type of Modification to the Auditor's Opinion," .08-.10, <https://www.aicpa.org/content/dam/aicpa/research/standards/auditattest/downloadabledocuments/au-c-00705-a.pdf> (last visited Feb. 4, 2020) (describing the different types of modifications to the auditor's opinion, including a qualified opinion, adverse opinion, and disclaimer of opinion).

¹¹⁶ American Institute of CPAs, Clarified Statements on Auditing Standards, AU-C Section 570 (SAS No. 132): The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern, "Implications for the Auditor's Report," .23-.27,

(continued....)

57. An applicant that submits the required audited financial statements and has a clean opinion letter on the submitted audited financial statements would be deemed financially qualified to participate in the auction.¹¹⁷ For the reasons we discussed in the *Auction 904 Comment Public Notice*,¹¹⁸ we conclude that a clean opinion letter will be sufficient for this purpose and that this approach will help streamline our review of applicants submitting audited financial statements with the short-form application.

58. For an applicant that does not have a clean opinion letter on all submitted audited financial statements, Commission staff will first determine whether the issue is material to the applicant's participation in the auction. If so, any such applicants—and any applicants that submit unaudited financial statements—will be subject to a review of the full set of financial statements submitted with the short-form application, as well as other information submitted with the application and/or information submitted to the Commission in other contexts (e.g., financials filed with a FCC Form 481, revenues reported in FCC Form 499, etc.). To the extent this information does not sufficiently demonstrate that an applicant is financially qualified, the application will be deemed incomplete, and Commission staff may request further information from the applicant during the application resubmission period.

59. While we recognize that our approach may subject a number of applicants to an in-depth financial review, we believe that a tailored financial review of each relevant application and other available information will best enable us to identify the applicants that may have difficulty meeting the relevant performance obligations due to various factors, including their financial situation. Commission staff will consider the total picture revealed by an applicant's financial statements as part of this review. The financial scoring metrics that were used for the CAF Phase II auction would not by themselves definitively qualify or disqualify applicants.¹¹⁹ The scoring did not meaningfully correlate to staff determinations of auction eligibility based on the totality of information provided in an application or on the ultimate ability of an applicant that became a winning bidder to meet the post-auction financial requirements, obtain a letter of credit, and become authorized for support, as evidenced by the applicants that were deemed eligible to bid and were authorized. Moreover, requiring applicants to identify these metrics in the short-form application was confusing for applicants. Many applicants incorrectly entered their financial metrics or were confused about which numbers from their financial statements were relevant. This confusion led to extensive, time-consuming discussion between applicants and staff to ensure that the scores reflected on the application were accurate.

60. We decline to define specific parameters for the review of an applicant that does not have a clean opinion letter on all its submitted audited financial statements or an applicant that submits

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<https://www.aicpa.org/content/dam/aicpa/research/standards/auditattest/downloadabledocuments/au-c-00570.pdf>
(last visited Feb. 4, 2020) (AU-C Section 570).

¹¹⁷ An applicant that is required to submit three years of audited financial statements must have a clean opinion letter on all three submitted audited financial statements to be deemed financially qualified to participate in the auction without further review.

¹¹⁸ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2313, paras. 59-60 (describing the function of an audit and a clean audit opinion letter).

¹¹⁹ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1446-1451, paras. 46-62. For the CAF Phase II auction, an applicant was scored based on the following financial metrics: (1) latest operating margins (i.e., operating revenue less operating expenses excluding depreciation), where an operating margin greater than zero received one point; (2) Time Interest Earned Ratio (TIER), where TIER ((net income plus interest expense)/interest expense) greater than or equal to 1.25 received one point; (3) current ratio (i.e., current assets divided by current liabilities), where a ratio greater than or equal to 2 received one point; (4) equity ratio (total equity divided by total capital), where a result greater or equal to 0.4 received one point; and (5) to the extent that its prior year-end financial statements were audited, where an applicant's audited financial statements with an unmodified, non-qualified opinion from the auditor received one point. *Id.* at 1447, para. 49.

unaudited financial statements because we observed from the CAF Phase II auction that each applicant's financial circumstances may differ in ways that frustrate the streamlining of review by adopting specific parameters. Instead, we seek to tailor the review to each applicant's circumstances and will determine based on the totality of information available whether it is reasonable to expect that the applicant is financially capable of fulfilling its Rural Digital Opportunity Fund obligations.

61. The Commission staff's determination at the short-form stage that an applicant is financially qualified to bid does not preclude a determination at the long-form application review stage that an applicant is not authorized to receive Rural Digital Opportunity Fund support. During the long-form application stage, a winning bidder must: (1) certify that it will have available funds for all project costs that exceed the amount of Rural Digital Opportunity Fund support for the first two years,¹²⁰ (2) submit a description of how the required construction will be funded,¹²¹ and (3) obtain a letter of credit from a bank meeting the Commission's requirements.¹²²

4. Eligibility to Bid for Performance Tier and Latency Combination

62. For the reasons discussed in the *Auction 904 Comment Public Notice*,¹²³ we adopt the proposal to collect generally the same information and use the same process for Auction 904 as we used in the CAF Phase II auction for Commission staff to determine, at the short-form application stage and in advance of the start of bidding in the auction, each applicant's eligibility to bid for the performance tier and latency combinations it has selected in its application for each state.

63. In the *Rural Digital Opportunity Fund Order*, we concluded that we would accept bids for four performance tiers with varying speed and usage allowances and, with respect to each tier, would provide for bids at either high or low latency.¹²⁴ Pursuant to our rules, each applicant for Auction 904 must indicate in its short-form application the performance tier and latency combinations for which it intends to bid and the technologies it intends to deploy to meet the relevant public interest obligations.¹²⁵ The rules also require each applicant to submit any additional information that the Commission may require to establish its eligibility for the selected performance tier and latency combinations.¹²⁶ Additionally, each applicant is required to make certain certifications in its short-form application, including a certification that it is technically qualified to meet the public interest obligations for each performance tier and latency combination and in each area for which it seeks support, and a certification regarding its experience in providing voice, broadband, and/or electric distribution or transmission service.¹²⁷ The Commission's rules also require an applicant to submit certain information in its short-form application in connection with those certifications.¹²⁸

64. We will use the short-form application to assess the likelihood that an applicant would not default if selected as a winning bidder. If the applicant becomes qualified to bid in Auction 904 and subsequently becomes a winning bidder, Commission staff will evaluate the information submitted in the long-form application and will rely on an eligible bank's willingness to issue the applicant a letter of

¹²⁰ 47 CFR § 54.804(b)(2)(v); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 727, para. 91.

¹²¹ 47 CFR § 54.804(b)(2)(vi); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 727, para. 91.

¹²² 47 CFR § 54.804(c); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 729-35, paras. 96-113.

¹²³ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2304-2311, paras. 31-55.

¹²⁴ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 702-06, paras. 31-39 (adopting the standards for the Minimum, Baseline, Above Baseline, and Gigabit performance tiers and for High and Low latency bids).

¹²⁵ 47 CFR § 54.804(a)(4).

¹²⁶ *Id.* § 54.804(a)(5).

¹²⁷ *Id.* § 54.804(a)(2), (7)(i).

¹²⁸ *Id.* § 54.804(a)(4), (5), (7).

credit to determine whether an applicant is reasonably capable of meeting its Rural Digital Opportunity Fund auction obligations in the specific areas where it has winning bids.¹²⁹ “Reasonably capable” refers to the Commission staff’s reasonable expectation that the applicant can meet those obligations. A determination at the short-form stage that an applicant is eligible to bid for a performance tier and latency combination would not preclude a determination at the long-form application stage that an applicant does not meet the technical qualifications for the performance tier and latency combination and thus will not be authorized to receive Rural Digital Opportunity Fund support.¹³⁰ In addition, the Commission’s adoption of certain non-compliance measures in the event of default—both before a winning bidder is authorized for support and if a support recipient does not fulfill its Rural Digital Opportunity Fund obligations after it has been authorized—should encourage each applicant to select performance tier and latency combinations with public interest obligations that it can reasonably expect to meet.¹³¹ With these considerations in mind, we adopt (1) the information and showing each applicant must submit to establish its qualifications for the performance tier and latency combinations it has selected on its application, and (2) the process Commission staff will use to determine whether an applicant is eligible to bid on those combination(s).

a. Selecting Performance Tier and Latency Combinations

65. As required by the Commission’s rules, each applicant must select in its short-form application the performance tier and latency combination(s) for which it intends to bid in each state where it seeks support.¹³² An applicant may select more than one performance tier and latency combination in a state.¹³³ For each tier and latency combination, an applicant must indicate the technology or technologies it intends to use to meet the associated requirements.¹³⁴ If an applicant intends to use spectrum, it must also indicate the spectrum band(s) and total amount of uplink and downlink bandwidth (in megahertz) that it has access to for the last mile for each performance tier and latency combination it selected in each state.¹³⁵

b. Operational Information

66. As proposed in the *Auction 904 Comment Public Notice*,¹³⁶ we will require an applicant to submit in its short-form application sufficient operational information regarding its experience providing voice, broadband, and/or electric distribution or transmission service and its plans for provisioning service if awarded support. Such information will demonstrate whether an applicant has the technical qualifications to bid for specific performance tier and latency combinations. Specifically, we adopt the proposal that an applicant must submit high-level operational information to complete its operational showing and demonstrate that it can be expected to be reasonably capable of meeting the public interest obligations (e.g., speed, usage, latency, and service milestones) for each performance tier and latency combination selected. We also make several clarifying changes to the short-form application

¹²⁹ *Id.* § 54.804(b), (c).

¹³⁰ If an applicant does not ultimately qualify for authorization for the performance tier and latency requirements that are applicable to its winning bids, it will default and will not be found eligible for a lower performance tier.

¹³¹ See, e.g., *id.* §§ 54.320(d), 54.804(c)(4)(i), 54.806(b)&(c); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 735-36, paras. 114-17.

¹³² 47 CFR § 54.804(a)(4).

¹³³ See Hughes Comments at 5 (requesting that the Commission clarify “that bidders may bid on different areas in the same state” for different performance tier and latency combinations).

¹³⁴ 47 CFR § 54.804(a)(4). An applicant may propose to use different technologies within a state and use hybrid networks to meet its Rural Digital Opportunity Fund public interest obligations.

¹³⁵ 47 CFR § 54.804(a)(6). The last mile refers to the portion of the network that transmits services to end users.

¹³⁶ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2305-6, 2333-35, paras. 34-36, Appx. A.

operational questions proposed in the *Auction 904 Comment Public Notice*. We decline proposals to require applicants to submit additional evidence with their short-form applications.

67. Eligibility to bid for specific tier and latency combinations will be determined on a state-by-state basis.¹³⁷ Accordingly, for each selected performance tier and latency combination, an applicant will be required to demonstrate that it is reasonably capable of meeting the relevant public interest obligations for each state it selects and to explain how it intends to provision service if awarded support. Because compliance with the service obligations will be determined on a state-level basis and some applicants may propose to deploy hybrid networks, it will be useful to understand how an applicant selecting multiple performance tier and latency combinations within a state intends to meet the requirements for each combination in the state.

68. We decline to make eligibility determinations on a CBG-by-CBG basis.¹³⁸ Each applicant is required to certify that it has conducted due diligence to determine whether it is capable of meeting the relevant performance requirements for each area where it intends to bid.¹³⁹ We expect it would be burdensome for applicants to provide enough detail at the short-form application stage and for Commission staff to review the information and make eligibility decisions for smaller areas than a state, particularly when the applicant may not know exactly where in a state it will bid, much less win support. Such a review is better suited for the long-form application, where a long-form applicant is required to provide detailed network information for the areas covered by its winning bids.

69. As proposed,¹⁴⁰ an applicant must answer the questions listed in Appendix A for each state it selects in its application. If an applicant is a consortium/joint venture, or holding/parent company, it should answer the questions for each operating company that intends to provide service if the consortium/joint venture or holding/parent company is named as a winning bidder. The questions are intended to elicit short, narrative responses from the applicant regarding its experience in providing voice, broadband, and/or electric distribution or transmission service, and the network(s) it intends to use to meet its Rural Digital Opportunity Fund public interest obligations. The questions are designed to confirm that the applicant has developed a preliminary design or business case for meeting the public interest obligations for its selected performance tier and latency combinations. They ask the applicant to identify the information it could make available to support the assertions in its application. We recognize that because a short-form applicant will not know where it might be authorized to receive support and will have a number of years to build out or upgrade its network, the information submitted may be based on a preliminary network design, which may be modified once the winning bids are announced and as the network is built out.

70. We do not anticipate that it will be unduly burdensome to respond to these questions because, at a minimum, each applicant will need to have started planning at a high level how it intends to meet the relevant Rural Digital Opportunity Fund public interest obligations as part of its obligation to conduct due diligence prior to the auction.¹⁴¹ We are not persuaded that we should rely on an applicant's operational history instead of requiring an applicant to answer questions about the technologies, spectrum,

¹³⁷ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2305, para. 35.

¹³⁸ See Viasat Comments at 14-15 (citing Dr. Paul Milgrom and Dr. Ilya Segal, "Lessons from the CAF II Auction for the RDOF Auction" (Sept. 20, 2019)), attached to Comments of Viasat, Inc., WC Docket Nos. 19-126, 10-90 (filed Sept. 20, 2019) (claiming that "[s]uch an approach would ensure that 'bidders are not allowed to bid for areas in which they are unable to provide service'" and that "at least one bidder" bid in areas where it was unable to provide service in the CAF Phase II auction "to delay clearing and prevent meaningful information discovery for other bidders before the clearing round").

¹³⁹ 47 CFR § 54.804(a)(8).

¹⁴⁰ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2305-6, 2333-35, para. 36, Appx. A.

¹⁴¹ See generally SBI Comments at 4-5.

and networks it intends to use to meet the relevant public interest obligations.¹⁴² The fact that an applicant has offered a voice and/or broadband service in the past does not necessarily indicate that the applicant is expected to be reasonably capable of fulfilling the Auction 904 public interest obligations for the performance tier and latency combinations it has selected.

71. At the same time, we also decline to revise the questions to collect more detailed network information.¹⁴³ In the *Rural Digital Opportunity Fund Order*, we denied requests to require a more detailed technical showing at the short-form application stage.¹⁴⁴ Instead, our approach of requiring high-level information that is sufficient for determining eligibility to bid in a state, requiring applicants to make certifications regarding their due diligence and ability to meet the performance requirements,¹⁴⁵ requiring a more thorough long-form application technical showing for the areas where support is won,¹⁴⁶ and imposing a forfeiture for defaults if an applicant is not deemed qualified to be authorized,¹⁴⁷ more appropriately balances the objectives of determining whether an applicant is expected to be reasonably capable of meeting the relevant performance requirements in the areas where it plans to bid with minimizing burdens on applicants and Commission staff.¹⁴⁸ For the CAF Phase II auction, substantially the same questions elicited information at a sufficient level of detail to verify that each applicant had developed a preliminary design or business case for meeting the public interest obligations for its selected performance tier and latency combinations, as demonstrated by the almost universal success so far in winning bidders being authorized to receive support. Moreover, we expect that our decision to adopt the

¹⁴² SBI Comments at 5 (suggesting “that the Commission should provide that any active facilities-based carrier that has operated for more than three years should be deemed to be eligible to participate in the auction”).

¹⁴³ See, e.g., NTCA Comments at 5, 17 (claiming the Commission “should require potential bidders to submit technical showings in their short-form application that would demonstrate with some reasonable basis their ability to meet the proposed speeds and latency in the face of terrain, distance, and other relevant factors” and also urging the Commission to require each applicant to “state its assumed subscription rate, its peak period data usage assumptions and plans for oversubscription ratios, its total capacity for the planned network, and the methods it intends to use to allocate that capacity among existing and new users”). We already ask for certain information regarding an applicant’s ability to scale its network to meet demand in the short-form application including its target or design peak period over-subscription ratios for various portions of the network and the basic assumptions and calculations for determining these ratios. See *infra* Appendix A. We save the more detailed information requests for the long-form application. They will be more useful once it is known where an applicant will be providing service and how many locations it will serve. In addition, Hughes suggests that we “augment the information required in response to question 5 to require applicants to make a more fulsome demonstration at the short-form stage that they have a viable plan to provide the required level of service to 70% of their customers at each of the build-out milestones.” Hughes Comments at 5; see also Inmarsat Reply at 4-5. Consistent with the CAF Phase II auction, we require an applicant to assume a 70% subscription rate by the *final* service milestone. Moreover, a technical showing regarding an applicant’s ability to accommodate a 70% subscription rate, or more generally its expected deployment at each service milestone, is more appropriate at the long-form stage when an applicant knows the number of locations it will be required to serve in its winning bid areas. The guidance we adopt below for the long-form application describes the specific information an applicant should submit to demonstrate how the required performance for the relevant performance tier will be achieved during periods of peak usage, downstream and upstream speed and latency assuming a 70% subscription rate by the final service milestone and also for a project plan that describes each stage of network build-out for each of the service milestones.

¹⁴⁴ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 722, para. 78 (stating that “requiring more technical and operational information before the auction begins will provide significant barriers to entry for some participants and unnecessarily extend the short-form review period and delay the auction,” and that “additional technical information at the short-form stage would be speculative based on a presumption of what a winning area would look like”).

¹⁴⁵ 47 CFR § 54.804(a)(2), (8).

¹⁴⁶ *Id.* § 54.804(b)(2)(iv).

¹⁴⁷ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 735-36, paras. 114-17.

¹⁴⁸ *Id.* at 721-22, paras. 78-79.

edits proposed in the *Auction 904 Comment Public Notice* will improve the clarity of the questions and enhance our efforts to elicit the precise information that was most useful to Commission staff in making eligibility determinations for the CAF Phase II auction.¹⁴⁹

72. We are, however, modifying the proposed questions to obtain information regarding an applicant's plans to offer voice service, including the required standalone voice service.¹⁵⁰ We make several changes to the proposed questions in Appendix A to emphasize that the applicant must address both voice and broadband services in response to the questions and also to require an applicant that intends to implement a new system to meet its voice requirements to provide additional specific information about that system. An applicant that has not previously offered a voice service or that will be offering voice using a new system would benefit from closer scrutiny to determine whether the applicant is expected to be reasonably capable of meeting the voice service requirements.¹⁵¹ An ETC must offer qualifying voice service using its own facilities, at least in part, and we expect that an applicant will conduct the due diligence necessary to ensure that it can meet this requirement.¹⁵²

73. We emphasize that we will treat the responses to the questions in Appendix A and any associated supporting documentation as confidential and will withhold them from routine public inspection.¹⁵³ Accordingly, there is no need for an applicant to submit a section 0.459 confidentiality request to seek protection of this information from public disclosure.

c. Assumptions

74. We also adopt certain assumptions that an applicant will need to make about network usage and subscription rates when determining, for purposes of its short-form application, whether it can meet the public interest obligations for its selected performance tier and latency combination(s) if it becomes a winning bidder and is authorized to receive Auction 904 support.

75. First, as proposed in the *Auction 904 Comment Public Notice*,¹⁵⁴ we require that an applicant assume that it will offer service to at least 95% of the required number of locations across its bids in each state.¹⁵⁵ No commenters opposed this proposal. The Commission's rules require that each long-form applicant provide in its long-form application a certification by a professional engineer that the applicant's proposed network can deliver the required service to at least 95% of the required number of locations.¹⁵⁶ Applicants were required to make the same assumption for the CAF Phase II auction.¹⁵⁷

¹⁴⁹ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2305-06, 2333-35, para. 36, Appx. A.

¹⁵⁰ See generally NTCA Comments at 5 (suggesting that "the Commission should carefully review the short-form applications of those that do not today deliver voice services on a standalone basis today to determine if their service and network plans will enable them to do so if they were to prevail in the auction"). See also *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 708, para. 43 (requiring all Rural Digital Opportunity Fund support recipients to provide standalone voice service meeting the reasonable comparability requirements in the areas in which they receive support).

¹⁵¹ See generally NTCA Comments at 5.

¹⁵² See *infra* II.E.6 (Eligible Telecommunications Carrier Certification).

¹⁵³ We will treat short-form applicants that submit this information as having made a request to treat this information as confidential trade secrets and/or commercial information. See 47 CFR § 0.459(a)(4). If a request for public inspection under section 0.461 is made, however, the short-form applicant will be notified and will be required to justify confidential treatment of its request if the short-form applicant has any objections to disclosure. See *id.* § 0.461.

¹⁵⁴ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2306, para. 37.

¹⁵⁵ See NTCA Comments at 14 (claiming that this is a "reasonable" assumption "of the objectives for deployment of broadband in rural areas, reflecting . . . the accountability needed to ensure a sufficient number of locations are reached").

¹⁵⁶ 47 CFR § 54.804(b)(2)(iv); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 726, para. 90.

Rural Digital Opportunity Fund support recipients will ultimately be required to offer service to 100% of the actual locations in their service areas and offer service to newly built locations upon reasonable request that were built prior to milestone year eight.¹⁵⁸ Consequently, Commission staff will also review the information provided in the short-form and long-form applications to verify that the applicant has the plans and capability to scale the network if necessary.¹⁵⁹ We caution potential bidders that, after the close of a round, each bid represents an irrevocable offer to meet the terms of the bid if it becomes a winning bid.¹⁶⁰ Each winning bidder that is authorized to receive Rural Digital Opportunity Fund support will be required to offer service in areas where it is authorized to receive support. Accordingly, an applicant that becomes a qualified bidder should assume for each round of the auction that it could be required to offer service meeting the relevant requirements to the number of locations across *all* the bids that it places in each state.

76. We also adopt our proposal to require each service provider to assume a subscription rate of at least 70% for both voice services and broadband services by the final service milestone when determining whether it can meet the public interest obligations for its selected performance tiers and latency combinations.¹⁶¹ This subscription rate is consistent with the assumptions made in the CAM when calculating the amount of support made available and is also the subscription rate assumption required for CAF Phase II auction applicants.¹⁶² A support recipient will not be required to demonstrate that it has achieved at least a 70% subscription rate. Instead, we require an applicant to assume for purposes of its application that it will achieve at least a 70% subscription rate when engineering its network. By adopting a 70% subscription rate assumption, we are balancing our objective of adopting a reasonably high subscription rate that will demonstrate that an applicant can be expected to be reasonably capable of quickly scaling its network to meet demand with the reality that not all consumers in a given area may subscribe to an Auction 904-funded service plan. Because it may take time for an applicant that becomes a winning bidder and is authorized to receive Auction 904 support to obtain customers as it builds out its network, we will permit an applicant to factor this into its engineering submission and make reasonable assumptions about how the subscription rate will scale during the build-out term.¹⁶³

77. We decline commenters' suggestions to lower the assumed subscription rate to 40% or to increase it to 100%.¹⁶⁴ We acknowledge that the rural areas that are eligible for Auction 904 may have lower take rates than in urban areas and that take rates may vary by performance tier.¹⁶⁵ In our 2020 Broadband Deployment Report, we found that the 2018 adoption rate for fixed terrestrial services in "Non-Urban Core" census tracts varied from 59.9% for broadband at speeds of 25/3 Mbps to 5.5% for

(Continued from previous page) _____

¹⁵⁷ *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1458-59, para. 81.

¹⁵⁸ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 709-11, paras. 45-53.

¹⁵⁹ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2306, para. 37. *See also* SBI Comments at 5 (supporting this approach).

¹⁶⁰ This is consistent with other Commission auctions. *See, e.g.*, 47 CFR §§ 1.21004, 1.2104(g)(2).

¹⁶¹ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2306, para. 38. *See also* SBI Comments at 6; NTCA Comments at 14 (supporting a 70% subscription rate).

¹⁶² *Connect America Fund et al.*, Report and Order, 29 FCC Rcd 3964, 4040, para. 179 (WCB 2014) (*CAM Inputs Order*); *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1459, para. 82.

¹⁶³ USTelecom Comments at 9.

¹⁶⁴ USTelecom Comments at 8-9 (requesting the Commission lower the subscription rate and citing prior advocacy for a 40% subscription rate); WTA Comments at 4-5 (urging the Commission to adopt a 100% subscription rate).

¹⁶⁵ USTelecom Comments at 8-9.

broadband at speeds of 250/25 Mbps.¹⁶⁶

78. Given the variation in adoption rates among performance tiers, the likely variation amongst Auction 904 eligible areas in factors that affect adoption like population density and income levels, and the 10-year support term, we cannot determine with any certainty what the actual subscription rate will be for support recipients. We are also not convinced that an applicant needs to assume that every location will subscribe to its services for Commission staff to determine it is reasonably capable of being able to scale its network to meet demand, particularly since this would increase the risk that an applicant will have to incur unnecessary costs.¹⁶⁷ Instead, as the Commission found for the CAF Phase II auction, a 70% subscription rate is a more reasonable assumption for engineering a network when taking into account that (i) existing subscription rates, which in some cases are lower than 70%, may not reflect actual demand over the 10-year support term, which we would expect to increase as data usage increases and higher speeds are made available and may be impacted by unforeseen circumstances like those experienced recently due to COVID-19; (ii) in the high-cost areas where the Auction 904 support recipient will be deploying its network, it is more likely to be the only broadband provider, which may increase subscription rates; and (iii) current adoption rates are low for higher speed tiers even in “Urban Core” areas.¹⁶⁸ We expect that this assumption, coupled with the additional information an applicant will be required to provide in response to the questions in Appendix A, will help Commission staff determine whether an applicant is reasonably capable of taking the necessary steps to meet demand.

79. Regardless of the assumptions an applicant makes about its subscription rate when engineering its network, the applicant must keep in mind that its network must be capable of scaling to meet demand. That is, a Rural Digital Opportunity Fund recipient cannot report in the High Cost Universal Service Broadband Portal that a location is served until it can provide service meeting the relevant performance requirements to that location within 10 business days after receiving a request.¹⁶⁹

80. We decline to adopt busy hour overload factor assumptions for each performance tier, although we agree with NTCA that “performance capabilities . . . must be premised upon a reasonable

¹⁶⁶ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 19-285, 2020 Broadband Deployment Report, FCC 20-50, at 30-31, paras. 49-50, Fig. 11 (Apr. 24, 2020) (*2020 Broadband Deployment Report*). The adoption rates are a ratio of residential FCC Form 477 data subscriptions to fixed terrestrial services of at least the designated speed divided by the total number of households in the area where our FCC Form 477 deployment data indicate that fixed terrestrial services of at least the designated speed are deployed. *Id.* at 30, para. 49. A census tract is designated as “Urban Core” if it has a land area less than three square miles and a population density of at least 1,000 people per square mile. A census tract is designated as “Non-Urban Core” if it is not designated as “Urban Core.” *Id.* at 30, para. 49 n.143.

¹⁶⁷ WISPA Reply at 8 n.20 (stating that a 100% subscription rate would lead to “wasteful construction”). In 2018 the highest adoption rate in the United States was 78.1% for broadband at speeds of 10/1 Mbps in the United States for “Urban Core” areas (as compared to 67.4% in “Non-Urban Core” areas). *2020 Broadband Deployment Report* at 31, Fig. 11.

¹⁶⁸ In “Urban Core” areas, the 2018 adoption rate for broadband at speeds of 250/25 Mbps was 5.8% and 46.6% for broadband at speeds of 100/10 Mbps. *2020 Broadband Deployment Report* at 31, Fig. 11. *See also Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1460, para. 84 (acknowledging that there is still a risk that a 70% subscription rate assumption may result in an increase in costs and could potentially lead to an applicant engineering a network that is capable of serving more locations than actually request service, but balancing the potential harm against the risk that a support recipient could engineer a network that is incapable of meeting demand and leaving consumers unserved). *See also WTA Comments* at 5 (noting that “conditions may necessitate an increased reliance on robust rural networks in the future”); NTCA Reply at 23 (presenting statistics that show “over time, consumers presented with good choices for broadband service are increasingly opting to take those services”).

¹⁶⁹ *See* 47 CFR §§ 54.316, 54.806(a) (describing the Rural Digital Opportunity Fund location reporting requirements); *WCB Location Guidance Public Notice*, 31 FCC Rcd at 12902-03.

oversubscription ratio or busy hour overload (BHOL) factor.”¹⁷⁰ Such assumptions vary based on a number of factors including the technology involved, the equipment that will be used, the spectrum bands that will be used (if applicable), the network architecture, and the number of subscribers. This information needs to be considered in the context of each applicant’s application and network design and the specifics will be more relevant once the winning bidder knows where it will be bidding and how many locations it is required to serve. We conclude that a less burdensome and more targeted approach for both Commission staff and applicants is to seek general information on an applicant’s peak period oversubscription and the underlying assumptions and calculations as well as its plans for improving, upgrading, and expanding its network infrastructure at the short-form application stage to confirm that an applicant is expected to be reasonably capable of scaling its network to meet demand.¹⁷¹ Then we will seek more detailed information at the long-form stage, including information demonstrating how the required performance for the relevant performance tier will be achieved during periods of peak usage, downstream and upstream speed, and latency assuming a 70% subscription rate by the final service milestone; and a description of how the long-form applicant’s design will meet the peak period end-to-end performance requirements for the path from the consumer premises to the Internet.

d. Spectrum Access

81. The Rural Digital Opportunity Fund auction rules require a short-form applicant that plans to use radiofrequency spectrum to demonstrate that it has (1) the proper spectrum use authorizations, if applicable; (2) access to operate in the spectrum it intends to use; and (3) sufficient spectrum resources to cover peak network usage and meet the minimum performance requirements to serve the fixed locations in eligible areas.¹⁷² Consistent with the Commission’s approach in the CAF Phase II auction, for the described spectrum access to be sufficient as of the date of the short-form application, the applicant must have obtained any necessary approvals from the Commission for the spectrum, if applicable.¹⁷³ The Rural Digital Opportunity Fund auction short-form application rules also require an applicant to certify that it will retain such authorizations for 10 years.¹⁷⁴

82. To demonstrate sufficient access to spectrum, an applicant must (i) identify the spectrum bands it will use for last mile, backhaul, and any other parts of the network;¹⁷⁵ (ii) describe the total amount of uplink and downlink bandwidth (in megahertz) that it has access to in such spectrum band(s) for the last mile; (iii) describe the authorizations (including leases) it has obtained to operate in the spectrum, if applicable;¹⁷⁶ and (iv) list the call signs and/or application file numbers associated with its spectrum authorizations, if applicable.¹⁷⁷ If an applicant is a consortium/joint venture, or holding/parent company, it should make this demonstration for each operating company that intends to provide service if the consortium/joint venture or holding/parent company is named as a winning bidder.

83. Any applicant that intends to provide service using satellite technology must describe in

¹⁷⁰ NTCA Comments at 15-17.

¹⁷¹ See *infra* Appendix A.

¹⁷² 47 CFR § 54.804(a)(6).

¹⁷³ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 723-24, para. 82.

¹⁷⁴ 47 CFR § 54.804(a)(6).

¹⁷⁵ An applicant may propose to use more than one spectrum band to meet its Rural Digital Opportunity Fund public interest obligations. Each applicant must identify in which part of the network (e.g., last mile, backhaul, etc.) it intends to use each spectrum band.

¹⁷⁶ If the licensee is a different party than the applicant, the licensee name and the relationship to the applicant should be described. If the applicant is leasing spectrum, the lease number should be provided along with the license information.

¹⁷⁷ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 723-24, para. 82.

its short-form application its expected timing for applying for earth station licenses if it has not already obtained these licenses.¹⁷⁸ Moreover, an applicant that intends to obtain microwave license(s) for backhaul to meet its public interest obligations must describe in its short-form application its expected timing for applying for such license(s), if it has not already obtained them.¹⁷⁹

84. This spectrum information, combined with the operational and financial information submitted in the short-form application, will allow an applicant to demonstrate that it has sufficient spectrum resources and is reasonably capable of meeting the public interest obligations required by its selected performance tier and latency combination(s). If a license, lease, or other authorization is set to expire prior to the end of the 10-year support term, the Commission will infer that the authorization will be able to be renewed when determining at the short-form application stage whether an applicant has sufficient access to spectrum.¹⁸⁰ However, this inference will in no way influence or prejudice our resolution of any future renewal application, and if the authorization is not renewed during the support term and the support recipient is unable to meet its Rural Digital Opportunity Fund obligations, that support recipient will be in default and subject to any applicable non-compliance measures.

85. In Appendix B, we identify the licensed and unlicensed spectrum bands that we anticipate could be used by a service provider operating in these bands to, at a minimum, offer service meeting the requirements for the Minimum performance tier provided that the service provider is using sufficient bandwidth in the spectrum band(s) and a technology that can operate in these spectrum bands consistent with applicable rules and regulations.¹⁸¹ This is a non-exhaustive list of spectrum bands that an applicant could potentially use to meet its performance obligations.¹⁸² We adopt our proposal to update the spectrum band chart used for the CAF Phase II auction to include some additional frequencies for the Upper Microwave Flexible Use Service.¹⁸³ The Commission has adopted flexible use rules to allow mobile operations in these additional bands as part of its Spectrum Frontiers proceedings, and following the CAF Phase II auction, the Commission has conducted auctions to award licenses for this spectrum (Auction 102 and Auction 103).¹⁸⁴

86. In the *Rural Digital Opportunity Fund Order*, we decided that we would permit an applicant that plans to operate in the 3550-3650 MHz band using a priority access license that will be subject to auction with bidding scheduled to begin in July 2020 (Auction 105) to indicate the status of its participation in that auction (consistent with auction procedures regarding the disclosure of non-public auction-related information) as long as it provides alternatives for how it intends to meet its obligations if

¹⁷⁸ *Id.* at 724, para. 83.

¹⁷⁹ *Id.*

¹⁸⁰ WISPA Comments at 7.

¹⁸¹ *See also Auction 904 Comment Public Notice*, 35 FCC Rcd at 2336-37, Appx. B.

¹⁸² An applicant would not be precluded from proposing to use a spectrum band not included in Appendix B, provided that the applicant could demonstrate that it is reasonably capable of meeting the performance requirements over the 10-year support term for the selected performance tier and latency combination(s) using that spectrum.

¹⁸³ *See Auction 904 Comment Public Notice*, 35 FCC Rcd at 2307, para. 41; *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1530-31, Appx. B. We also corrected the 70-80-90 GHz unpaired frequencies to reflect that the 100 MHz from 94,000 to 94,100 MHz is allocated for radiolocation and radio astronomy. *See* 47 CFR § 101.1505(b); *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2307, para. 41 n.74..

¹⁸⁴ The Commission auctioned 24 GHz spectrum through Auction 102 and 37.6-40 GHz and 47 GHz spectrum through Auction 103. *See Use of Spectrum Bands Above 24 GHz for Mobile Radio Services et al.*, GN Docket No. 14-177 et al., Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014 (2016); *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services et al.*, GN Docket No. 14-177 et al., Second Report and Order et al., 32 FCC Rcd 10988 (2017).

it were not awarded a license.¹⁸⁵ As proposed, we will allow an applicant to do the same if it intends to participate in the 2.5 GHz Rural Tribal Priority Window this year or is in the process of applying for a license following Auction 102 or Auction 103.¹⁸⁶ At the suggestion of commenters,¹⁸⁷ we also extend this option to applicants that intend to participate in the 3.7 GHz band auction (Auction 107) to the extent that eligible space station operators have voluntarily agreed to clear prior to the Relocation Deadline of December 5, 2025,¹⁸⁸ and the Lower 37 GHz band proceeding.¹⁸⁹ We also extend this option to applicants that intend to operate in the unlicensed 6 GHz band once it is available.¹⁹⁰ We update Appendix B accordingly. While these proceedings are in various stages, we expect that an applicant that intends to operate in these bands could at a minimum meet the requirements for the Minimum performance tier (assuming sufficient bandwidth and appropriate technology) and that licenses or leases can be obtained (to the extent applicable) and operation can begin with sufficient time for applicants to meet the first interim service milestone. As such, an applicant that intends to use this spectrum to meet its Rural Digital Opportunity Fund public interest obligations must indicate in its short-form application the status of its participation in any relevant proceeding and must provide alternatives for if it does not ultimately obtain a

¹⁸⁵ *Rural Digital Opportunity Fund Order*, at 39, para. 82 n.235; *Auction of Priority Access Licenses for the 3550-3650 MHz Band Rescheduled to Begin July 23, 2020; Auction 105 Short-Form Application Deadline Postponed to May 7, 2020*, AU Docket No. 19-244, Public Notice, DA 20-330 (OEA/WTB 2020). We decline to delay the short-form deadline until after Auction 105 has concluded. See WISPA Comments at 2. Because bidding in that auction is scheduled to begin on July 23, 2020, we expect that applicants will know if they are winning bidders prior to the start of bidding in Auction 904 and can account for the Auction 105 results when determining whether and where to bid. Applicants for Auction 105 can apply for Auction 904 without any obligation to bid for support. We conclude that our interest in proceeding quickly so that we can begin authorizing and funding deployment of broadband to unserved areas outweighs the possibility that an Auction 904 applicant may ultimately decide not to bid based on the results of Auction 105, particularly since such an applicant would have to demonstrate in its Auction 904 short-form application that it has access to sufficient spectrum as an alternative to the licenses that will be available in Auction 105.

¹⁸⁶ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2307-08, para. 43. See also *Wireless Telecommunications Bureau Announces Procedures for 2.5 GHz Rural Tribal Priority Window*, WT Docket No. 18-120, Public Notice, 35 FCC Rcd 308 (WTB 2020) (stating that the 182-day Tribal priority window opened on Feb. 3, 2020 and will close on Aug. 3, 2020); *Auction of 24 GHz Upper Microwave Flexible Use Service Licenses Closes; Winning Bidders Announced for Auction 102*, Public Notice, 34 FCC Rcd 4294 (OEA/WTB 2019); *Incentive Auction of Upper Microwave Flexible Use Service Licenses in the Upper 37 GHz, 39 GHz, and 47 GHz Bands for Next-Generation Wireless Service Closes; Winning Bidder Announced for Auction 103*, AU Docket No. 19-59, Public Notice, 35 FCC Rcd 2015 (OEA/WTB 2020).

¹⁸⁷ USTelecom Comments at 10-11; WISPA Comments at 6-7; Starry Reply at 2-3.

¹⁸⁸ See *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, GN Docket No. 18-122, Report and Order and Order of Proposed Modification, 35 FCC Rcd 2343 (2020); *Auction of Flexible-Use Service Licenses in the 3.7-3.98 GHz Band for Next-Generation Wireless Services; Comment Sought on Competitive Bidding Procedures for Auction 107*, AU Docket No. 20-25, Public Notice, 35 FCC Rcd 2601 (2020).

¹⁸⁹ *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services; Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 To Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services*, Third Report and Order, Memorandum Opinion and Order, and Third Further Notice of Proposed Rulemaking, 33 FCC Rcd 5576 (2018); *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services; Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 To Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014 (2016).

¹⁹⁰ WISPA Comments at 6; *Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, ET Docket No. 18-295; GN Docket No. 17-183, Report and Order and Further Notice of Proposed Rulemaking, FCC 20-51 (Apr. 24, 2020).

license or if the timing for these proceedings change such that it is not able to obtain a license or otherwise operate in these bands in time to meet the interim service milestones.¹⁹¹

87. We do not extend the same option to applicants that intend to participate in the 2.5 GHz auction.¹⁹² Because the timing for that auction has not been established, we cannot reasonably predict whether an applicant that intends to participate in the 2.5 GHz auction will have sufficient time to obtain a license and meet its Auction 904 public interest obligations by the first interim service milestone. However, a current licensee or an applicant that has obtained a lease to operate in the 2.5 GHz band will be able to propose to use the 2.5 GHz band to meet its public interest obligations.

88. Additionally, we decline to add the 5850-5925 MHz band to Appendix B.¹⁹³ Last year, we initiated a Notice of Proposed Rulemaking to propose changes to the 5850-5925 MHz band rules, and this proceeding is ongoing. Accordingly, it is premature to address proposals made in that proceeding in the absence of any resolution of those issues.¹⁹⁴

89. Furthermore, we are not persuaded that we should adopt the “maximum level of performance” that Commission staff expects “can be achieved by each spectrum band.”¹⁹⁵ While we provide an illustrative list of spectrum bands that we expect *could* at a minimum be used to meet the Minimum performance tier requirements, Commission staff will still review each applicant’s responses to the short-form application questions to determine whether it can be expected to be reasonably capable of meeting the public interest obligations for the relevant performance tiers given the equipment it intends to use to meet its obligations and its available bandwidth, among other factors. Applicants are also able to propose to use other spectrum bands, which will be reviewed on a case-by-case basis. Determinations about maximum performance levels for spectrum bands are more challenging and fact-specific than providing a list of bands that could be used to meet the Minimum performance tier. We do not expect that we could make reasonable maximum performance determinations that are generally applicable and useful without more specifics about each applicant’s plans. It would also be a significant administrative burden for Commission staff to contemplate every potential use of each spectrum band to determine a maximum performance level. While NTCA suggests that the Commission could adopt maximums and then have applicants file waivers if they expect they could provide speeds that exceed these maximums, such a process seems unnecessary when Commission staff already intends to review applicants’ proposals on a case-by-case basis and applicants will have an opportunity to provide additional information during the resubmission period.¹⁹⁶

90. We also decline to prohibit applicants from proposing to use unlicensed spectrum to meet their relevant Auction 904 public interest obligations.¹⁹⁷ A number of CAF Phase II auction applicants that intend to use unlicensed spectrum were able to demonstrate to Commission staff that they could be expected to be reasonably capable of meeting the public interest obligations at both the short-form and long-form application stages.¹⁹⁸ Consistent with the CAF Phase II auction, we again intend to collect

¹⁹¹ Such an alternative may not include spectrum bands that are subject to pending spectrum processes.

¹⁹² WISPA Comments at 6; *Transforming the 2.5 GHz Band*, Report and Order, 34 FCC Rcd 5446 (2019).

¹⁹³ WISPA Comments at 6.

¹⁹⁴ *Use of the 5.850-5.925 GHz Band*, Notice of Proposed Rulemaking, 34 FCC Rcd 12603 (2019).

¹⁹⁵ NTCA Comments at 6-8; NTCA Reply at 16.

¹⁹⁶ NTCA Comments at 7 n.12.

¹⁹⁷ WTA Comments at 6-8 (claiming that Auction 904 “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 [Auction 904] support for networks that will be constructed and operated on unlicensed spectrum bands”). *But see* NTCH/Flat Wireless Comments at 6; WISPA Reply at 5-8; GeoLinks Reply at 6-7 (supporting the inclusion of unlicensed spectrum).

¹⁹⁸ GeoLinks Reply at 7.

specific information from applicants regarding how they expect to meet the public interest obligations for each performance tier and latency combination and for Auction 904 have supplemented the short-form application operational questions to more specifically ask this question in relation to the applicant's proposed spectrum bands.¹⁹⁹ Moreover, concerns about congestion and interference may further be alleviated by the fact that many of the areas that are eligible for Auction 904 are rural and unserved.²⁰⁰ We also are not persuaded that the lower costs of using unlicensed spectrum results in an unfair competitive advantage for such providers.²⁰¹ One objective of Auction 904 is to identify providers "that are willing to provide voice and broadband at a competitive cost to the Fund"²⁰² Accordingly, we expect all bidders will take advantage of the cost efficiencies inherent in the technologies they intend to use.²⁰³

e. Collection and Use of Identifiers Associated with Information Submitted to the Commission in Other Contexts

91. In addition to information provided in a short-form application, any relevant information that an applicant has submitted to the Commission in other contexts may be considered for purposes of determining whether the applicant is expected to be reasonably capable of meeting the public interest obligations for its selected performance tier and latency combination(s) if it becomes a winning bidder and is authorized to receive Rural Digital Opportunity Fund support. As proposed in the *Auction 904 Comment Public Notice*,²⁰⁴ this other information would include the following: data reported in FCC Form 477 Local Telephone Competition and Broadband Report (FCC Form 477), FCC Form 481 Carrier Annual Reporting Data Collection Form (FCC Form 481), and FCC Form 499-A Annual Telecommunications Reporting Worksheet (FCC Form 499-A), including non-public information. For example, whether an applicant already offers service that meets the public interest obligations associated with its selected performance tier and latency combination(s) and the number of subscribers to that service may be considered. No commenters opposed the collection of the identifiers associated with this information.

92. Specifically, as we proposed in the *Auction 904 Comment Public Notice*,²⁰⁵ we require that applicants submit in the short-form application any FCC Registration Numbers (FRNs) that an applicant or its parent company—and in the case of a holding company applicant, the operating companies identified in its application—has used to submit its FCC Form 477 data during the past two years.²⁰⁶ Because the short-form application deadline is July 15, 2020, we will collect FCC Form 477 FRNs that were used for the following filing periods: data as of December 31, 2019; June 30, 2019; and

¹⁹⁹ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2334, Appx. A.

²⁰⁰ WTA Comments at 6-8 (expressing concern about interference and congestion on unlicensed bands.) *But see* NTCH/Flat Wireless Comments at 6 (claiming "[a]reas this remote are almost certain to have large stocks of unused unlicensed spectrum"); WISPA Reply at 6-7 (noting that "many census blocks eligible for [Auction 904] support lack broadband altogether, so there can be no possibility of congestion and interference").

²⁰¹ WTA Comments at 6-7. *But see* GeoLinks Reply at 6 (disagreeing with WTA's claims that the cost savings result in an "unfair competitive advantage").

²⁰² *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 694-95, para. 18.

²⁰³ *See* NTCH/Flat Wireless Comments at 6-7 (claiming that service providers that use unlicensed spectrum "will be able to use one of the key components of their service plans without the acquisition costs associated with licensed spectrum").

²⁰⁴ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2308-09, paras. 44-47.

²⁰⁵ *Id.* at 2308, para. 45.

²⁰⁶ If an applicant is a consortium or joint venture, it should provide all the FRNs that were used by its members to submit FCC Form 477 data during the past two years, if applicable.

December 31, 2018.²⁰⁷ Requiring submission of the FRNs that an applicant has used for FCC Form 477, will allow reviewers to cross-reference FCC Form 477 data that an applicant (or a related entity) has filed during the past two years. We remind all interested parties that because FCC Form 477 data are used to verify an applicant's operating history and current service offerings as well as to identify areas that are eligible for the auction,²⁰⁸ they should ensure that they have filed and will timely file all required FCC Form 477 data.²⁰⁹

93. As we proposed in the *Auction 904 Comment Public Notice*,²¹⁰ an applicant must also submit in the short-form application any study area codes (SACs) indicating that the applicant (or its parent company/subsidiaries) is an existing ETC.²¹¹ A holding-company applicant must submit the SACs of its operating companies identified in the application. An applicant is required by the Commission's short-form application rules to disclose its status as an ETC if applicable.²¹²

94. Finally, as we proposed in the *Auction 904 Comment Public Notice*,²¹³ applicants must submit in the short-form application any FCC Form 499 filer identification numbers that the applicant or its parent company and, in the case of a holding company, its operating companies identified in the application have used to file an FCC Form 499-A in the past year, if applicable.²¹⁴ Because the short-form application filing deadline is July 15, 2020, applicants must submit filer identification numbers that were used for the April 1, 2020 filing.²¹⁵

²⁰⁷ Twice a year, in FCC Form 477: (1) all facilities-based providers of broadband connections to end users and facilities-based providers of terrestrial mobile wireless broadband must file broadband deployment and subscription data; (2) all incumbent or competitive local exchange carriers and providers of interconnected VoIP must file voice subscription data; and (3) all facilities-based mobile voice providers must file voice deployment and subscription data. 47 CFR §§ 1.7001, 1.7002; FCC, FCC Form 477: Local Telephone Competition and Broadband Reporting Instructions at 5-9, <https://transition.fcc.gov/form477/477inst.pdf> (FCC Form 477 Instructions).

²⁰⁸ 47 CFR § 54.804(7)(i)(A) (requiring that an applicant that has provided a voice and/or broadband service for at least two years must certify it has filed FCC Form 477s as required during this time period).

²⁰⁹ *Id.* §§ 1.7001, 1.7002; FCC Form 477 Instructions at 5-9.

²¹⁰ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2308, para. 45.

²¹¹ If an applicant is a consortium or joint venture, it should provide the SACs associated with all its members, if applicable. Any time that a service provider is designated as an ETC by a state or the Commission, USAC will assign that service provider a SAC before the provider begins receiving universal service support.

²¹² 47 CFR § 54.804(a)(3).

²¹³ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2308, para. 45.

²¹⁴ Subject to some exceptions, the Commission requires telecommunications carriers and certain other providers of telecommunications (including VoIP providers) to report on an annual basis in FCC Form 499-A certain revenues from the prior year for a number of purposes, including for purposes of calculating contributions to the Universal Service Fund and the Telecommunications Relay Services Fund, the administration of the North American Numbering Plan, for shared costs of the local number portability administration, and for calculating and assessing Interstate Telecommunications Service Provider regulatory fees. *See* 47 U.S.C. § 159(a) (Interstate Telecommunications Service Provider regulatory fees); 47 CFR §§ 52.17 (number administration), 52.32 (local number portability), 54.706 (Universal Service contributions), and 64.604 (interstate Telecommunications Relay Services Fund). *See also* FCC, 2020 Telecommunications Reporting Worksheet Instructions (FCC Form 499-A) at 4-5, <https://www.usac.org/wp-content/uploads/service-providers/documents/forms/2020/2020-FCC-Form-499A-Form-Instructions.pdf>.

²¹⁵ If an applicant is a consortium or joint venture, it should provide the filer identification numbers associated with all its members, if applicable.

f. Limiting Eligibility to Bid for Certain Performance Tier and Latency Combinations

95. In the *Auction 904 Comment Public Notice*, we proposed precluding applicants planning to use certain technologies to meet their Auction 904 obligations from becoming eligible to bid for certain performance tier and latency combinations. Specifically, we proposed precluding any applicant that intends to use fixed wireless or digital subscriber line (DSL) technologies from bidding in the Gigabit performance tier if the applicant had not reported offering Gigabit broadband service in its FCC Form 477 data.²¹⁶ Additionally, we proposed prohibiting geostationary satellite providers from bidding in the Gigabit and Above Baseline performance tiers.²¹⁷ We also proposed prohibiting providers that intend to use geostationary or medium earth orbit satellites from selecting low latency in combination with any of the performance tiers.²¹⁸ Finally, we proposed that Commission staff would review applications from providers that plan to use nascent technologies on a case-by-case basis.²¹⁹ Based on the record in this proceeding, we largely adopt the proposals we made in this regard in the *Auction 904 Comment Public Notice*, with certain appropriate modifications.

96. Consistent with our policy of technological neutrality for voice and broadband services assigned support by Auction 904,²²⁰ we remain committed to the general case-by-case review approach that the Commission used in the CAF Phase II auction to review short-form applications. One of our main objectives is to maximize the impact of finite universal service resources by awarding support to those providers that will make the most efficient use of budgeted funds.²²¹ Our case-by-case approach furthers this objective by giving service providers the opportunity to make a case based on their specific plans that they can meet the relevant performance obligations even if they themselves have not necessarily deployed broadband yet at those speeds.²²² Such an approach allows us to stretch our universal service dollars further to serve more consumers because new competitors offering service using proven technologies may be less expensive to deploy than the fiber networks that received support through the CAF Phase II auction to offer Gigabit service. We expect that the Commission staff review coupled with the requirement that an applicant conduct due diligence and certify that it is able to meet the requirements for the performance tier and latency combinations it selects,²²³ along with the threat of the forfeiture if a winning bidder defaults,²²⁴ will help minimize the risk of bidder defaults. We also expect the more in-depth long-form application process will further minimize the risk of authorizing an unqualified applicant.²²⁵

97. At the same time, some technologies lack demonstrated capabilities to perform at certain speed and latency combinations—and we do not find it prudent to authorize bidding for performance tier/latency/technology combinations that lack a proven track record that deployment at the speeds and

²¹⁶ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2310, para. 51.

²¹⁷ *Id.* at 2309-10, para. 50.

²¹⁸ *Id.* at 2309, para. 49.

²¹⁹ *Id.* at 2310-11, para. 52 n.94.

²²⁰ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 702, para. 31.

²²¹ *Id.* at 694-95, para. 18.

²²² See, e.g., ADTRAN Comments at 5-7; Cambium Comments at 4-8; Hughes Comments at 2-3; SES Comments at 1-6; Siklu Comments at 1-2; SpaceX Comments at 2-4, 6-11; Telesat Comments at 2-5; WATCH Comments at 1-3; WISPA Comments at 8-16; Ericsson Reply at 2-4; Intelsat Reply at 1-3; Microsoft Reply at 3-6; SES Reply at 2-5; SpaceX Reply at 1-9; Starry Reply at 4-6; WISPA Reply at 8-12.

²²³ 47 CFR § 54.804(a)(2), (8).

²²⁴ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 735-36, paras. 114-17.

²²⁵ *Id.* at 725-35, paras. 86-113.

latencies we expect will actually occur. The record demonstrates significant concern regarding applicants that propose to use technologies that have not been widely deployed to offer services at high speeds or low latency, or have not been deployed at all on a commercial basis to retail consumers.²²⁶ Auction 904 is not the appropriate venue to test unproven technologies using universal service support. The risk of default—and therefore leaving an area unserved longer than necessary—is significantly greater if Commission staff, in making its determinations, cannot rely on concrete examples of the technology being used to offer high speed or low latency service directly to residential consumers or to demonstrate a reasonable increment in the speeds that service providers have already reported deploying using those technologies.²²⁷ We are guided by our obligation to preserve the Universal Service Fund and do not want winning bidders and support recipients to default and strand consumers with no service, unreliable service, or with service that is not reasonably comparable to service offered in urban areas.²²⁸

98. Applying these principles, we find that the only applicants that can make a case to bid in the Gigabit performance tier or for low latency are those applicants proposing to use a technology: (1) that has a proven track record of offering mass market voice and broadband services directly to residential consumers; and (2) where there are concrete examples of such technology being used to offer service at speeds that would meet the requirements for the higher speed tiers or at latency levels meeting our low latency requirements. Thus, the Auction Application System will not allow an applicant that intends to use any form of satellite technology, whether geostationary, high earth orbit, medium earth orbit, or low earth orbit, to select the Gigabit performance tier or to select low latency. In contrast, an applicant proposing to use fixed wireless or DSL will have the opportunity to demonstrate in its short-form application to Commission staff that it is reasonably capable of offering service meeting the Gigabit performance tier public interest obligations even if it has not previously reported offering Gigabit broadband service. For the Above Baseline, Baseline, and Minimum performance tiers and for high latency, we retain our prior approach of reviewing all technologies on a case-by-case basis. We do not express an opinion here on which technologies the Commission may permit to bid at particular speed and latency tiers in Phase II of the Rural Digital Opportunity Fund.

99. *Gigabit performance tier.* We will prohibit service providers that intend to use any form of satellite technology from selecting the Gigabit performance tier. Commission staff will consider short-form applicants that intend to use fixed wireless or DSL technologies for bidding in the Gigabit performance tier on a case-by-case basis.

100. No geostationary satellite provider has reported offering upload speeds that would meet the requirements for Gigabit service in its deployment data or even for the next two performance tiers.²²⁹ Viasat and Hughes report upload speeds of only 3 Mbps, far below the required 500 Mbps for the Gigabit tier.²³⁰ Viasat also remains the only geostationary satellite provider that reports being capable of offering

²²⁶ See, e.g., ADTRAN Comments at 3-5; Canadian Valley Electric Comments at 3-4; Conexon Comments at 2-5; FBA Comments at 3-11; GeoLinks Comments at 2-5; Gibson Comments at 3; Hughes Comments at 2-3; NRECA/UTC Comments at 3-4; NTCA Comments at 8-13; TECA Comments at 3-4; USTelecom Comments at 2-4; WTA Comments at 8-9; ADTRAN Reply at 1-8; AT&T Reply at 3-4; Conexon Reply at 2-3, 6-7; FBA Reply at 2-11; GeoLinks Reply at 2-6; Gogo Reply at 2-10; NTCA Reply at 3-15; USTelecom Reply at 4-6; WISPA Reply at 12-14.

²²⁷ We are unable to anticipate every type of technology that a potential Auction 904 applicant will propose to use and address those technologies here. We direct Commission staff to review those technologies and make eligibility determinations consistent with the decisions we adopted here.

²²⁸ See, e.g., NTCA Reply at 7 (noting that if a bidder defaults, “consumers may be forced to wait again (perhaps for years) before finally receiving service that most urban consumers take for granted”).

²²⁹ FCC, Fixed Broadband Deployment Data from FCC Form 477, <https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477> (providing FCC Form 477 data as of June 30, 2019) (FCC Form 477 data as of June 30, 2019).

²³⁰ *Id.*

downstream speeds of 100 Mbps to consumers in certain areas.²³¹ Moreover, no geostationary satellite provider has claimed in the record that it has deployed a technology that is capable of meeting the Gigabit performance tier obligations; nor are we aware of any such developments. Based on available data, Commission staff could not conclude that a geostationary satellite provider is reasonably capable of meeting the required public interest obligations for the Gigabit performance tier.

101. Similarly, no service provider has reported using non-geostationary orbit satellites to offer fixed retail service directly to residential consumers.²³² Service providers that may propose to use such technologies in Auction 904 indicate that they will be deploying services to residential customers in the near term or that they currently offer services to other carriers or organizations.²³³ These kinds of trials or limited service offerings are not as instructive as mass market deployment; when services are offered on a commercial basis there is more of an opportunity to observe how networks using a particular technology perform under varied real-world conditions or how networks use the technology at scale to meet demand. Moreover, services offered on an enterprise or wholesale basis are more likely to be offered on terms with different quality of service standards not generally offered to residential customers. Given this lack of a track record of providing service to a mass market at *any* speed, no service provider that intends to use non-geostationary orbit satellites to meet its Auction 904 public interest obligations will be permitted to bid in the Gigabit performance tier.

102. In contrast, we will permit service providers that intend to use fixed wireless or DSL technologies to make a case for bidding in the Gigabit performance tier. Although we noted in the *Auction 904 Comment Public Notice* that such speeds are not commercially available on a widespread basis using these technologies,²³⁴ service providers using these technologies have increasingly reported deploying networks capable of speeds meeting the speeds required by the Gigabit and Above Baseline performance tiers to residential consumers.²³⁵ Because service providers have reported deploying networks capable of meeting these high speeds,²³⁶ these data will be instructive to Commission staff when determining based on an applicant's specific plans that it is reasonably capable of meeting the Gigabit performance tier public interest obligations.

103. Additionally, the Commission has taken a number of steps since the CAF Phase II

²³¹ *Id.*

²³² *Id.* See also *Communications Marketplace Report et al.*, Report, 33 FCC Rcd 12558, 12674-75, paras. 217-218 (2018) (describing the fixed satellite service market).

²³³ See, e.g., *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 705, para. 37 (finding that medium earth orbit satellites and hybrid satellite technologies have not been deployed widely to deliver service to residential consumers); SpaceX Comments at 4, 8 (claiming that “SpaceX will now begin to offer its Starlink broadband service for consumers—first in the United States and Canada—by the end of 2020” and citing a news article explaining how the United States Air Force has been testing the use of broadband delivered by SpaceX’s network in plane cockpits); Telesat Comments at 3 (noting that “Telesat’s [low earth orbit] constellation *will* offer the ability to provide extremely high performance service . . . to end users”) (emphasis added). SES offers “middle-mile capacity” to terrestrial providers using medium earth orbit satellites. Rather than bid in the auction itself, SES appears to claim that its customers may want to bid for low latency. SES Comments at 1-2, 4; SES Reply at 2-3.

²³⁴ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2310, para. 51.

²³⁵ FCC Form 477 data as of June 30, 2019.

²³⁶ 1.8% of fixed wireless providers report deploying networks capable of offering broadband at speeds that meet both the downstream and upstream speeds requirements for the Gigabit performance tier—1 Gigabit/500 Mbps. 0.4% of DSL providers and 2% of fixed wireless providers report deploying networks capable of offering 1 Gigabit downstream and 0.3% of DSL providers and 3% of fixed wireless providers report deploying networks capable of upstream speeds of at least 500 Mbps. 7.7% of DSL providers and 17.1% of fixed wireless providers report having deployed networks capable of offering both speeds meeting the requirements of the Above Baseline performance tier of 100 Mbps downstream and 20 Mbps upstream. *Id.*

auction to make additional spectrum available that could potentially support Gigabit speeds for fixed wireless service.²³⁷ The record also indicates that equipment that may support Gigabit speeds under certain conditions has since been developed and deployed.²³⁸ Similarly, for DSL technologies, the record suggests that some providers are deploying hybrid networks that are able to achieve high speeds using a fiber network that involves next-generation DSL technologies for the “very last link.”²³⁹ We expect that Commission staff determinations will also be informed by the engineering assumptions and standards that are used for these technologies at lower speeds. Given these recent developments and existing deployments, we conclude that it would be reasonable to allow an applicant using these technologies to make a case that it is reasonably capable of meeting the Gigabit performance tier requirements based on its specific plans.

104. While an applicant will be permitted to *select* the Gigabit performance tier in its application if it intends to use fixed wireless or DSL technologies for meeting its Auction 904 public interest obligations, such applicants face a high burden to persuade Commission staff that it is reasonably capable of meeting the public interest obligations and thus qualified to bid for the Gigabit performance tier. Particularly for DSL services, we do not anticipate that an applicant using DSL technologies would be able to demonstrate that it is reasonably capable of offering a service that meets the Gigabit performance tier public interest obligations absent a hybrid approach that relies mostly on fiber.²⁴⁰ Likewise, given distance limitations, spectrum and infrastructure constraints, tower siting requirements, required upstream speeds, and required minimum monthly usage allowances,²⁴¹ we expect it will be similarly challenging for a fixed wireless provider to make a case that it can offer a mass market service meeting the Gigabit performance tier public interest obligations in the less dense areas eligible for Auction 904. This is so especially for entities lacking an operational history of offering Gigabit service in

²³⁷ WATCH Comments at 2-3; WISPA Comments at 10-11; Siklu Comments at 2; Starry Reply at 2.

²³⁸ Cambium Comments at 1-4 (noting that its “Massive Multiuser Multiple Input Multiple Output (MU-MIMO) technology, cnMedusa, has been sold for four years” and that “Cambium’s customers have implemented this solution, which can deliver up to 1.6 Gbps (per sector) to serve more than 19,000 sectors worldwide,” and citing other trials where new equipment has or soon will have the capability to offer speeds that meet or exceed 1 Gbps); Siklu Comments at 1-2 (claiming that “[o]ver 100,000 Siklu carrier-grade systems are delivering interference-free Gigabit performance worldwide”); WATCH Comments at 2-3 (claiming that “60 GHz point-to-multipoint solutions from Siklu and IgniteNet have already been deployed by Watch and other operators to deliver gigabit speeds,” and that “5G technologies from Ericsson and other vendors are now available in licensed mmW bands including 28 GHz and 37 GHz, allowing operators to combine up to 800 MHz of spectrum that supports the delivery of gigabit services to both urban and rural communities”); WISPA Comments at 11-12 (noting the advantages of mmWave fixed gigabit wireless networks, providing “data sheets from a number of manufacturers that are producing and distributing inexpensive equipment that can enable Gigabit service,” and explaining that “JAB Wireless, Inc., the country’s largest privately held WISP with operations in 16 states, is using equipment manufactured by IgnitedNet to deploy networks in the unlicensed 57-71 GHz band that are capable of offering Gigabit services”); Ericsson Reply at 2-3 (noting a trial where “Ericsson engineers, utilizing 800 MHz of mmW spectrum, achieved a downlink speed of 4.3 Gbps using commercially available solutions”); Microsoft Reply at 4-5; Starry Reply at 5 (noting that its “technology is based on the 802.11 standard, which [Starry] upconvert[s] to operate in wide channels in licensed mmW spectrum” and that “[u]sing a full 160-megahertz channel, [Starry is] able to reach a PHY capacity of 6.9 gigabits-per-second, per sector”); WISPA Reply at 8-11; Letter from Louis Peraertz, Vice President of Policy, WISPA, to Marlene H. Dortch, Secretary, FCC, AU Docket No. 20-34 et al., at 1-4 (filed May 15, 2020) (WISPA May 15, 2020 *ex parte*).

²³⁹ ADTRAN Comments at 5-7.

²⁴⁰ *Id.* at 5-7.

²⁴¹ *See, e.g.*, Canadian Valley Comments at 4; NRECA/UTC Comments at 4; (claiming that “[e]xcept for 5G systems operating on spectrum below 1 GHz, 5G systems operating on millimeter wave frequency assignments are distance constrained”); TECA Comments at 3-4.

rural areas. Accordingly, we expect that relatively few fixed wireless and DSL technologies will be able to meet the short-form requirements for bidding in the Gigabit performance tier.

105. We remind potential applicants that they are certifying under penalty of perjury in their short-form applications that they are technically qualified to meet the public interest obligations for each performance tier and latency combination they select. The Commission may initiate enforcement proceedings against applicants that submit threadbare or wholly unrealistic technical showings while selecting the Gigabit or other higher performance tiers. We also note that an applicant will be deemed in default if at the long-form application stage, Commission staff determines the applicant is not reasonably capable of meeting the public interest obligations associated with its winning bids.²⁴² Accordingly, all applicants should conduct due diligence and consider seriously whether they will be able to meet the relevant public interest obligations before selecting performance tier and latency combinations in their applications.

106. *Low latency.* We prohibit providers that intend to use satellite technology from selecting low latency in combination with any of the performance tiers. We received no comments from providers intending to use geostationary satellites or other parties that provided specific technology solutions using these types of satellites that could meet the low latency standards adopted in the *Rural Digital Opportunity Fund Order*, nor are we aware of any such solutions.²⁴³ In fact, geostationary satellite providers even objected to the methodology we adopted for measuring compliance with the voice service quality requirements for the high latency performance tier that will be applicable to Auction 904.²⁴⁴

107. Similarly, no provider that intends to use non-geostationary orbit satellites will be permitted to select low latency in combination with any of the performance tiers. A service provider that uses medium earth orbit satellites claims it is able to offer a low latency service,²⁴⁵ but admits it is unable to meet the low latency standards that we adopted.²⁴⁶ Service providers that intend use low earth orbit satellites claim that the latency of their technology is “dictated by the laws of physics” due to the altitude of the satellite’s orbit.²⁴⁷

²⁴² There also may be other consequences for defaulting. For example, the Commission decided that any applicant that defaulted on its entire CAF Phase II auction award would not be eligible to participate in Auction 904. *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 721, para. 77.

²⁴³ Viasat claims that we cited “years-old statements made well before the current performance measurement rules were adopted and without regard to other approaches that may be proposed in short-form applications” in the *Auction 904 Comment Public Notice* when we noted that satellite providers using geostationary satellites have acknowledged they cannot meet the Commission’s low latency requirements, but Viasat does not provide any evidence to dispute these claims. Viasat Comments at 6: *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2309, para. 49 (citing Letter from John P. Janka, Counsel to Viasat, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 et al., at 4 (filed Aug. 21, 2015); Petition for Reconsideration of Hughes Network Systems, LLC, WC Docket No. 10-90, at 9 (filed Apr. 20, 2017)).

²⁴⁴ See generally *CAF Performance Measures First Reconsideration Order*, 34 FCC Rcd 8081.

²⁴⁵ SES purports to offer a low latency service, but rather than explain how its middle mile service meets the low latency requirements adopted by the Commission, its comments appear to be seeking reconsideration of the Commission’s low latency requirements which is outside the scope of this Public Notice. SES Comments at 1-6; SES Reply at 2-3; Intelsat Reply at 2-3. See also ADTRAN Reply at 7 (noting that “seeking reconsideration of that Commission decision in the context of the finalization of the auctions procedures is procedurally deficient”).

²⁴⁶ SES Americom, Inc. and O3B Limited NPRM Comments at 1, 3 (claiming that its network that consists of “sixteen Ka-band [non-geostationary orbit] satellites in Medium Earth Orbit” has “round-trip latency in the range of 120-150” milliseconds). See also *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 704-705, paras. 36-37.

²⁴⁷ SpaceX Comments at 7-8. See also Telesat Comments at 2 (“The latency associated with satellite delivered broadband is almost entirely a function of the distance between earth station and space station.”). SpaceX claims that because its low earth orbit satellite system operates at “an altitude of 550 kilometers,” it can deliver roundtrip

(continued....)

108. While satellites in low earth orbit may not be subject to the same absolute physical latency limitations as higher-orbiting satellites, we disagree that the altitude of a satellite's orbit is the sole determinant of a satellite applicant's ability to meet the Commission's low latency performance requirements. As commenters have explained, the latency experienced by customers of a specific technology is not merely a matter of the physics of one link in the transmission.²⁴⁸ Other factors will affect network performance as well: The latency of a satellite network, in particular, consists of the "propagation delay," the time it takes for a radio wave to travel from the satellite to the earth's surface and back, and the "processing delay," the time it takes for the network to process the data.²⁴⁹ It is true that a radio wave takes less time to travel from an earth station to a low earth orbiting satellite and back when compared to a geosynchronous or medium earth orbit satellite.²⁵⁰ Propagation delay in a satellite network does not account for latency in other parts of the network such as processing, routing, and transporting traffic to its destination.²⁵¹ Moreover, if the network uses satellite-to-satellite transmissions, the latency of these transmissions could add to the latency experienced by the end user. Further, the inherent latency of earth station to satellite round trips does not account for latency in other portions of the network, which could also affect the latency experienced by the consumer. As Viasat notes, "[m]easured latency depends, among other things, on the space and ground segments and how those segment[s] are designed, the performance of various network components, and the distance to the FCC-designated [Internet exchange point]."²⁵² We do not yet have sufficient basis to assess the actual design and performance of these components for planned low earth orbit satellite constellations.

109. In the absence of a real world example of a non-geostationary orbit satellite network offering mass market fixed service to residential consumers that is able to meet our 100 ms round trip latency requirements, Commission staff could not conclude that such an applicant is reasonably capable of meeting the Commission's low latency requirements, and so we foreclose such applications.²⁵³

110. *Other Performance Tiers and High Latency.* For the lower performance tiers—i.e., Above Baseline, Baseline, and Minimum—and for high latency, we will not adopt any presumptions or exclude any type of technology. Rather, we will use the same approach as in the CAF Phase II auction of permitting an applicant to propose using any technology to meet the relevant performance obligations.

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latency at less than 50 ms. SpaceX Comments at 7; Letter from David Goldman, Director of Satellite Policy, Space Exploration Technologies Corporation, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-126 et al., at Attach. (Feb. 21, 2020).

²⁴⁸ See Viasat Comments at 7; Gogo Reply at 8-9 ("Orbital altitude represents just one factor in the latency equation and does not automatically necessitate low-latency services").

²⁴⁹ Greg Berlocher, *Minimizing Latency in Satellite Networks*, Via Satellite (Sept. 1, 2009) (noting that "latency in a satellite network can vary greatly" and distinguishing propagation delay from processing delay in a satellite network), <https://www.satellitetoday.com/telecom/2009/09/01/minimizing-latency-in-satellite-networks/>.

²⁵⁰ *Id.* Of course, the design of a low earth orbit satellite network may have an earth station access a satellite close to the horizon, which would result in longer latency delays.

²⁵¹ *Id.* ("Processing delay is the cumulative total that every network component contributes to. Each device in a network is guilty of slowing the overall end-to-end flow of information, contributing some tangible amount to the total processing delay.").

²⁵² Viasat Comments at 7.

²⁵³ Our eligibility decisions would not "mandate that SpaceX affirmatively mischaracterize the capabilities of its network in any bid." SpaceX Comments at 7. Instead, our eligibility decisions mean that at this time we conclude that it is not in the public interest to permit low earth orbit satellite providers to bid for the Gigabit performance tier or low latency given their lack of a proven track record in offering the services that will be supported by Auction 904. Because we have weighed a number of principles to make these decisions, it is not arbitrary and capricious. See, e.g., Telesat Comments at 2 ("Adopting a per se prohibition against low earth orbit satellites selecting low latency in combination with any service tier would be arbitrary and capricious").

We conclude that the balance between our technology-neutral, cost-saving objectives and our concern with defaults materially shifts for these performance tiers and high latency. We expect the associated weights, along with the limitations we have implemented for the Gigabit performance tier and low latency will likely cause more support to be awarded to service providers that intend to use more established technologies, which should reduce the likelihood of defaults. We are confident that Commission staff can effectively determine short-form applicants are reasonably capable of meeting public interest obligations, particularly given our robust resubmission process should an applicant's initial showing prove insufficient and the less restrictive performance requirements associated with the lower performance tiers and high latency. Because we remain interested in funding innovative technologies that could potentially make an efficient use of universal service funds, we expect that giving an applicant an opportunity to describe its specific plans against the backdrop of concerns raised in the record would better serve the public interest than categorically denying their participation based on speculation from commenters—that are likely potential competitors in the auction—of what showing such service providers might try to make.²⁵⁴

111. *Additional Arguments Raised in the Record.* We reject claims that our decisions to preclude some entities from bidding in the Gigabit performance tier or low latency and to permit service providers that plan to use nascent technologies to make a case for participating in the auction in the lower performance tiers and for high latency violate the principle of competitive neutrality.²⁵⁵ Additionally, our eligibility decisions here do not negate our decision to adopt technology-neutral performance standards for Auction 904.²⁵⁶ Further, adopting eligibility requirements for Auction 904 that some applicants are

²⁵⁴ For example, we expect that an applicant could address concerns regarding the status of its deployment and capacity concerns in response to the Appendix A questions. See, e.g., ADTRAN Comments at 3 (“It is not clear how many, if any, of these systems will be fully deployed in time to provide the [Auction 904] services.”); Conexon Comments at 4-5 (claiming that “[e]ven if SpaceX dramatically increases the pace of its launches and deploys 10,000 satellites by the first [interim service] milestone, and each can do 20 Gbps, SpaceX will not have sufficient capacity to provide Gigabit service throughout rural America”); WTA Comments at 8 (“[C]laims 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.”); FBA Reply at 4 (claiming that “SpaceX and Telesat . . . fail to provide evidence that they will be able to meet the deployment deadlines for [Auction 904] recipients”).

²⁵⁵ The principle of competitive neutrality does not require all competitors to be treated alike, but “only prohibits the Commission from treating competitors differently in ‘unfair’ ways.” *Rural Cellular Ass’n v. FCC*, 588 F.3d 1095, 1104 (D.C. Cir. 2009). Moreover, neither the competitive neutrality principle nor the other section 254(b) principles impose inflexible requirements for the Commission’s formulation of universal service rules and policies. Instead, the “promotion of any one goal or principle should be tempered by a commitment to ensuring the advancement of each of the principles” in section 254(b). *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8803, para. 52 (1997) (*Universal Service First Report and Order*); see also *Rural Cellular Ass’n*, 588 F.3d at 1103 (“The Commission enjoys broad discretion when conducting exactly this type of balancing.”); *Qwest Corp. v. FCC*, 258 F.3d 1191, 1199 (10th Cir. 2001) (*Qwest I*) (“The FCC may balance the principles against one another, but must work to achieve each one unless there is a direct conflict between it and either another listed principle or some other obligation or limitation on the FCC’s authority.”); *Alenco Communications, Inc. v. FCC*, 201 F.3d 608, 621 (5th Cir. 2000) (“We reiterate that predictability is only a principle, not a statutory command. To satisfy a countervailing statutory principle, therefore, the FCC may exercise reasoned discretion to ignore predictability.”).

²⁵⁶ See, e.g., SpaceX Comments at 7-8 (claiming that precluding low earth orbit satellite providers from selecting low latency “would create a technological bias, unsupported by the evidence, that prevents fair competition based on network capabilities, undermining the very purpose of the reverse auction”); Telesat Comments at 3-5 (“Absent a compelling reason, and there is none here, it is inappropriate for a regulatory authority to favor a particular set of technologies or to pick particular winners (and, derivatively, losers) in marketplace competition”); Intelsat Reply at 3 (“Ultimately, this artificial reduction in the participant pool for F [Rural Digital Opportunity Fund] funding is not only unfair, it skews funding to a predetermined set of providers to the detriment of Americans in rural, underserved areas.”); USTelecom Comments at 4 (“Without reliance on strong evidence of operational ability to provide the service as defined by the Commission the auction cannot be truly technologically or competitively neutral”).

unable to meet does not violate competitive and technological neutrality if those requirements are necessary to advance the Commission's objectives.²⁵⁷

112. The principle of competitive neutrality also does not preclude us from addressing other reasonable regulatory objectives, including ensuring that an entity bidding in Auction 904 is expected to be reasonably capable of meeting the relevant public interest obligations if awarded support and that we are spending our universal service fund efficiently to serve as many consumers as possible. Thus, balancing these various interests, we conclude that it is reasonable to draw the lines we have in making our eligibility decisions.²⁵⁸

113. Some commenters argue that our proposals in the *Auction 904 Comment Public Notice* created a perception that bidders proposing to use a technology that lacks any deployment history would get an advantage by having the opportunity to make a case for bidding in *any* performance tier while some applicants proposing to use more established technologies would not have the same opportunity.²⁵⁹ Although these commenters mischaracterize the scope and purpose of the proposals we sought comment on, the safeguards we adopt today moot these concerns. We draw several bright lines where there is a paucity of evidence in the record supporting that certain technologies could meet the public interest obligations of particular speed and latency combinations rather than drawing a bright-line distinction between existing technologies and "nascent" technologies.²⁶⁰

114. We are not persuaded by arguments suggesting that nascent technologies should be categorically banned from receiving Auction 904 support. As a general matter, such arguments are improper and untimely attempts to revisit the Commission's decisions to adopt technology-neutral performance standards and fall outside of the scope of this Public Notice. For example, some commenters question whether low earth orbit satellite providers should be allowed to participate in the auction at all because they could use their support to serve ineligible areas.²⁶¹ That concern is hardly unique to satellite providers; any type of service provider could potentially use its support improperly. Even if the risk increases in the context of a "global network,"²⁶² all ETCs are required to use support for

²⁵⁷ In the context of universal service, the principle of competitive neutrality includes technological neutrality. See *Universal Service First Report and Order*, 12 FCC Rcd at 8802, para. 49.

²⁵⁸ See *In re: FCC 11-161*, 753 F.3d at 1055, 1082 (affirming that the Commission has "broad discretion [to balance competing policy goals] when overseeing "the Universal Service Fund with the goal of extending service in rural areas") (quoting *Rural Cellular Ass'n*, 588 F.3d at 1108)).

²⁵⁹ See, e.g., FBA Comments at 8 (noting "the perception, whether reasonable or not, that the auction does not provide a level playing field, detracts from participants' belief in the fairness of the auction"); Hughes Comments at 4 n.10 (claiming "if low-earth-orbit satellites are permitted to bid at all in Auction 904, there is no basis to bar geostationary satellite providers from bidding in *any* tier-and-latency combination"); NTCA Comments at 8-11 (claiming that under the original proposal "technologies *that do not exist yet* benefit from an effective presumption that they *can* bid in whatever tier they would like, subject to coming forward with information to substantiate that the Commission (and likely *only* the Commission) can review"); Inmarsat Reply at 2 ("[T]he Commission should not treat various types of satellite systems differently based upon their orbits . . .").

²⁶⁰ See, e.g., Inmarsat Reply at 3 ("It would be arbitrary and contrary to the principles of competitive and technological neutrality to adopt blanket prohibitions on one class of operators while granting additional flexibility to other providers based on an undefined notion of 'nascent technologies.'").

²⁶¹ Conexon Comments at 6-7; GeoLinks Reply at 5-6; Gogo Reply at 3-6. SpaceX claims that it "designs, manufactures, and operates it launch vehicles and satellites in the United States, employs [more] than 6,000 employees across the United States, and has suppliers in all 50 states" and that "is has already deployed gateways across the United States, has applied for many more, and was recently licensed to connect one million user terminals in the United States." SpaceX Reply at 5.

²⁶² Conexon Comments at 6-7.

its intended purpose,²⁶³ which for Auction 904 means that support recipients must use the support to offer voice and broadband service meeting the relevant public interest obligations to locations in eligible areas. All applicants are required to conduct due diligence to ensure they will be able to use the support in this manner and certify they will be able to build and operate facilities in accordance with the Auction 904 obligations and the Commission's rules generally.²⁶⁴ For support recipients, either the state that designated the support recipient as an ETC, or the ETC itself if it was designated by the Commission, must certify on an annual basis that the support "was used in the preceding calendar year and will be used in the coming calendar year only for the provision, maintenance, and upgrading of facilities and services for which the support is intended."²⁶⁵

115. Similarly, we are not persuaded by arguments that suggest we should not use universal service fund support for nascent technologies because section 254(c) requires the Commission to "consider the extent to which such telecommunications services . . . have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers" and "are being deployed in public telecommunications networks by telecommunications carriers"²⁶⁶ In the *USF/ICC Transformation Order*, the Commission defined the supported service as "voice telephony" and to promote technological neutrality, it determined that ETCs "may use any technology in the provision of voice telephony service" as long the service offers the enumerated core functionalities.²⁶⁷ The Commission made this decision noting that "consumers are increasingly obtaining voice services [delivered] over broadband networks as well as over traditional circuit switched telephone networks."²⁶⁸ Arguments that suggest we are limited to providing support to only established technologies that are able to meet these voice requirements are essentially an untimely petition for reconsideration of the Commission's 2011 decision and outside of the scope of this Public Notice.²⁶⁹ Moreover, commenters appear to be conflating the term "services" with technology. Congress directed the Commission to consider which *services* have "been subscribed to by a substantial majority of residential customers," and "are being deployed in public telecommunications networks by telecommunications carriers," and not which technologies have been used to offer these services.²⁷⁰ Nevertheless, Congress's direction generally does not preclude us from making eligibility decisions that balance these considerations as they relate to established technologies with other public interest considerations.²⁷¹

²⁶³ 47 CFR § 54.7(a); SpaceX Reply at 5.

²⁶⁴ 47 CFR § 54.804(a)(8).

²⁶⁵ 47 CFR § 54.314.

²⁶⁶ 47 U.S.C. 254(c)(1)(B); Conexon Comments at 4 ("As directed by Congress in the Communications Act, public funds administered by the Commission are intended for services offered over public telecommunications networks already deployed and subscribed to by residential customers"); GeoLinks Reply at 3-4; Gogo Reply at 7.

²⁶⁷ *USF/ICC Transformation Order*, 26 FCC Rcd at 17692-93, paras. 77-81. *See also* 47 CFR § 54.101.

²⁶⁸ *USF/ICC Transformation Order*, 26 FCC Rcd at 17962, para. 77.

²⁶⁹ SpaceX Reply at 7.

²⁷⁰ Section 254(c) plainly acknowledges that "[u]niversal service is an evolving level of telecommunications services" and the Commission should define supported services "taking into account advances in telecommunications and information technologies and services" 47 U.S.C. § 254(c).

²⁷¹ NTCA Reply at 8 ("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."). *But see* 47 U.S.C. § 254(c)(1)(D) (also requiring the Commission to "consider the extent to which such telecommunications services . . . are consistent with the public interest, convenience, and necessity"); *Connect America Fund et al.*, Report and Order and Order on Reconsideration, 32 FCC Rcd 1624, 1631, para. 24 (2017) (noting that there are several factors that Congress directed the Commission to consider when establishing the definition of supported services and that

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116. Some commenters also suggest that applicants may engage in “double dipping” by seeking Auction 904 support to fund commitments they have already made to the Commission.²⁷² But we have already addressed this issue: In the *Rural Digital Opportunity Fund Order*, we expressly stated that “[a] provider’s deployment of broadband service in satisfaction of its Rural Digital Opportunity Fund obligation shall be independent from any other deployment obligations made as part of any other regulatory obligation or to satisfy a provider’s separate commitments made to the Commission or a state or local regulatory body as part of any other proceeding.”²⁷³ An applicant must certify in its short-form application that it is in compliance with all “regulatory requirements for receiving the universal service support” that it seeks which includes compliance with this requirement.²⁷⁴ We expect all short-form applicants will conduct the required due diligence to ensure that they are in compliance prior to participating in the auction and will be prepared to demonstrate their compliance with this requirement. We anticipate that an applicant’s specific obligation to offer service meeting the relevant public interest obligations to a number of locations in eligible areas will be independent of a more general commitment to deploy a technology that covers a certain area within a certain timeframe.²⁷⁵

117. We are not convinced that we should take a step further and prohibit any applicant that has not filed a FCC Form 477 from bidding in a higher performance tier,²⁷⁶ or prohibit an applicant from bidding in the Gigabit performance tier unless the Commission confirms the applicant advertises such services.²⁷⁷ We specifically created a path for applicants that lack a two-year operating history to participate in the auction.²⁷⁸ We are not persuaded that such an applicant should be precluded from proposing to use a technology that is reasonably capable of meeting the relevant public interest obligations in accordance with our eligibility decisions. Additionally, a service provider may choose not to offer a service to consumers for any number of reasons independent of its capability to do so for its intended Auction 904-supported network.²⁷⁹ However, we will ask questions about an applicant’s operating history and the services it provides as adopted in Appendix A, and responses to those questions, like the responses to all other questions in the Appendix, will be carefully considered and weighed by Commission staff when making eligibility determinations.

118. We also decline to establish a rebuttable presumption that would require an applicant to

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the Communications Act of 1934, as amended makes clear that universal service is an evolving level of service); SpaceX Reply at 7.

²⁷² GeoLinks Comments at 3-5; GeoLinks Reply at 5-6; Gogo Reply at 2-3.

²⁷³ *Rural Digital Opportunity Fund Order*, 24 at 46 n.135.

²⁷⁴ 47 CFR § 1.21001(b)(6).

²⁷⁵ See GeoLinks Comments at 4-5 (describing how SpaceX committed to “meet certain conditions related to, among other things, deployment milestone and coverage requirements” in exchange for its “spectrum rights and operating authority”).

²⁷⁶ GeoLinks Comments at 5 (claiming that “[o]nly service providers with a track record for providing broadband service (and for complying with regulatory reporting requirements) understand the rigors associated with designing, deploying, and supporting high-speed broadband networks”). See also GeoLinks Reply at 4-5; Gogo Comments at 9-10; WISPA Reply at 13.

²⁷⁷ Conexon Reply at 3, 7.

²⁷⁸ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 720, para. 75; SpaceX Reply at 4.

²⁷⁹ WISPA Comments at 14 (“A WISP may choose to not offer a Gigabit service tier because there is no demand within the WISP’s market and customer base.”); Starry Reply at 5 (“A provider should not be handicapped in the upcoming auction because they provide a service at a speed that is responsive to market demands today.”). We are not persuaded that one commenter’s claim that certain rural electric cooperatives have achieved “customer ‘take rates’ for Gigabit tier service in excess of 30%” is necessarily indicative of the demand that would be experienced by other service providers. Conexon Reply at 3.

submit additional evidence to prove based upon “a preponderance of evidence” or “clear and convincing evidence” that it can meet the relevant performance requirements if it proposes to use certain technologies and select certain performance tier and latency combinations.²⁸⁰ It would be burdensome for each applicant to submit this information with its short-form application for every area where it intends to bid and for Commission staff to analyze the information, particularly when an applicant, even if it becomes qualified to bid, may not win support in these areas. Instead, to streamline our review process and minimize the burden on applicants, additional information will be requested during the resubmission period if an applicant is unable to demonstrate to Commission staff on initial review that it is eligible based on the information submitted with the short-form application. Such an approach will allow Commission staff to make targeted requests for information from an applicant designed to address the specific concerns that Commission staff has with the information submitted by the applicant in its short-form application.

g. Evaluating Eligibility to Bid on Selected Performance Tier and Latency Combinations

119. As proposed in the *Auction 904 Comment Public Notice* and consistent with the CAF Phase II auction,²⁸¹ Commission staff will review the information submitted by an applicant in its short-form application as well as any other relevant available information to determine whether the applicant could provide service if awarded support and whether it is reasonably capable of meeting the public interest obligations for its selected performance tier and latency combination(s) in its selected state(s).²⁸² If an applicant demonstrates that it is reasonably capable of meeting the public interest obligations for one or more selected tier and latency combinations in a state, the applicant will be deemed eligible to bid for those performance tier and latency combination(s) in that state.

120. If Commission staff, in its initial review, is unable to find that an applicant can reasonably be expected to meet the relevant public interest obligations based on the information submitted in its short-form application, Commission staff will deem the application incomplete, and the applicant will have an opportunity during the application resubmission period to submit additional information demonstrating that it meets this standard. Commission staff will notify the applicant that additional information is required to assess the applicant’s eligibility to bid for any or all of the specific states and performance tier and latency combinations selected in its short-form application. During the application resubmission period, an applicant would be able to submit additional information to establish its eligibility to bid for the relevant performance tier and latency combinations. An applicant would also have the option of selecting a lesser performance tier and latency combination for which it might be more technically qualified. We will consider this to be a permissible minor modification of the short-form application.²⁸³ Once the application resubmission period has ended, Commission staff will make its final determination of an applicant’s eligibility to bid for any or all of the specific states and performance tier and latency combinations selected in its application, and then notify each applicant in which states and for which performance tier and latency combinations it is eligible to bid.²⁸⁴ The bidding system will be

²⁸⁰ See, e.g., FBA Comments at 10; ADTRAN Reply at 6.

²⁸¹ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2311, paras. 53-55; *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1469-70, paras. 108-09.

²⁸² See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2311, para. 55 (explaining that for the CAF Phase II auction, this “standard of review and eligibility determination process facilitated consistent staff reviews, and by applying the standard and following the resubmission process, Commission staff was able to verify the qualifications of each applicant without imposing an undue burden on the applicant”).

²⁸³ See 47 CFR § 1.21001(d)(5).

²⁸⁴ A finding that an applicant is not reasonably capable of meeting the relevant public interest obligations would not necessarily mean that a potential bidder is incapable of meeting the public interest obligations. Instead, it would indicate that based on the totality of circumstances, it is more likely than not that the long-form application is not

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configured to permit a bidder to bid only in the state(s) and for the performance tier and latency combinations on which Commission staff deems it eligible to bid.

121. We disagree with commenters arguing that the process we have adopted for reviewing short-form applications is insufficient for making eligibility determinations for applicants proposing to use technologies for performance tier and latency combinations that have not yet been widely deployed.²⁸⁵ *First*, we have narrowed the situations in which applicants may bid in the Gigabit performance tier and for low latency. This change will improve the administrative efficiency of the short-form application review process..

122. *Second*, Commission staff is not making a definitive finding that the applicant will meet the public interest obligations.²⁸⁶ Such a finding would be impossible at the short-form application stage for any applicant without more information about exactly where the applicant will win support and how many locations it will serve.²⁸⁷ Moreover, such a review at the short-form stage or long-form stage would be unduly burdensome and potentially irrelevant. Although an applicant is required to conduct due diligence, it has several years to deploy its network and may change its plans as conditions on the ground or technology continue to evolve. Instead, the information we collect at the short-form application stage is designed to determine at a high level, and based on the totality of circumstances and the information submitted in the application that the applicant has developed a reasonable preliminary design or business case for meeting the public interest obligations for its selected performance tier and latency combinations and is thus expected to be reasonably capable of meeting those public interest obligations.

123. *Third*, we are confident that Commission staff will be able to review technologies consistently on a case-by-case basis without having to adopt additional standards or invite comment on

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qualified to meet the relevant public interest obligations. Such a finding would mean that it is not in the public interest to risk awarding support to an applicant that Commission staff believes is likely to default or be unable to fulfill its obligations.

²⁸⁵ See, e.g., FBA Comments at 9-11; USTelecom at 3-4; AT&T Comments at 4; NTCA Reply at 10-13, 15.

²⁸⁶ See, e.g., FBA Comments at 6 (claiming “[t]he Commission can only reach a conclusion about any network technology by examining an operational network under customer loads meeting the [Auction 904] performance requirements”); ADTRAN Reply at 4 (“[A]n applicant cannot make a valid demonstration of such capabilities without full deployment and under actual operating conditions, particularly because the performance requirements are not just speed and latency, but also include capacity, availability and robustness.”); FBA Reply at 7- 9 (“[I]f the Commission decides to rethink its proposed prohibition on fixed wireless providers bidding for the Gigabit tier, it should require that those providers demonstrate, through thorough engineering assessments using realistic operational models accounting for factors such as oversubscription and any relevant geographical obstacles applicable to the specific service area, that they, as a rule, will be able to provide service meeting the performance obligations.”); NTCA Comments at 12 (claiming that if the Commission decides to review nascent technologies on a case-by-case basis “it should apply that process equally across the board and require *all* applicants to submit upfront documentation along the lines of what NTCA has previously suggested before any applicant is qualified to bid”).

²⁸⁷ SpaceX Reply at 6 (“Because this auction targets areas currently unserved by any provider, [Commission] staff will have to make predictive judgments about whether that applicant can provide the performance it claims to a new location, whether or not an applicant has previously filed Form 477 data.”). Although we disagree with Space X’s advocacy on this point, we agree that the Commission will need to exercise predictive judgment about areas within our discretion and expertise when determining which applicants will be qualified to bid at which performance levels in Auction 904. Accordingly, our determinations in this regard will be entitled to deference. See *EarthLink, Inc. v. FCC*, 462 F.3d 1, 12 (D.C. Cir. 2006) (“[A]n agency’s predictive judgments about areas that are within the agency’s field of discretion and expertise are entitled to particularly deferential review, as long as they are reasonable.” (quoting *FCC v. WNCN Listeners Guild*, 450 U.S. 582, 594 (1981))).

applicants' proposals.²⁸⁸ Adopting generally-applicable standards and assumptions for the review that have been suggested in the record beyond those we have already adopted would be time-consuming and difficult given the fact-intensive nature of the review. Moreover, inviting comment on proposals would lead to delays in the review and the potential benefits of eliciting additional information that would be helpful for the review would be outweighed by the burdens of the process, particularly if entities that have a competitive interest in having certain entities excluded from the auction comment solely to prevent such entities' participation.²⁸⁹ Instead, we will implement the Commission's ordinary procedures for reviewing auction applications to help ensure that eligibility determinations are made consistently across all applications by, among other things, leveraging the expertise of engineers and/or other subject matter experts. Our eligibility decisions may result in more case-by-case reviews, but we do not expect such reviews would delay the auction.²⁹⁰

124. For the CAF Phase II auction, we explained that we would review applicants proposing to use nascent technologies on a case-by-case basis, and we did not experience an influx of such applications.²⁹¹ Indeed, the widespread success of winning bidders in the CAF Phase II auction in ultimately becoming authorized to receive support demonstrates the efficacy and value of the short-form application process. Moreover, an applicant must certify that it is technically qualified to meet the public interest obligations for each performance tier and latency combination and in each area for which it seeks support, and will be subject to a forfeiture if it is named as a winning bidder and defaults. Because we expect few applicants will be able to demonstrate they are reasonably capable of meeting the public interest obligations for higher performance tiers and low latency using technologies that have not been used in a widespread manner to offer such service, we do not expect an unmanageable increase in such applications. Finally, the date we have selected for bidding takes into account the procedures we have adopted herein, including the expected time to review applications. We have extensive experience in running auctions and a strong track record of managing resources to meet our expected auction timelines.

5. Due Diligence Certification

125. Each applicant has sole responsibility for investigating and evaluating all technical and marketplace factors that may have a bearing on the level of Rural Digital Opportunity Fund support for which it will seek to bid in Auction 904 if it becomes a qualified bidder. The Commission makes no representations or warranties about the use of this support for particular services. Each applicant should be aware that Auction 904 represents an opportunity to apply for Rural Digital Opportunity Fund support, subject to certain conditions and regulations. A Commission auction does not constitute an endorsement by the Commission of any particular service, technology, or product, nor does the award of Rural Digital Opportunity Fund support constitute a guarantee of business success.

126. An applicant should perform its due diligence research and analysis before proceeding, as it would with any new business venture. In particular, we encourage each potential bidder to perform technical and financial analyses and/or refresh its previous analyses to assure itself that, should it become a winning bidder for any Rural Digital Opportunity Fund support, it will be able to build and operate

²⁸⁸ See, e.g., FBA Comments at 9 (“[C]onducting case-by-case reviews, without definitive or published standards and without review of and the ability to comment on an applicant’s submissions, precludes any meaningful oversight of the evaluation process”).

²⁸⁹ SpaceX Reply at 6 (“In all cases, the Commission—not auction competitors—should make such decisions, and it should do so in the context of the information about the specific applicant.”).

²⁹⁰ *Contra* Letter from Michael R. Romano, Senior Vice President – Industry Affairs & Business Development, NTCA, to Marlene H. Dortch, Secretary, FCC, AU Docket No. 20-34 et al., at 1 (filed Apr. 27, 2020) (“Case-by-case review of specific technologies would also require significant Commission staff time and resources that could jeopardize an effort to meet the timelines previously set for the auction.”).

²⁹¹ *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1469, para. 106.

facilities that provide service to a particular area in accordance with the public interest obligations and the Commission's rules generally.

127. We also encourage each applicant in Auction 904 to continue to conduct its own research throughout the auction in order to determine the existence of pending or future administrative or judicial proceedings that might affect its decision on continued participation in the auction. Each applicant is responsible for assessing the likelihood of the various possible outcomes and for considering the potential impact on support available in an auction. The due diligence considerations mentioned in this Public Notice do not constitute an exhaustive list of steps that should be undertaken prior to participating in Auction 904. As always, the burden is on the potential bidder to determine how much research to undertake, depending upon the specific facts and circumstances related to its interests.

128. Applicants are solely responsible for identifying associated risks and for investigating and evaluating the degree to which such matters may affect their ability to bid on or otherwise receive Rural Digital Opportunity Fund support. Each potential bidder is responsible for undertaking research to ensure that any support won in this auction will be suitable for its business plans and needs. Each potential bidder must undertake its own assessment of the relevance and importance of information gathered as part of its due diligence efforts.

129. We make no representations or guarantees regarding the accuracy or completeness of information in our databases or any third-party databases, including, for example, court docketing systems. To the extent the Commission's databases may not include all information deemed necessary or desirable by an applicant, an applicant must obtain or verify such information from independent sources or assume the risk of any incompleteness or inaccuracy in said databases. Furthermore, we make no representations or guarantees regarding the accuracy or completeness of information that has been provided by outside entities and incorporated into our databases.

130. To confirm an applicant's understanding of its obligations, we require that each applicant make the following certification in its short-form application under penalty of perjury:

The applicant acknowledges that it has sole responsibility for investigating and evaluating all technical and marketplace factors that may have a bearing on the level of Rural Digital Opportunity Fund support it submits as a bid, and that if the applicant wins support, it will be able to build and operate facilities in accordance with the Rural Digital Opportunity Fund obligations and the Commission's rules generally.²⁹²

This certification will help ensure that an applicant acknowledges and accepts responsibility, if it becomes a qualified bidder, for its bids and any forfeitures imposed in the event of default, and that it will not attempt to place responsibility for the consequences of its bidding activity on either the Commission or any of its contractors.²⁹³

131. Moreover, this certification will help ensure that an applicant has conducted due diligence to provide service should it win support for an area that includes Tribal Lands.²⁹⁴ We encourage applicants to engage in outreach to Tribal entities as early as possible to ensure that no issues arise post-

²⁹² *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 725, para. 84.

²⁹³ *Id.* at 725, para. 85.

²⁹⁴ Accordingly, we see no need for the short-form application to include a specific question on Tribal engagement, *see* CPUC Comments at 4-7, particularly when at the time of the short-form application deadline, an applicant may not know the precise areas within a state in which it intends to bid. To the extent an applicant has entered into an agreement with any Tribal nation related to the participation of the applicant in Auction 904, such an agreement should be disclosed in the short-form application.

auction that may delay the authorization of support.²⁹⁵

6. Eligible Telecommunications Carrier Certification

132. An applicant must acknowledge in its short-form application that it must be designated as an ETC for the areas in which it will receive support prior to being authorized to receive support.²⁹⁶ Only ETCs designated pursuant to section 214(e) of the Communications Act of 1934, as amended (the Act) “shall be eligible to receive specific Federal universal service support.”²⁹⁷ Section 214(e)(2) gives states the primary responsibility for ETC designation.²⁹⁸ However, section 214(e)(6) provides that the Commission is responsible for processing requests for ETC designation when the service provider is not subject to the jurisdiction of any state commission.²⁹⁹ Support is disbursed only after the provider receives an ETC designation and satisfies the other long-form application requirements.

133. The Commission decided that an applicant need not already be an ETC as of the initial short-form application filing deadline for Auction 904, but that it must obtain a high-cost ETC designation for the areas covered by its winning bids within 180 days after being announced as a winning bidder.³⁰⁰ Long-form applicants subject to state jurisdiction must petition the relevant state commissions for ETC designation and should follow state rules and requirements to apply for designation(s).³⁰¹ Long-form applicants not subject to state jurisdiction must petition the Commission for designation(s) as described in the *Federal ETC Public Notice*.³⁰² As described in the public notice, the Commission places the burden of proof upon the petitioner seeking a Commission ETC designation to demonstrate that the Commission has jurisdiction.³⁰³ Such demonstration may be made through the submission of an affirmative statement from the relevant state commission declining jurisdiction. In addition, the Bureau will consider state legislation specifically declining jurisdiction over the type of service offered by the long-form applicant to be relevant.³⁰⁴ Petitioners seeking an ETC designation to serve Tribal lands may also petition the Commission directly so long as they have not initiated an ETC designation proceeding

²⁹⁵ See *Connect America Fund Phase II Auction Support for 105 Winning Bids Ready to Be Authorized*, Public Notice, DA 20-483, at 2 (WCB/OEA May x, 2020) (describing Viasat’s delay in obtaining its ETC designation for Tribal lands in Oregon).

²⁹⁶ 47 CFR § 54.804(a)(3). A Lifeline-only ETC designation is not sufficient, and the applicant must obtain a high-cost ETC designation in areas where it seeks to be authorized to receive Rural Digital Opportunity Fund support.

²⁹⁷ 47 U.S.C. § 254(e).

²⁹⁸ 47 U.S.C. § 214(e)(2); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 20 FCC Rcd 6371, 6397, para. 61 (2005).

²⁹⁹ 47 U.S.C. § 214(e)(6).

³⁰⁰ 47 CFR §§ 54.803(b), 54.804(b)(5); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 723, 727, paras. 81, 92. See also *infra* Section V.E (Documentation of ETC Designation) (describing how the Commission explained that in the event a long-form applicant is unable to obtain the necessary ETC designations within this timeframe, it would be appropriate to waive the 180-day timeframe if the bidder is able to demonstrate that it has engaged in good faith efforts to obtain an ETC designation, but the proceeding is not yet complete; and that the Commission will presume good faith if the long-form applicant files its ETC application with the state commission or the Commission as applicable within 30 days of the release of the Auction 904 closing public notice).

³⁰¹ 47 U.S.C. § 214(e)(2). *WCB Reminds Connect America Fund Phase II Auction Applicants of the Process for Obtaining a Federal Designation as an Eligible Telecommunications Carrier*, Public Notice, 33 FCC Rcd 6696 (WCB 2018) (*Federal ETC Public Notice*).

³⁰² 47 U.S.C. § 214(e)(6); *Federal ETC Public Notice*, 33 FCC Rcd 6696.

³⁰³ *Federal ETC Public Notice*, 33 FCC Rcd at 6696-97.

³⁰⁴ *Id.* at 6697.

before the relevant state commission.³⁰⁵ Petitioners taking this approach should verify that the intended service area is completely on Tribal lands. If not, the petitioner must petition the relevant state commission for waiver of the state's jurisdiction over the non-Tribal areas.

134. All applicants should be familiar with the requirements that are applicable to ETCs and conduct due diligence to ensure that they can meet the requirements.³⁰⁶ For example, each Auction 904 support recipient must offer Lifeline voice and broadband service throughout the eligible areas covered by its winning bids to qualifying low-income consumers pursuant to the Lifeline program rules.³⁰⁷ While an Auction 904 long-form applicant is not required to obtain an ETC designation that is limited only to the eligible census blocks covered by its winning bids, it may only use its Auction 904 support to offer the required voice and broadband services to locations in eligible census blocks. If an Auction 904 support recipient has obtained an ETC designation that covers more area than the eligible census blocks in its winning bids, that support recipient has the obligation to provide Lifeline services throughout its designated service area, including in areas where it cannot use its Auction 904 support.³⁰⁸ A high-cost ETC may also be subject to state-specific requirements imposed by the state that designates it as an ETC.

135. Additionally, ETCs must offer qualifying voice service using their own facilities, at least in part.³⁰⁹ The Commission has interpreted the term "facilities," for purposes of section 214(e) of the Act, to mean "any physical components of the telecommunications network that are used in the transmission or routing of the services designated for support under section 254(c)(1)."³¹⁰ As explained by the Commission, "a carrier need not offer universal service *wholly* over its own facilities in order to be designated as eligible because the statute allows an eligible carrier to offer the supported services through a combination of its own facilities and resale."³¹¹ Facilities are the ETC's "own" if the ETC has exclusive right to use the facilities to provide the supported services³¹² or when service is provided by any affiliate within the holding company structure.³¹³

³⁰⁵ See *Federal-State Joint Board on Universal Service et al.*, CC Docket No. 96-45, Twelfth Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking, 15 FCC Rcd 12208, 12268-69, para. 126 (2000); *Federal ETC Public Notice*, 33 FCC Rcd at 6697.

³⁰⁶ Our summary of various rules, orders, and public notices that describe certain obligations of a high-cost ETC is not comprehensive; nor is it intended to amend requirements that are applicable to ETCs. Each support recipient is responsible for conducting the due diligence required to comply with its ETC obligations.

³⁰⁷ See 47 CFR §§ 54.101(c), (d), 54.405(a); 47 CFR Subpart E; *Lifeline and Link Up Reform and Modernization et al.*, Third Report and Order et al., WC Docket No. 11-42 et al., 31 FCC Rcd 3962 (2016). When the requirement has been fully implemented, each Rural Digital Opportunity Fund support recipient will be required to bid on category one telecommunications and Internet access services in response to a posted FCC Form 470 seeking broadband service that meets the connectivity targets for the schools and libraries universal service support program (E-rate) for eligible schools and libraries located within any area in a census block where the ETC is receiving Rural Digital Opportunity Fund support. 47 CFR § 54.805(c). WCB has not yet adopted reasonable comparability benchmarks to implement this requirement.

³⁰⁸ For example, some Auction 904 support recipients may have obtained an ETC designation for an entire CBG(s) that was covered by its winning bid(s) but may only use its Auction 904 support to offer service to locations in the eligible census blocks within the CBG(s).

³⁰⁹ 47 U.S.C. § 214(e)(1)(A); 47 CFR § 54.101.

³¹⁰ *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8847, para. 128 (1997).

³¹¹ *Id.* at 8870, para. 169.

³¹² *Id.* at 8866, para. 160.

³¹³ *Connect America Fund et al.*, Report and Order, 29 FCC Rcd 15644, 15668, para. 62 n.143 (2014); see also 47 U.S.C. § 153(2) (defining an affiliate as "a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person").

136. An ETC satisfies its obligation to “offer” qualifying services by being legally responsible for dealing with customer problems, providing quality of service guarantees, and meeting universal service fund-related requirements.³¹⁴ Accordingly, a broadband provider may satisfy its voice obligation by offering voice service through an affiliate or by offering a managed voice solution (including VoIP) through a third-party vendor, but a provider cannot simply rely on the availability of over-the-top voice options to satisfy this obligation.³¹⁵

F. Procedures for Limited Disclosure of Application Information

137. Consistent with our proposals, we adopt procedures for limiting the application information that will be disclosed to the public.³¹⁶

138. Specifically, to help ensure anonymous bidding and to protect applicants’ competitively sensitive information, we will withhold from the public, as well as other applicants, the following information related to the short-form application process at least until the auction closes and the results are announced:

- The state(s) selected by an applicant.³¹⁷
- The state(s) for which the applicant has been determined to be qualified to bid.
- The performance tier and latency combination(s) selected by an applicant.
- The spectrum access attachment submitted with the short-form application.
- The performance tier and latency combination(s) for which the applicant has been determined to be eligible to bid and the associated weight for each combination.
- An applicant’s responses to the questions in Appendix A and any supporting documentation submitted in any attachment(s) that are intended to demonstrate an applicant’s ability to meet the public interest obligations for each performance tier and latency combination that the applicant has selected in its application.

³¹⁴ Cf. *Connect America Fund*, Report and Order, 28 FCC Rcd 7211, 7215, para. 9 (WCB 2013) (finding that it is not sufficient for a broadband provider to qualify as an “unsubsidized competitor” if a consumer must obtain voice service from a third party, because that broadband provider would not be offering a voice service) (*Phase II Challenge Process Order*).

³¹⁵ See *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 707-08, paras. 42-43 (requiring Rural Digital Opportunity Fund recipients to offer standalone voice); cf. *Phase II Challenge Process Order*, 28 FCC Rcd 7224, n.21 (explaining that a broadband provider would be considered to be providing voice service if it did so through an affiliated competitive local exchange company or through “a managed voice solution obtained from a third party vendor . . . so long as the broadband provider is the entity responsible for dealing with any customer problems, and it provides quality of service guarantees to end user customers”).

³¹⁶ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2328-29, paras. 132-37.

³¹⁷ Because the state(s) selected by an applicant is competitively sensitive information and to further our efforts to preserve anonymous bidding, we decline to adopt CPUC’s proposal that we collect and disseminate information regarding an applicant’s intent to collect state matching funds. See CPUC Comments at 8. In any event, a state commission could gather that information itself directly from the entities it regulates, provided that it protects the confidentiality of an applicant’s information.

- Any financial information contained in an applicant's short-form application for which the applicant has requested confidential treatment under the abbreviated process described below.
- An applicant's letter of interest from a qualified bank that the bank would provide a letter of credit to the applicant.³¹⁸

All other application information that is not subject to a request for confidential treatment under section 0.459 of the Commission's rules will be publicly available upon the release of the public notice announcing the status of submitted short-form applications after initial review.

139. As proposed, we will permit any applicant to use the abbreviated process under section 0.459(a)(4) to request confidential treatment of the financial information contained in its short-form application.³¹⁹ The abbreviated process allows all applicants to answer a simple "yes/no" question on FCC Form 183 as to whether they wish their information to be withheld from public inspection.³²⁰ We caution that we will not grant requests to withhold financial data that applicants elsewhere disclose to the public, and that information will be disclosed in the normal course.

140. Unlike the typical section 0.459 process, which requires that an applicant submit a statement of the reasons for withholding the information for which confidential treatment is sought from public inspection,³²¹ an applicant that seeks confidential treatment of the financial information contained in its short-form application need not submit a statement that conforms with the requirements of section 0.459(b) unless and until its request for confidential treatment is challenged.³²² Because we have found in other contexts that financial information that is not otherwise publicly available could be competitively sensitive,³²³ we permit applicants seeking confidential treatment of financial information to use this abbreviated process.

141. The section 0.459(a)(4) abbreviated process for requesting confidential treatment may *not* be used by an applicant to request confidential treatment of any information in its short-form application other than its financial information. Thus, an applicant that wishes to seek confidential treatment of any other portion(s) of its short-form application must file a regular section 0.459 request for confidential treatment of any such information with its short-form application (other than responses to the questions in Appendix A and associated supporting documentation and a letter of interest that we presume to be competitively sensitive).³²⁴ This request must include a statement of the reasons for withholding those portions of the application from public inspection.³²⁵ Additionally, in the event an applicant's abbreviated

³¹⁸ In CAF Phase II, a winning bidder's letter of credit from a qualified bank was treated as confidential trade secrets and/or commercial information and thus withheld from routine public inspection. *See Connect America Fund Phase II Auction Support for 962 Winning Bids Ready to Be Authorized; Listed Auction 903 Long-Form Applicants Must Submit Letters of Credit and Legal Counsel's Opinion Letters by March 13, 2019*, Public Notice, DA 19-126, at 2 (WCB/OEA Feb. 27, 2019). For the same reasons, we will withhold an applicant's letter of interest from a qualified bank.

³¹⁹ *See Auction 904 Comment Public Notice*, 35 FCC Rcd at 2329, para. 134; 47 CFR § 0.459(a)(4).

³²⁰ 47 CFR § 0.459(a)(4).

³²¹ *Id.* § 0.459(b).

³²² *Id.* § 0.459(a)(4). Section 0.459(b) of the Commission's rules cross-references section 0.459(a)(3), which the Commission redesignated as section 0.459(a)(4) in 2011. *See* FCC, Commission's Rules of Practice, Procedure, and Organization, 76 Fed. Reg. 24383 (May 2, 2011); *Modernizing the FCC Form 477 Data Program*, Report and Order, 28 FCC Rcd 9887, 9921, para. 79 (2013) (allowing for the request of confidentiality pursuant to a checkbox on the Form 477).

³²³ *Connect America Fund Fifth Reconsideration Order*, 27 FCC Rcd at 14554-56, paras. 15-17.

³²⁴ *See supra* paras. 73, 138.

³²⁵ 47 CFR § 0.459(b).

request for confidential treatment of the financial information contained in its short-form application is challenged, the applicant must submit a request for confidential treatment of its financial information that conforms with the requirements of section 0.459 within 10 business days after receiving notice of the challenge.

142. As proposed, after the close of bidding and announcement of auction results, we will make publicly available all short-form application information, except for an applicant's operational information, letter of interest, and confidential financial information.³²⁶

G. Prohibited Communications and Compliance with Antitrust Laws

143. To help protect competition in the auction, the Commission's rules prohibit an applicant from communicating certain auction-related information to another applicant from the auction short-form application filing deadline until the post-auction deadline for winning bidders to file long-form applications for support. More specifically, section 1.21002 of the Commission's rules prohibits an applicant in Auction 904 from cooperating or collaborating with any other applicant with respect to its own, or one another's, or any other competing applicant's bids or bidding strategies, and from communicating with any other applicant in any manner the substance of its own, or one another's, or any other competing applicant's bids or bidding strategies during the prohibition period.³²⁷ The rule's exception for communications between applicants that are members of a joint bidding arrangement shall not apply in Auction 904.³²⁸

144. This section provides guidance on the application of the rule during Auction 904 and clarifies certain aspects of the rule for prospective auction applicants.³²⁹ As in past auctions where similar suggestions have been made, we explain that the targeted restrictions imposed by the rule are necessary to serve the important public interest in a fair and competitive auction.³³⁰

1. Entities Covered by Section 1.21002

145. Section 1.21002's prohibition of certain communications will apply to any applicant that submits a short-form application to participate in Auction 904. This prohibition applies to all applicants that submit short-form applications regardless of whether such applicants become qualified bidders or actually bid in the auction.³³¹

³²⁶ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2329, para. 136.

³²⁷ 47 CFR § 1.21002.

³²⁸ *Id.* § 1.21002(b).

³²⁹ In relevant part, section 1.21002 is substantially the same as section 1.2105(c), which prohibits certain communications in the context of spectrum auctions. Therefore, precedent and guidance with respect to section 1.2105(c) is pertinent to our interpretation of section 1.21002.

³³⁰ See *Guidance Regarding the Prohibition of Certain Communications During the Incentive Auction, Auction 1000*, Public Notice, 30 FCC Rcd 10794 (WTB 2015) (*BIA Guidance*); *Mobility Fund Phase I Auction Scheduled for September 27, 2012; Notice and Filing Requirements and Other Procedures for Auction 901*, Public Notice, 27 FCC Rcd 4725, 4743-44, paras. 54-55 (WCB/WTB 2012) (discussing prohibition in competitive bidding for universal service support); *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Seventh Report and Order, 16 FCC Rcd 17546, 17551-52, para. 11 (2001) (explaining that "when one bidder is privy to a competing bidder's strategic bidding information . . . it may use such information to manipulate the auctions process and gain an unfair competitive advantage").

³³¹ See, e.g., *Star Wireless, LLC*, Forfeiture Order, 19 FCC Rcd 18626, 18628, para. 4 & n.19 (2004), *application for review granted in part sub nom. Star Wireless, LLC and Northeast Communications of Wisconsin, Inc.*, Order on Review, 22 FCC Rcd 8943 (2007) (*Star and Northeast Review Order*), *petition for review denied, Star Wireless, LLC v. FCC*, 522 F.3d 469 (D.C. Cir. 2008) (observing that Section 1.2105(c) applies to applicants regardless of whether they are qualified to bid); Letter from Margaret W. Wiener, Chief, Auctions and Industry Analysis Division, FCC, to Robert Pettit, Wiley, Rein & Fielding, 16 FCC Rcd 10080 (2000) (declining to exempt an

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146. An “applicant” for purposes of this rule includes the entity filing the application, each party capable of controlling the applicant, and each party that may be controlled by the applicant or by a party capable of controlling the applicant.³³²

147. All applicants applying to obtain support are “competing applicants” under the rule. Parties apply to participate in Auction 904 to obtain support from a fixed budget that is insufficient to provide support at the reserve price to all eligible areas. The bidding system determines which areas will receive support based on the bids placed for any areas. As in the reverse auction portion of the broadcast incentive auction and in Auction 903, applicants are competing with one another regardless of whether each seeks to serve different geographic areas with Rural Digital Opportunity Fund support.³³³

2. Prohibition Applies Until Long-Form Application Deadline

148. Section 1.21002’s prohibition of certain communications begins at the short-form application filing deadline and ends at the long-form application deadline. Long-form applications will be due within a specified number of days after release of the Auction 904 closing public notice.³³⁴

3. Scope of Prohibition of Communications

149. Section 1.21002 prohibits an applicant from communicating with another applicant with respect to “its own, or one another’s, or any other competing applicant’s bids or bidding strategies.”³³⁵ In addition to express statements of bids and bidding strategies, the prohibition against communicating “in any manner” includes public disclosures as well as private communications and indirect or implicit communications.³³⁶ Consequently, an applicant must take care to determine whether its auction-related communications may reach another applicant.³³⁷

150. Parties subject to section 1.21002 should take special care in circumstances where their officers, directors, and employees may receive information directly or indirectly relating to any applicant’s bids or bidding strategies. Such information may be deemed to have been received by the applicant under certain circumstances. For example, Commission staff have found that, where an individual serves as an officer and director for two or more applicants, the bids and bidding strategies of one applicant are presumed to be conveyed to the other applicant through the shared officer, which creates an apparent violation of the rule.³³⁸

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applicant’s controlling interest from coverage by the communication prohibitions of section 1.2105(c), even though the applicant never made an upfront payment for the auction and was not listed as a qualified bidder).

³³² 47 CFR § 1.21002(a).

³³³ See *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567, 6738, para. 400 (2014).

³³⁴ See *infra* Section V.B (Long-Form Application: Disclosures and Certifications).

³³⁵ 47 CFR § 1.21002(b).

³³⁶ See generally *2015 Part 1 Report and Order*, 30 FCC Rcd at 7577, para. 199; *Cascade Access, LLC*, Forfeiture Order, 28 FCC Rcd 141, 144, para. 7 (EB 2013) (rejecting argument that the communication was not prohibited because it did not reveal the “substance” of Cascade’s bids or bidding strategies).

³³⁷ We remind applicants that they must determine whether their communications with other parties are permissible under the rule once the prohibition begins at the deadline for submitting applications, even before the public notice identifying applicants is released.

³³⁸ See, e.g., Letter from Barbara A. Kreisman, Chief, Video Division, Media Bureau, and Margaret W. Wiener, Chief, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, FCC, to Colby M. May, TCCSA, Inc., d/b/a Trinity Broadcasting Network, 20 FCC Rcd 14648, 14648-49 (2005) (finding apparent violation of communication prohibitions of section 1.2105(c) where applicants with mutually exclusive applications reported

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151. A communication must convey “bids or bidding strategies” to be covered by the prohibition. The *Prohibited Communications Guidance Public Notice* released in advance of the broadcast incentive auction (Auction 1000) reviewed the scope of the prohibition generally, as well as in that specific auction’s forward auction of spectrum licenses and reverse auction to relinquish broadcast licenses.³³⁹ As the Commission explained therein, a communication conveying “bids or bidding strategies (including post-auction market structure)” must also relate to the “licenses being auctioned” in order to be covered by the prohibition.³⁴⁰ Thus, the prohibition is limited in scope and does not apply to all communications between or among the specified parties. The Commission consistently has made clear that application of the rule prohibiting communications has never required total suspension of essential ongoing business.³⁴¹ Entities subject to the prohibition may negotiate agreements during the prohibition period, provided that the communications involved do not relate both (1) to the eligible areas in the auction and (2) to bids or bidding strategies or post-auction market structure.³⁴²

152. Accordingly, neither business discussions and negotiations that are *unrelated* to Auction 904 nor those that do not convey information about the bids or bidding strategies of an applicant in Auction 904 or the post-auction market structure are prohibited by the rule.³⁴³ Not all auction-related information is covered by the prohibition. For example, communicating merely whether a party has or has not applied to participate in Auction 904 will not violate the rule.³⁴⁴ In contrast, communicating, among other things, how an applicant will participate, including specific states selected, specific bid amounts, and/or whether or not the applicant is placing bids, would convey bids or bidding strategies and would thus be prohibited.³⁴⁵

153. While section 1.21002 does not prohibit business discussions and negotiations among auction applicants that are not auction related, each applicant must remain vigilant not to communicate, directly or indirectly, information that affects, or could affect, bids or bidding strategies. Certain discussions might touch upon subject matters that could convey cost or geographic information related to bidding strategies. Such subject areas include, but are not limited to, management, sales, local marketing agreements, and other transactional agreements.

154. We caution applicants that bids or bidding strategies may be communicated outside of situations that involve one party subject to the prohibition communicating privately and directly with another such party. For example, the Commission has warned that prohibited “communications concerning bids and bidding strategies may include communications regarding capital calls or requests for additional funds in support of bids or bidding strategies to the extent such communications convey

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sharing same individual as an officer and director and reported having no bidding agreement, which under the rule then in effect would have made an exception to the prohibition applicable).

³³⁹ See generally *BIA Guidance*.

³⁴⁰ *BIA Guidance*, 30 FCC Rcd at 10806, para. 32.

³⁴¹ See, e.g., *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567, 6770-71, para. 492 (2014) (citing *Application of Todd Stuart Noordyk for a New FM Station on Channel 260A at Manistique, Michigan*, Memorandum Opinion and Order, 16 FCC Rcd 18113, 18116-17, para. 12 (2001) (“Our rules do not require the suspension of all relations among auction participants while an auction is pending.”)).

³⁴² *BIA Guidance*, 30 FCC Rcd at 10806, paras. 33-34.

³⁴³ *Id.* at 10806, para. 32.

³⁴⁴ *Id.* at 10796, paras. 6-7.

³⁴⁵ *Id.* at 10796-97, paras. 8-9.

information concerning the bids and bidding strategies directly or indirectly.”³⁴⁶ Moreover, the Commission found a violation of the rule against prohibited communications when an applicant used the Commission’s bidding system to disclose “its bidding strategy in a manner that explicitly invited other auction participants to cooperate and collaborate . . . in specific markets”³⁴⁷ and has placed auction participants on notice that the use of its bidding system “to disclose market information to competitors will not be tolerated and will subject bidders to sanctions.”³⁴⁸

155. Likewise, when completing a short-form application, each applicant should avoid any statements or disclosures that may violate section 1.21002, particularly considering the limited information procedures in effect for Auction 904. Specifically, an applicant should avoid including any information in its short-form application that might convey information regarding its state selection, such as referring to certain states or markets in describing agreements, including any information in attachments that will be publicly available that may otherwise disclose the applicant’s state selections, or, to the extent it has an alternative option, using applicant names that refer to states or locations within a state.³⁴⁹

156. Applicants also should be mindful that communicating non-public application or bidding information publicly or privately to another applicant may violate section 1.21002 even though that information subsequently may be made public during later periods of the application or bidding processes.

4. Communicating with Third Parties

157. Section 1.21002 does not prohibit an applicant from communicating bids or bidding strategies to a third party, such as a consultant or consulting firm, counsel, or lender. The applicant should take appropriate steps, however, to ensure that any third party it employs for advice pertaining to its bids or bidding strategies does not become a conduit for prohibited communications to other applicants, as that would violate the rule.³⁵⁰ For example, an applicant might require a third party, such as a lender, to sign a non-disclosure agreement before the applicant communicates any information regarding bids or bidding strategy to the third party.³⁵¹ Within third-party firms, separate individual employees, such as attorneys or auction consultants, may advise individual applicants on bids or bidding strategies, as long as such firms implement firewalls and other compliance procedures that prevent such individuals from communicating the bids or bidding strategies of one applicant to other individuals

³⁴⁶ *Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, Memorandum Opinion and Order, 9 FCC Rcd 7684, 7689, para. 12 (1994) (*Competitive Bidding Memorandum Opinion and Order*).

³⁴⁷ *Mercury PCS II, LLC*, Notice of Apparent Liability for Forfeiture, 12 FCC Rcd 17970, 17976, para. 17 (1997).

³⁴⁸ *Mercury PCS II, LLC*, Memorandum Opinion and Order, 13 FCC Rcd 23755, 23760, para. 11 (1998).

³⁴⁹ For example, if an existing ETC with a name that includes the state in which it operates wishes to apply, it need not necessarily change that name to avoid violating section 1.21002. However, to the extent that an existing entity wishes to apply through a new operating company, it should avoid using a location name for that new entity.

³⁵⁰ See, e.g., *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1479-80, para. 144; *BIA Guidance*, 30 FCC Rcd at 10798, para. 13 (describing the use of non-disclosure agreements and, for third parties that may be advising multiple covered parties, firewalls).

³⁵¹ *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1479, para. 144.

representing separate applicants.³⁵² Although firewalls and/or other procedures should be used, their existence is not an absolute defense to liability, if a violation of the rule has occurred.³⁵³

158. As the Commission explained in the *Auction 903 Procedures Public Notice*, in the case of an individual, the precautionary measure of a firewall is not available.³⁵⁴ As a result, an individual that is privy to bids or bidding information of more than one applicant presents a greater risk of engaging in a prohibited communication.³⁵⁵ We will take the same approach to interpreting the prohibited communications rule in Auction 904. We emphasize that whether a prohibited communication has taken place in each case will depend upon the totality of circumstances, including who possessed what information, what information was conveyed to whom, and the course of bidding in the auction.³⁵⁶

159. Separate Auction 904 applicants should not specify the same individual on their short-form applications to serve as an authorized bidder.³⁵⁷ A violation of section 1.21002 could occur if an individual acts as the authorized bidder for two or more applicants because a single individual may, even unwittingly, be influenced by the knowledge of the bids or bidding strategies of multiple applicants, in his or her actions on behalf of such applicants.³⁵⁸ Also, if the authorized bidders are different individuals employed by the same organization (e.g., a law firm, engineering firm, or consulting firm), a violation similarly could occur.³⁵⁹ In the latter case, at a minimum, applicants should certify on their applications that specific precautionary steps have been taken to prevent communication between authorized bidders, and that the applicant and its bidders will comply with section 1.21002.³⁶⁰

160. We remind potential applicants that they may discuss the short-form application or bids for specific eligible areas with the counsel, consultant, or expert of their choice *before* the short-form application deadline. Furthermore, the same third-party individual could continue to give advice after the short-form deadline regarding the application, provided that no information pertaining to bids or bidding strategies, including state(s) selected on the short-form application, is conveyed to that individual. With respect to bidding, the same third-party individual could, *before* the short-form application deadline, assist more than one potential applicant with calculating how much support the specific applicant would require to provide service in each eligible area for which it is interested in bidding.³⁶¹ If such work can be completed in advance of the short-form application deadline, it would eliminate the need for third-party bidding advice during the auction. Finally, to the extent potential applicants can develop bidding

³⁵² See *id.* at 1479-80, para. 144; *Application of Nevada Wireless*, Memorandum Opinion and Order, 13 FCC Rcd 11973, 11978, para. 12 (1998) (*Nevada Wireless Order*) (strongly encouraging applicants to implement any firewall procedures necessary and to provide information in their auction applications regarding the procedures).

³⁵³ See, e.g., *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1480, para. 144; *BIA Guidance*, 30 FCC Rcd at 10799, para. 14; *Nevada Wireless Order*, 13 FCC Rcd at 11978, para. 13.

³⁵⁴ *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1480, para. 145; see also *BIA Guidance*, 30 FCC Rcd at 10800, para. 15.

³⁵⁵ *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1480, para. 145.

³⁵⁶ *Id.*

³⁵⁷ Each applicant must specify at least one and up to three individuals (or authorized bidders) to place bids in the bidding system on behalf of the applicant. 47 CFR § 1.21001(b)(2).

³⁵⁸ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1480, para. 146; see also *BIA Guidance*, 30 FCC Rcd at 10800, para. 15.

³⁵⁹ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1480, para. 146; see also *Nevada Wireless Order*, 13 FCC Rcd at 11977-78, paras. 11-12.

³⁶⁰ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1480, para. 146; see also *Nevada Wireless Order*, 13 FCC Rcd at 11977-78, paras. 11-12.

³⁶¹ See AT&T Reply at 10-11.

instructions prior to the short-form deadline that a third party could implement without changes during bidding, the third party could follow such instructions for multiple applicants provided that those applicants do not communicate with the third party during the prohibition period.³⁶²

161. Applicants should use an abundance of caution in their dealings with other parties. This would include communications with public entities concerning state or federal loan or support programs.³⁶³ Applicants should also take care in any communications to members of the press, financial analysts, or others who might become conduits for the communication of prohibited bidding information.³⁶⁴ For example, even though communicating that it has applied to participate in the auction will not violate the rule, an applicant's statement to the press that it intends to stop bidding in the auction could give rise to a finding of a section 1.21002 violation.³⁶⁵ Similarly, an applicant's public statement of intent not to place bids during Auction 904 bidding could also violate the rule.

5. Section 1.21001(b)(4) Certification

162. By electronically submitting a short-form application, each applicant in Auction 904 certifies its compliance with sections 1.21001(b)(4) and 1.21002.³⁶⁶ In particular, an applicant must certify under penalty of perjury that the application discloses all real parties in interest to any agreements involving the applicant's participation in the competitive bidding for Rural Digital Opportunity Fund support.³⁶⁷ Also, the applicant must certify that it and all applicable parties have complied with and will continue to comply with 47 CFR § 1.21002.³⁶⁸

163. We caution, however, that merely filing a certifying statement as part of an application will not outweigh specific evidence that a prohibited communication has occurred, nor will it preclude the initiation of an investigation when warranted.³⁶⁹ The Commission has stated that it "intend[s] to scrutinize carefully any instances in which bidding patterns suggest that collusion may be occurring."³⁷⁰ Any applicant found to have violated section 1.21002(b) may be subject to sanctions.³⁷¹

6. Duty to Report Prohibited Communications

164. Section 1.21002(c) provides that any applicant that makes or receives a communication that appears to violate section 1.21002 must report such communication in writing to the Commission

³⁶² See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1482, para. 152; see also *BIA Guidance*, 30 FCC Rcd at 10802, para. 20.

³⁶³ To the extent state commissions seek information about an applicant's intent to participate in state matching fund programs, see CPUC Comments at 8, an applicant should ensure that any information it provides that may implicate the Commission's prohibited communications rule has appropriate confidentiality protections and that the state commission does not become, wittingly or not, a conduit of prohibited bidding information.

³⁶⁴ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1479, para. 142.

³⁶⁵ Cf. *Wireless Telecommunications Bureau Responds to Questions About the Local Multipoint Distribution Service Auction*, Public Notice, 13 FCC Rcd 341, 347-48 (WTB 1998) ("Public statements can give rise to collusion concerns. This has occurred in the antitrust context, where certain public statements can support other evidence which tends to indicate the existence of a conspiracy.").

³⁶⁶ 47 CFR §§ 1.21001(b)(4), 1.21002.

³⁶⁷ *Id.* § 1.21001(b)(4).

³⁶⁸ *Id.* §§ 1.21001(b)(5), 1.21002.

³⁶⁹ See *Nevada Wireless Order*, 13 FCC Rcd at 11978, para. 13.

³⁷⁰ *Competitive Bidding Memorandum Opinion and Order*, 9 FCC Rcd at 7689, para. 12.

³⁷¹ See, e.g., 47 CFR § 1.2109(d).

immediately, and in no case later than five business days after the communication occurs.³⁷² An applicant's obligation to make such a report continues until the report has been made.³⁷³

165. In addition, section 1.65 of the Commission's rules requires an applicant to maintain the accuracy and completeness of information furnished in its pending application and to notify the Commission of any substantial change that may be of decisional significance to that application.³⁷⁴ Thus, section 1.65 requires an Auction 904 applicant to notify the Commission of any substantial change to the information or certifications included in its pending short-form application. An applicant is therefore required by section 1.65 to report to the Commission any communication the applicant has made to or received from another applicant after the short-form application filing deadline that affects or has the potential to affect bids or bidding strategy.³⁷⁵

166. Sections 1.65(a) and 1.21002 of the Commission's rules require each applicant in competitive bidding proceedings to furnish additional or corrected information within five days of a significant occurrence, or to amend its short-form application no more than five days after the applicant becomes aware of the need for amendment.³⁷⁶ These rules are intended to facilitate the auction process by making information that should be publicly available promptly accessible to all participants and to enable OEA and the Bureau to act expeditiously on those changes when such action is necessary.³⁷⁷ We note that enforcement actions were initiated against two applicants in Auction 903 for failing to timely report communications that potentially violated the rule.³⁷⁸

7. Procedure for Reporting Prohibited Communications

167. A party reporting any prohibited communication pursuant to sections 1.65, 1.21001(b), or 1.21002(c) must take care to ensure that any report of the prohibited communication does not itself give rise to a violation of section 1.21002.³⁷⁹ For example, a party's report of a prohibited communication could violate the rule by communicating prohibited information to other applicants through the use of Commission filing procedures that allow such materials to be made available for public inspection.

168. Parties must file only a single report concerning a prohibited communication and must file that report with the Commission personnel expressly charged with administering the Commission's auctions.³⁸⁰ This rule is designed to minimize the risk of inadvertent dissemination of information in such reports. Any reports required by section 1.21002(c) must be filed consistent with the instructions set forth

³⁷² *Id.* § 1.21002(c); *see also Part 1 Seventh Report and Order*, 16 FCC Rcd at 17553-55, paras. 13-17.

³⁷³ 47 CFR § 1.21002(c).

³⁷⁴ *Id.* § 1.65.

³⁷⁵ *See Part 1 Seventh Report and Order*, 16 FCC Rcd at 17550-51, para. 9.

³⁷⁶ *Procedural Amendments to Commission Part 1 Competitive Bidding Rules*, Order, 25 FCC Rcd 521, 523, para. 8 (2010) (*Part 1 Procedural Amendments Order*).

³⁷⁷ *Id.*

³⁷⁸ *See AMG Technology Investment Group, LLC*, Notice of Apparent Liability for Forfeiture, 34 FCC Rcd 7649 (EB 2019) (proposing a forfeiture of \$100,000); *AT&T Services, Inc.*, Notice of Apparent Liability for Forfeiture, 34 FCC Rcd 7660 (EB 2019) (proposing a forfeiture of \$75,000).

³⁷⁹ 47 CFR §§ 1.65, 1.21001(b)(3)-(5), 1.21002.

³⁸⁰ *Part 1 Procedural Amendments Order*, 25 FCC Rcd at 522, para. 4. This process differs from filing procedures used in connection with other Commission rules and processes, which may call for submission of filings to the Commission's Office of the Secretary or ECFS. Filing through the Office of Secretary or ECFS could allow the report to become publicly available and might result in the communication of prohibited information to other auction applicants.

in this Public Notice.³⁸¹ For Auction 904, such reports must be filed with Jonathan Campbell, Chief of the Auctions Division, Office of Economics and Analytics, by the most expeditious means available. Any such report should be submitted by email to Mr. Campbell at the following email address: auction904@fcc.gov. If a report must be submitted in hard copy, any such report shall be delivered only to Jonathan Campbell, Chief, Auctions Division, Office of Economics and Analytics, Federal Communications Commission, 45 L St., NE, Washington, DC 20554.

169. Given the potential competitive sensitivity of public disclosure of information in such a report, a party seeking to report such a prohibited communication should consider submitting its report with a request that the report or portions of the submission be withheld from public inspection by following the procedures specified in section 0.459 of the Commission's rules.³⁸² We encourage such parties to coordinate with the Auctions Division staff about the procedures for submitting such reports.³⁸³

8. Winning Bidders Must Disclose Terms of Agreements

170. Each applicant that is a winning bidder may be required to disclose in its long-form application the specific terms, conditions, and parties involved in any agreement into which it has entered.³⁸⁴ This may apply to any bidding consortium, joint venture, partnership, or agreement, understanding, or other arrangement entered into relating to the competitive bidding process, including any agreement relating to the post-auction market structure. Failure to comply with the Commission's rules can result in enforcement action and sanctions.

9. Additional Information Concerning Prohibition of Certain Communications in Commission Auctions

171. A summary listing of Commission documents addressing the application of the prohibited communications rule is available on the Commission's auction web page at www.fcc.gov/summary-listing-documents-addressing-application-rule-prohibiting-certain-communications.³⁸⁵ Applicants utilizing these precedents should keep in mind the specific language of the rule applied in past decisions, as well as any differences in the context of the applicable auctions.

10. Antitrust Laws

172. Regardless of compliance with the Commission's rules, applicants remain subject to the antitrust laws, which are designed to prevent anticompetitive behavior in the marketplace.³⁸⁶ Compliance with the disclosure requirements of section 1.21002 will not insulate a party from enforcement of the

³⁸¹ *Id.*

³⁸² See 47 CFR § 0.459. Filers requesting confidential treatment of documents must be sure that the cover page of the filing prominently displays that the documents seek confidential treatment. For example, a filing might include a cover page stamped with "Request for Confidential Treatment Attached" or "Not for Public Inspection." Any such request must cover all the material to which the request applies. See *id.* § 0.459(a).

³⁸³ See *supra* Section VII (Contact Information).

³⁸⁴ See 47 CFR § 54.315(b)(2)(viii) (applicants for Phase II support will need to provide "[s]uch additional information as the Commission may require").

³⁸⁵ Note that this website is not intended to—and does not—include every Commission document, judicial opinion, or civil enforcement action that refers to the prohibition of certain communications in Commission auctions.

³⁸⁶ See *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Third Further Notice of Proposed Rulemaking, 14 FCC Rcd 21558, 21560-61, para. 4 & n.17 (1999) (quoting *Competitive Bidding Memorandum Opinion and Order*, 9 FCC Rcd at 7689, para. 12) ("[W]e wish to emphasize that all applicants and their owners continue to be subject to existing antitrust laws. Applicants should note that conduct that is permissible under the Commission's Rules may be prohibited by the antitrust laws."); *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, Fourth Memorandum Opinion and Order, 9 FCC Rcd 6858, 6869 n.134 (1994) ("[A]pplicants will also be subject to existing antitrust laws.") (*Fourth Memorandum Opinion and Order*).

antitrust laws.³⁸⁷ For instance, a violation of the antitrust laws could arise out of actions taking place well before any party submits a short-form application.³⁸⁸ The Commission has cited a number of examples of potentially anticompetitive actions that would be prohibited under antitrust laws: for example, actual or potential competitors may not agree to divide territories in order to minimize competition, regardless of whether they split a market in which they both do business, or whether they merely reserve one market for one and another market for the other.³⁸⁹

173. To the extent we become aware of specific allegations that suggest that violations of the federal antitrust laws may have occurred, we may refer such allegations to the United States Department of Justice for investigation.³⁹⁰ If an applicant is found to have violated the antitrust laws or the Commission's rules in connection with its participation in the competitive bidding process, it may be subject to a forfeiture and may be prohibited from participating further in Auction 904 and in future auctions, among other sanctions.³⁹¹

H. Red Light Rule

174. The Commission adopted rules, including a provision referred to as the "red light rule," that implement the Commission's obligation under the Debt Collection Improvement Act of 1996 governing the collection of debts owed to the United States, including debts owed to the Commission.³⁹² Under the red light rule, applications and other requests for benefits filed by parties that have outstanding debts owed to the Commission will not be processed.³⁹³ Applicants seeking to participate in Auction 904 are subject to the Commission's red light rule.³⁹⁴ Pursuant to the red light rule, unless otherwise expressly provided for, the Commission would withhold action on an application by any entity found to be delinquent in its debt to the Commission.³⁹⁵

175. Because robust participation is critical to the success of Auction 904, as in Auction 903, we find good cause to provide a limited waiver of the red light rule for any applicant seeking to participate in Auction 904 that is red-lighted for debt owed to the Commission at the time it timely files a short-form application.³⁹⁶ Specifically, a red-lighted applicant seeking to participate in Auction 904 will have until the close of the application resubmission filing window to pay any debt(s) associated with the red light. No further opportunity to cure will be allowed. If an applicant has not resolved its red light issue(s) by the close of the initial filing window, its application will be deemed incomplete. If the

³⁸⁷ See *Competitive Bidding Memorandum Opinion and Order*, 9 FCC Rcd at 7689, para. 12. See also Press Release, Dep't of Justice, Justice Department Sues Three Firms Over FCC Auction Practices (Nov. 10, 1998).

³⁸⁸ See, e.g., *Fourth Memorandum Opinion and Order*, 9 FCC Rcd at 6869 n.134.

³⁸⁹ *Id.*

³⁹⁰ See *Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, Second Report and Order, 9 FCC Rcd 2348, 2388, para. 226 (1994).

³⁹¹ See *id.*; 47 CFR § 1.2109(d).

³⁹² *Amendment of Parts 0 and 1 of the Commission's Rules; Implementation of the Debt Collection Improvement Act of 1996 and Adoption of Rules Governing Applications or Requests for Benefits by Delinquent Debtors*, Report and Order, 19 FCC Rcd 6540 (2004) (implementing Pub. L. No. 104-134, 110 Stat. 1321, 1358 (1996)) (*Debt Collection Report and Order*); 47 CFR Part 1, Subpart O.

³⁹³ 47 CFR § 1.1910(b)(2).

³⁹⁴ Parties familiar with spectrum license auctions should note that the stricter spectrum license application rules supersede the Commission's red light rules in the context of a spectrum license auction. See 47 CFR § 1.1902(f). No corresponding provision applies with respect to Auction 904, however. Accordingly, the Commission's standard red light rules will apply.

³⁹⁵ 47 CFR § 1.1910(b)(2).

³⁹⁶ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1486-87, para. 167; 47 CFR § 1.3.

applicant has not resolved its red light issue(s) by the close of the application resubmission window, Commission staff will immediately cease all processing of the applicant's short-form application, and the applicant will be deemed not qualified to bid in the auction. Because this waiver is limited, it does not waive or otherwise affect the Commission's right or obligation to collect any debt owed to the Commission by an Auction 904 applicant by any means available to the Commission, including set off, referral of debt to the United States Treasury for collection, and/or by red lighting other applications or requests filed by an Auction 904 applicant.

176. Potential applicants for Auction 904 should review their own records, as well as the Commission's Red Light Display System (RLD), to determine whether they owe any non-tax debt to the Commission and should try to resolve and pay any outstanding debt(s) prior to submitting a short-form application. The RLD enables a party to check the status of its account by individual FCC Registration Numbers (FRNs) and links other FRNs sharing the same Tax Identification Number (TIN) when determining whether there are outstanding delinquent debts. The RLD is available at <http://www.fcc.gov/redlight/>. Additional information is available at https://www.fcc.gov/debt_collection/.

177. Additionally, we recognize that an Auction 904 applicant may incur debt to the Commission after it files its short-form application and may fail to pay that debt when due. An applicant should note that the Commission will conduct additional red light checks prior to authorizing support. We therefore encourage qualified bidders to continue to review their own records as well as the RLD periodically during the auction and to resolve and pay all outstanding debts to the Commission as soon as possible. The Commission will not authorize any winning bidder to receive support until its red light issues have been resolved.

I. USF Debarment

178. The Commission's rules provide for the debarment of those convicted of or found civilly liable for defrauding the high-cost support program.³⁹⁷ Auction 904 applicants are reminded that those rules apply with equal force to high-cost support assigned by Auction 904.

J. Modifications to FCC Form 183

1. Only Minor Modifications Allowed

179. After the initial FCC Form 183 filing deadline, an Auction 904 applicant will be permitted to make only minor changes to its application consistent with the Commission's rules.³⁹⁸ Examples of minor changes include the deletion or addition of authorized bidders (to a maximum of three bidders) and the revision of addresses and telephone numbers of the applicant, its responsible party, and its contact person. Major modifications to an FCC Form 183 (e.g., adding a state in which the applicant intends to bid, certain changes in ownership that would constitute an assignment or transfer of control of the applicant, change in the required certifications, or change in applicant's legal classification that results in a change in control) will not be permitted after the initial FCC Form 183 filing deadline.³⁹⁹ If an amendment reporting changes is a "major amendment," as described in section 1.21001(d)(4), the major

³⁹⁷ 47 CFR § 54.8. *See also Modernizing Suspension and Debarment Rules*, Notice of Proposed Rulemaking, 34 FCC Rcd 11348 (2019) (proposing to adopt rules consistent with the Office of Management and Budget's Guidance for Governmentwide Debarment and Suspension (Nonprocurement)).

³⁹⁸ *See id.* § 1.21001(d)(5). Minor amendments include any changes that are not major, such as correcting typographical errors and supplying or correcting information as requested to support the certifications made in the application. *Id.*

³⁹⁹ *See id.* § 1.21001(d)(4).

amendment will not be accepted and may result in dismissal of the application.⁴⁰⁰

2. Duty to Maintain Accuracy and Completeness of FCC Form 183

180. Pursuant to section 1.65 of the Commission's rules, each applicant has a continuing obligation to maintain the accuracy and completeness of information furnished in a pending application, including a pending application to participate in the Auction 904.⁴⁰¹ Consistent with the requirements for our spectrum auctions, an applicant for Auction 904 must furnish additional or corrected information to the Commission within five business days after a significant occurrence, or amend its FCC Form 183 no more than five business days after the applicant becomes aware of the need for the amendment.⁴⁰² An applicant is obligated to amend its pending application even if a reported change may result in the dismissal of the application because it is subsequently determined to be a major modification.

3. Modifying an FCC Form 183

181. An entity seeking to participate in Auction 904 must file an FCC Form 183 electronically via the FCC's Auction Application System. During the initial filing window, an applicant will be able to make any necessary modifications to its FCC Form 183 in the Auction Application System. An applicant that has certified and submitted its FCC Form 183 before the close of the initial filing window may continue to make modifications as often as necessary until the close of that window; however, the applicant must re-certify and resubmit its FCC Form 183 before the close of the initial filing window to confirm and effect its latest application changes. After each submission, a confirmation page will be displayed stating the submission time and submission date.⁴⁰³

182. An applicant will also be allowed to modify its FCC Form 183 in the Auction Application System, except for certain fields,⁴⁰⁴ during the resubmission filing window and after the release of the public notice announcing the Auction 904 qualified bidders. During these times, if an applicant needs to make permissible minor changes to its FCC Form 183, or must make changes in order to maintain the accuracy and completeness of its application pursuant to sections 1.65, it must make the change(s) in the Auction Application System and then re-certify and re-submit its application to confirm and effect the change(s).

183. An applicant's ability to modify its FCC Form 183 in the Auction Application System will be limited between the closing of the initial filing window and the opening of the application resubmission filing window and between the closing of the resubmission filing window and the release of the public notice announcing the Auction 904 qualified bidders. During these periods, an applicant

⁴⁰⁰ Any change in control of an applicant—resulting from a merger, for example—will be considered a major modification, and the application will consequently be dismissed. Even if an applicant's FCC Form 183 is dismissed, the applicant would remain subject to the communication prohibitions of section 1.21002 until the long-form application filing deadline, which will be established after the auction closes.

⁴⁰¹ See 47 CFR § 1.65. For purposes of section 1.65, an applicant's FCC Form 183 and associated attachments will remain pending until the release of a public notice announcing the close of Auction 904. We remind Auction 904 applicants that they remain subject to the section 1.21002 prohibition of certain communications until the post-auction deadline for filing long-form applications for winning bids. An applicant's post-auction long-form application (FCC Form 683) is considered pending from the time it is accepted for filing by the Commission until a Commission grant or denial of the long-form application is no longer subject to reconsideration by the Commission or to review by any court. See 47 CFR § 1.65(a).

⁴⁰² See 47 CFR §§ 1.65; 1.2105(b)(4). We remind each applicant of its duty to continuously maintain the accuracy of information submitted in its auction application. See, e.g., *Vermont Telephone Company, Inc.*, Notice of Apparent Liability for Forfeiture, 26 FCC Rcd 14130, 14134, para. 11 (EB 2011).

⁴⁰³ We advise applicants to retain a copy of this confirmation page.

⁴⁰⁴ Specifically, an applicant will not be allowed to modify electronically in the Auction Application System the applicant's legal classification, the applicant's name, or the certifying official.

will be able to view its submitted application, but it will be permitted to modify only the applicant's address, responsible party address, and contact information (e.g., name, address, telephone number, etc.) in the Auction Application System. An applicant will not be able to modify any other pages of the FCC Form 183 in the Auction Application System during these periods. If, during these periods, an applicant needs to make other permissible minor changes to its FCC Form 183, or changes to maintain the accuracy and completeness of its application pursuant to section 1.65, the applicant must submit a letter briefly summarizing the changes to its FCC Form 183 via email to auction904@fcc.gov. The email summarizing the changes must include a subject line referring to Auction 904 and the name of the applicant, for example, "Re: Changes to Auction 904 Auction Application of XYZ Corp." Any attachments to the email must be formatted as Adobe® Acrobat® (PDF) or Microsoft® Word documents. An applicant that submits its changes in this manner must subsequently modify, certify, and submit its FCC Form 183 application electronically in the Auction Application System once it is again open and available to applicants.

184. Applicants should also note that even at times when the Auction Application System is open and available to applicants, the system will not allow an applicant to make certain other permissible changes itself (e.g., correcting a misstatement of the applicant's legal classification).⁴⁰⁵ If an applicant needs to make a permissible minor change of this nature, it must submit a written request by email to auction904@fcc.gov, requesting that the Commission manually make the change on the applicant's behalf. Once Commission staff has informed the applicant that the change has been made in the Auction Application System, the applicant must then recertify and resubmit its FCC Form 183 in the Auction Application System to confirm and effect the change(s).

185. As with filing the FCC Form 183, any amendment(s) to the application and related statements of fact must be certified by an authorized representative of the applicant with authority to bind the applicant. Applicants should note that submission of any such amendment or related statement of fact constitutes a representation by the person certifying that he or she is an authorized representative with such authority and that the contents of the amendment or statement of fact are true and correct.

186. Applicants must not submit application-specific material through the Commission's Electronic Comment Filing System. Further, parties submitting information related to their applications should use caution to ensure that their submissions do not contain confidential information or communicate information that would violate section 1.21002 or the limited information procedures adopted for Auction 904. An applicant seeking to submit, outside of the Auction Application System, information that might reflect non-public information, such as an applicant's state and/or performance tier and latency selection(s) or specific information about bid(s), should consider including in its email a request that the filing or portions of the filing be withheld from public inspection until the end of the prohibition of certain communications pursuant to section 1.21002.

187. Questions about FCC Form 183 amendments should be directed to the Auctions Division at (202) 418-0660 or auction904@fcc.gov.

III. PREPARING FOR BIDDING IN AUCTION 904

A. Bidder Education

188. Prior to the deadline for applications to participate in Auction 904, detailed educational information will be provided in various formats to would-be participants. Specifically, we direct OEA, in conjunction with the Bureau, to provide various materials on the pre-bidding processes in advance of the opening of the short-form application window, beginning with the release of step-by-step instructions for completing the FCC Form 183. In addition, OEA will provide an online application procedures tutorial

⁴⁰⁵ This is the case because certain fields on the FCC Form 183 will no longer be available to/changeable by the applicant after the initial filing window closes.

for the auction covering information on pre-bidding preparation, completing short-form applications, and the application review process.

189. In advance of the start of the mock auction, OEA will provide educational materials on the bidding processes for Auction 904, beginning with release of a user guide for the bidding system and bidding system file formats, followed by an online bidding procedures tutorial. We recognize the importance of these materials to applicants' and bidders' comprehension of the bidding procedures we adopt herein. Accordingly, the educational materials will be released as soon as reasonably possible to provide potential applicants and bidders with time to understand them and ask any questions before having to make material decisions about their participation in the auction.

190. We believe that parties interested in participating in Auction 904 will find the interactive, online tutorials an efficient and effective way to further their understanding of the application and bidding processes. The online tutorials will allow viewers to navigate the presentation outline, review written notes, listen to audio of the notes, and search for topics using a text search function. Additional features of this web-based tool include links to auction-specific Commission releases, email links for contacting Commission staff, and screen shots of the online application and bidding systems. The online tutorials will be accessible in the Education section of the Auction 904 website at www.fcc.gov/auction/904. Once posted, the tutorials will be accessible at any time.

191. Finally, as proposed, the Commission's Office of Communications Business Opportunities will engage with small providers interested in the auction process.⁴⁰⁶

B. Short-Form Applications: Due Before 6:00 p.m. EDT on July 15, 2020

192. In order to be eligible to bid in this auction, applicants must first follow the procedures to submit a short-form application (FCC Form 183) electronically via the Auction Application System, following the instructions set forth in the FCC Form 183 Instructions. This short-form application will become available with the opening of the initial filing window and must be submitted **prior to 6:00 p.m. EDT on July 15, 2020**. Late applications will not be accepted. No application fee is required.

193. Applications may be filed at any time beginning at noon EDT on July 1, 2020, until the filing window closes at 6:00 p.m. EDT on July 15, 2020. Applicants are strongly encouraged to file early and in advance of the deadline. Applicants are responsible for allowing adequate time for filing their applications. There are no limits or restrictions on the number of times an application can be updated or amended until the filing deadline on July 15, 2020.

194. An applicant must always click on the CERTIFY & SUBMIT button on the "Certify & Submit" screen to successfully submit its FCC Form 183 and any modifications; otherwise, the application or changes to the application will not be received or reviewed by Commission staff. Additional information about accessing, completing, and viewing the FCC Form 183 will be provided in a separate public notice. Applicants requiring technical assistance should contact FCC Auctions Technical Support at (877) 480-3201, option nine; (202) 414-1250; or (202) 414-1255 (text telephone (TTY)); hours of service are Monday through Friday, from 8:00 a.m. to 6:00 p.m. EDT. In order to provide better service to the public, all calls to Auctions Technical Support are recorded.

C. Application Processing and Minor Modifications

1. Public Notice of Applicant's Initial Application Status and Opportunity for Minor Modifications

195. After the deadline for filing auction applications, the Commission will process all timely submitted applications to determine whether each applicant has complied with the application requirements and provided all information concerning its qualifications for bidding, and subsequently will

⁴⁰⁶ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2315, para. 66.

issue a public notice with applicants' initial application status identifying (1) those that are complete and (2) those that are incomplete or deficient because of defects that may be corrected. The public notice will include the deadline for resubmitting corrected applications and a paper copy will be sent to the contact address listed in the FCC Form 183 for each applicant by overnight delivery. In addition, each applicant with an incomplete application will be sent information on the nature of the deficiencies in its application, along with the name and phone number of a Commission staff member who can answer questions specific to the application.

196. After the initial application filing deadline on July 15, 2020, applicants can make only minor modifications to their applications.⁴⁰⁷ Major modifications (e.g., change control of the applicant, change the certifying official, or selecting additional states in which to bid) will not be permitted.⁴⁰⁸ After the deadline for resubmitting corrected applications, an applicant will have no further opportunity to cure any deficiencies in its application or provide any additional information that may affect Commission staff's ultimate determination of whether and to what extent the applicant is qualified to participate in Auction 904.

197. Commission staff will communicate only with an applicant's contact person or certifying official, as designated on the applicant's FCC Form 183, unless the applicant's certifying official or contact person notifies Commission staff in writing that another representative is authorized to speak on the applicant's behalf.⁴⁰⁹ Authorizations may be sent by email to auktion904@fcc.gov.

2. Public Notice of Applicant's Final Application Status

198. After Commission staff review resubmitted applications, OEA will release a public notice identifying applicants that have become qualified bidders. The *Auction 904 Qualified Bidders Public Notice* will be issued before bidding in Auction 904 begins. Qualified bidders are those applicants with submitted FCC Form 183 applications that are deemed timely filed and complete.

D. Auction Registration

199. All qualified bidders are automatically registered for the auction. Registration materials will be distributed prior to the auction by overnight delivery. The mailing will be sent only to the contact person at the contact address listed in the FCC Form 183. The mailing will include the SecurID® tokens that will be required to place bids and the Auction Bidder Line phone number.

200. Qualified bidders that do not receive this registration mailing will not be able to submit bids. Therefore, any qualified bidder that has not received this mailing by noon on October 21, 2020, should call the Auctions Hotline at (717) 338-2868. Receipt of this registration mailing is critical to participating in the auction, and each applicant is responsible for ensuring it has received all the registration materials.

201. If SecurID® tokens are lost or damaged, only a person who has been designated as an authorized bidder, the contact person, or the certifying official on the applicant's short-form application may request replacements. To request replacement of these items, call the Auction Bidder Line at the telephone number provided in the registration materials or the Auction Hotline at (717) 338-2868.

⁴⁰⁷ See *supra* Section II.J (Modifications to FCC Form 183).

⁴⁰⁸ 47 CFR § 1.2105(b); see also *Two Way Radio of Carolina, Inc.*, Memorandum Opinion and Order, 14 FCC Rcd 12035, 12039, para. 8 (1999).

⁴⁰⁹ In no event, however, will the Commission send auction registration materials to anyone other than the contact person listed on the applicant's FCC Form 183 or respond to a request for replacement registration materials from anyone other than the authorized bidder, contact person, or certifying official listed on the applicant's FCC Form 183. See *infra* Section III.D (Auction Registration).

E. Remote Electronic Bidding via the Rural Digital Opportunity Fund Bidding System

202. Bidders will be able to participate in Auction 904 over the Internet using the Rural Digital Opportunity Fund Bidding System.⁴¹⁰ Only qualified bidders are permitted to bid. Each authorized bidder must have his or her own SecurID® token, which the Commission will provide at no charge. Each applicant with one authorized bidder will be issued two SecurID® tokens, while applicants with two or three authorized bidders will be issued three tokens. A bidder cannot bid without his or her SecurID tokens. For security purposes, the SecurID® tokens and a telephone number for bidding questions are only mailed to the contact person at the contact address listed on the FCC Form 183. Each SecurID® token is tailored to a specific auction. SecurID® tokens issued for other auctions or obtained from a source other than the FCC will not work for Auction 904. Please note that the SecurID® tokens can be recycled and we encourage bidders to return the tokens to the FCC. Pre-addressed envelopes will be provided to return the tokens once the auction has ended.

203. The Commission makes no warranties, and shall not be deemed to have made any warranties, with respect to the bidding system, including any implied warranties of merchantability or fitness for a particular purpose. In no event shall the Commission, or any of its officers, employees, or agents, be liable for any damages (including, but not limited to, loss of business profits, business interruption, loss of use, revenue, or business information, or any other direct, indirect, or consequential damages) arising out of or relating to the existence, furnishing, functioning, or use of the bidding system. Moreover, no obligation or liability will arise out of the Commission's technical, programming, or other advice or service provided in connection with the bidding system.

204. To the extent an issue arises with the bidding system itself, the Commission will take all appropriate measures to resolve such issues quickly and equitably. Should an issue arise that is outside the bidding system or attributable to a bidder, including, but not limited to, a bidder's hardware, software, or Internet access problem that prevents the bidder from submitting a bid prior to the end of a round, the Commission shall have no obligation to resolve or remediate such an issue on behalf of the bidder. Similarly, if an issue arises due to bidder error using the bidding system, the Commission shall have no obligation to resolve or remediate such an issue on behalf of the bidder. Accordingly, after the close of a bidding round, the results of bid processing will not be altered absent evidence of a failure in the bidding system.

F. Mock Auction

205. All qualified bidders will be eligible to participate in a mock auction, which will begin on October 26, 2020. The mock auction will enable qualified bidders to become familiar with the bidding system and to practice submitting bids prior to the auction. We strongly recommend that all qualified bidders, including all their authorized bidders, participate in the mock auction to ensure that they can log in to the bidding system and gain experience with the bidding procedures. Participating in the mock auction may reduce the likelihood of a bidder making a mistake during the auction. Details regarding the mock auction will be announced in the *Auction 904 Qualified Bidders Public Notice*.

⁴¹⁰ In this Public Notice, the Rural Digital Opportunity Fund Bidding System is also referred to as the "bidding system." Telephonic bidding will not be available for Auction 904 because it would not be feasible given the number of eligible geographic areas and the manner in which bids will be uploaded. The Auction Bidder Line will be available during the mock auction and actual auction for bidder questions. The Auction Bidder Line telephone number will be supplied in the registration materials sent to each qualified bidder.

IV. BIDDING IN AUCTION 904

A. Auction Structure: Reverse Auction Mechanism

1. Multi-Round Reverse Auction Format

206. As determined in the *Rural Digital Opportunity Fund Order*, we will conduct Auction 904 using a multi-round, descending clock auction.⁴¹¹ To implement the auction, we generally adopt our proposed bidding procedures, and we address issues on which we sought comment in the *Auction 904 Comment Public Notice*.⁴¹²

207. At a very high level, bidding in Auction 904 will work as follows: In each round of the auction, a bidder will be asked whether it is willing to provide service to an area, at a performance tier and latency it indicates, in exchange for a support amount that is at least as high as an amount announced by the bidding system. In each subsequent round, the announced support amount will be less than the amount from the previous round. To the extent that the bidder is willing to accept the announced amount, it will so indicate by submitting a “bid” on a spreadsheet indicating the area, the tier and latency, and the current amount that it accepts. If the current round’s announced support amount becomes too low for the bidder, the bidder can simply stop bidding for the area or, alternatively, can enter a bid that indicates the lowest amount it will accept (an amount higher than the round’s announced amount and lower than the last round’s announced amount) in exchange for providing the service.⁴¹³

208. As set forth in the sections below, the announced support amount to which the bidder responds in a round depends on a percentage—applicable to bidding for all areas—as well as the reserve price for the specific area and the level of service that the bidder proposes to provide if it is assigned support for the area. These factors are linked through a formula. The bidding template—the spreadsheet—will show the support amount for a bid as well as the various factors determining that support amount in a given bidding round. Therefore, to bid effectively, a bidder need only determine the lowest amount of support it will accept in exchange for providing service to an area and bid for support that is at least that amount.

209. In adopting the bidding procedures set forth below, we are mindful of the need to make the bidding process as simple as possible, while ensuring an orderly, fair, and transparent auction. To this end, we will provide ample bidder education prior to the auction to help ensure that all potential auction participants are confident in the bidding procedures we adopt.

2. Minimum Geographic Area for Bidding

210. We will use CBGs containing one or more eligible census blocks as the minimum biddable area in the auction.⁴¹⁴ In March 2020, the Bureau released a preliminary list of eligible census blocks based on June 30, 2019 FCC Form 477 data.⁴¹⁵ This list included just under 858,000 eligible census blocks, which are located in just under 65,000 CBGs. The Bureau will release a revised map and list of eligible census blocks.

⁴¹¹ See *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 694-95, para. 18.

⁴¹² Several commenters indicate that they support our proposed procedures. See Canadian Valley Comments at 3; GeoLinks Comments at 6; NRECA/UTC Comments at 3.

⁴¹³ As addressed below, the bidding process can be simplified further if the bidder wishes to enter its “bottom-line support amount” early in the auction, instructing the auction system to enter a proxy bid automatically in each round, without bidding lower than the bidder’s lowest acceptable support amount. See *infra* Section IV.B.3.f (Bids Placed by Proxy Bidding Instructions).

⁴¹⁴ See *supra* Section I.E (Eligible Areas).

⁴¹⁵ See *Auction 904 Preliminary Eligible Areas Public Notice*.

3. Auction Delay, Suspension, or Cancellation

211. By announcement in the bidding system, the auction may be delayed, suspended, or cancelled in the event of natural disaster, technical obstacle, network disruption, evidence of an auction security breach or unlawful bidding activity, administrative or weather necessity, or for any other reason that affects the fair and efficient conduct of the competitive bidding.⁴¹⁶ In such cases, OEA and the Bureau, in their sole discretion, may elect to resume the auction starting from the point at which the auction was suspended or cancel the auction in its entirety.

B. Bidding Procedures

1. Bidding Overview

212. We will use a descending clock auction to identify (1) the areas that will receive Rural Digital Opportunity Fund support; (2) the provider that will be assigned to receive support in each such area; and (3) the amount of support that each winning bidder will be eligible to receive, subject to post-auction application review.⁴¹⁷ In the *Rural Digital Opportunity Fund Order*, we concluded that bids for different areas at specified performance tier and latency levels will be compared to each other based on the percentage each bid represents of their respective areas' reserve prices; however, once the budget has cleared, we will prioritize bids with lower tier and latency weights.⁴¹⁸ We also direct OEA, in conjunction with the Bureau, to release a guide that provides further technical and mathematical detail regarding the bidding, assignment, and support amount determination procedures adopted here.

213. The auction will be conducted over the Internet, and bidders will upload bids in a specified file format for processing by the bidding system. The bidding system will announce a clock percentage before each round. The clock percentage is used to delimit the range of acceptable bid percentages in each round of the auction and as a common unit to compare bids for different performance tiers and latencies, which were assigned weights ("T+L weights") in the *Rural Digital Opportunity Fund Order*.⁴¹⁹

214. The clock percentage will begin at a high level, as proposed, implying a support amount that is equal to or close to the full reserve price, even for bids at the largest T+L weight, and descend from one round to the next. In a round, a bidder can submit a bid for a given area at a specified performance tier and latency combination at any percentage that is greater than or equal to the round's clock percentage and less than the previous round's clock percentage. A bid indicates that the bidder is willing to provide service to the area that meets the specified performance tier and latency requirements in exchange for support that is no less than the support amount implied by the bid percentage.

215. The clock percentage will continue to descend in a series of bidding rounds, implying diminishing support amounts, until the aggregate amount of requested support represented by the bids placed in a round at the clock percentage is no greater than the budget. At that point, when the budget "clears," the bidding system will begin to assign support, prioritizing bids with lower T+L weights according to the bid processing procedures we adopt. Bidding will continue for areas that were bid at the round's clock percentage and have not been assigned, and the clock will continue to descend in subsequent rounds. When there is no longer competition for any area, the auction will end. Because of

⁴¹⁶ See generally 47 CFR § 1.2104(i).

⁴¹⁷ Before a winning bidder can receive support, the bidder will need to submit a long-form application and letter of credit and obtain an ETC designation in the relevant areas. Commission staff will evaluate the information submitted to determine whether an applicant is reasonably capable of meeting the relevant Rural Digital Opportunity Fund auction obligations in the specific areas where it has been selected as a winning bidder.

⁴¹⁸ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 695-96, paras. 20-21.

⁴¹⁹ *Id.* at 705-06, paras. 38-39.

the second-price rule, a winning bidder will be assigned support in amounts at least as high as the support amounts corresponding to its bid percentages.

216. The bidding procedures we proposed and adopt for Auction 904 are similar to those used in the CAF Phase II auction, but with several modifications. As adopted in the *Rural Digital Opportunity Fund Order*, once the budget has cleared, the bid processing procedures will prioritize bids with lower T+L weights.⁴²⁰ In implementing this decision, we adopt our proposal to require all areas within a package bid to be bid at the same T+L weight. We also set a maximum amount of aggregate implied support for which a single bidder may bid in a round, and we set that limit at 100% of the Rural Digital Opportunity Fund budget, as proposed. Also as proposed, the bidding system will consider bids submitted at the clock percentage of the previous round if bid processing procedures in the clearing round cannot assign the full budget to bids submitted in the clearing round.⁴²¹ Finally, we will disclose after each round the lowest T+L weight in each bidding area that has at least one bid at the prior round's clock percentage, implementing and expanding on a modification to the proposed bidder information procedures on which we sought comment.⁴²²

2. Reserve Prices

217. In the *Rural Digital Opportunity Fund Order*, we decided to use the CAM to set reserve prices for the Rural Digital Opportunity Fund Phase I auction; that the reserve price for each CBG will be no greater than the CAM-calculated support amount for the eligible census blocks in the CBG; and that a cap will be imposed in the amount of support per location provided to extremely high-cost census blocks.⁴²³ For high-cost census blocks, the CAM calculates a reserve price equal to the cost-per-location for all locations in the census block minus the funding threshold of \$40.00 per location, or \$30.00 per location in Tribal areas or areas lacking 10/1 Mbps.⁴²⁴ For extremely high-cost census blocks, support-per-location is capped at \$212.50, or \$222.50 in Tribal areas or areas lacking 10/1.⁴²⁵

3. Bid Collection

a. Round Structure

218. Auction 904 will consist of sequential bidding rounds according to an announced schedule providing the start time and closing time of each bidding round. As proposed and as is typical for Commission auctions, we retain the discretion to change the bidding schedule—with advance notice to bidders—in order to foster an auction pace that reasonably balances speed with giving bidders sufficient time to study round results and adjust bidding strategies. OEA may modify the amount of time for bidding rounds, the amount of time between rounds, or the number of rounds per day, depending on bidding activity and other factors.

b. Clock Percentages and Implied Support Amounts Based on Performance Tier and Latency Weights

219. Under the descending clock auction format that we use, the clock will be denominated in terms of a percentage, which will be decremented for each round. To determine the annual support

⁴²⁰ *Id.* at 695-96, paras. 20-21.

⁴²¹ This bidding procedure to consider bids submitted at the clock percentage of the previous round is responsive to comments received in the proceeding to establish the Rural Digital Opportunity Fund asserting that certain competitive bidding procedures should be more stringent than for the CAF Phase II auction to discourage behavior that is arguably anti-competitive. *Id.* at 697, para. 22 n.62.

⁴²² See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2328, para. 131.

⁴²³ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 693-94, 697-701, paras. 15-16, 23-28.

⁴²⁴ *Id.* at 693-94, 697-98, 699-701 paras. 15-16, 23, 27-28.

⁴²⁵ *Id.*

amount for an area implied at each percentage, the percentage is adjusted for the T+L weight of the bid and multiplied by the reserve price of the area, as in the formula set forth below. This approach is consistent with previous Commission decisions regarding Auction 904.

220. As determined in the *Rural Digital Opportunity Fund Order*, the bidding system will accept bids for four performance tiers with varying speed and usage allowances and, for each performance tier, will provide for bids at either high or low latency.⁴²⁶ All bids will be considered simultaneously so that bidders proposing varying performance standards will compete directly against each other for the limited Rural Digital Opportunity Fund budget, but with an assignment preference for bids with lower T+L weights once the budget has cleared.⁴²⁷ Also, as decided in the *Rural Digital Opportunity Fund Order*, bidders will bid for support expressed as a percentage of an area’s reserve price.⁴²⁸

221. In the *Rural Digital Opportunity Fund Order*, we adopted weights to compare bids for the different performance tiers and latency combinations.⁴²⁹ We determined that Minimum performance tier bids will have a 50 weight; Baseline performance tier bids will have a 35 weight; Above Baseline performance tier bids will have a 20 weight; and Gigabit performance tier bids will have zero weight.⁴³⁰ Moreover, high-latency bids will have a 40 weight and low latency bids will have zero weight added to their respective performance tier weight. The lowest possible weight for a performance tier and latency is 0, and the highest possible weight is 90. Each weight uniquely defines a performance tier and latency combination, as shown in the table below.

Weights for Performance Tiers and Latencies							
Minimum		Baseline		Above Baseline		Gigabit	
High Latency	Low Latency	High Latency	Low Latency	High Latency	Low Latency	High Latency	Low Latency
90	50	75	35	60	20	40	0

222. The clock percentage in each round will imply a total amount of annual support in dollars for each area available for bidding, based on the area’s reserve price and the T+L weight specified in the bid. The annual support amount implied at the clock percentage will be the smaller of the reserve price and the annual support amount obtained by using a formula that incorporates the T+L weights.⁴³¹ Specifically:

⁴²⁶ *Id.* at 705-06, paras. 38-39. The public interest obligations associated with each performance tier and latency are discussed in the *Rural Digital Opportunity Fund Order*. *Id.* at 702-05, paras. 31-37.

⁴²⁷ *Id.* at 695-96, paras. 20-21.

⁴²⁸ *Id.* at 705-06, paras. 38-39.

⁴²⁹ *Id.* at 20-21, paras. 38-39.

⁴³⁰ *Id.*

⁴³¹ Viasat urges us to use a multiplicative weighting formula to adjust bids for performance tier and latency rather subtracting the T+L weights from the reserve price in the formula we adopt. *See* Viasat Comments at 9-11. TPI similarly argues that the subtractive approach can cause bidders with higher speed and latency weights to drop out of the auction earlier, and that using a multiplicative approach would permit those bidders to remain in the auction longer, resulting in more areas served at lower prices. *See* TPI Reply at 4. NTCA opposes a multiplicative approach, arguing that it will “mute the impact of the weighting framework,” which it asserts worked well in Auction 903. NTCA Reply at 19. We agree with NTCA that the suggested modification is inconsistent with our objectives. The performance tier and latency weights were adopted assuming the subtractive formula used in the CAF Phase II auction, consistent with our decision to use a format for Auction 904 similar to the format used in Auction 903. *See Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 695-96, para. 20. We adopt that format

(continued....)

$$\text{Implied Annual Support Amount (at the clock percentage)} = \min \left\{ R, \left(\frac{C - (T+L)}{100} \right) R \right\}$$

where:

R denotes the area's reserve price

T denotes the tier weight

L denotes the latency weight

C denotes the clock percentage

223. Because the highest implied support amount can never exceed an area's reserve price, when the clock percentage is greater than 100, the total implied annual support for lower weighted performance tier and latency combinations may remain at an area's reserve price for one or more rounds, while the total implied annual support of one or more higher weighted performance tier and latency combinations may be lower than an area's reserve price.⁴³² When the clock percentage is decremented below 100, the implied annual support for any performance tier and latency combination will be below an area's respective reserve price.

224. The formula above (the "implied support formula") can be used to determine the implied support at any price point percentage by substituting a given percentage for the clock percentage.

c. Acceptable Bid Amounts

225. In the first round, a bidder may place a bid at any price point percentage equal to or greater than the clock percentage and equal to or less than the opening percentage, specified up to two decimal places. In each subsequent round, a bidder may place a bid at any price point percentage equal to or greater than the clock percentage and less than the previous round's clock percentage, specified up to two decimal places. This will reduce the likelihood of ties and allow bids to correspond to smaller increments in annual support amounts.

226. Bids must imply a support amount that is one percent or more of an area's reserve price to be acceptable. For a given performance tier and latency combination, when the price point percentage equals T+L, the formula implies that the annual support amount is zero. When the price point percentage equals T+L+1, the formula implies an annual support amount that is one percent of the area's reserve price. Hence, a bid percentage must be at least T+L+1 for the bid to be accepted by the bidding system.⁴³³

(Continued from previous page)

here to provide the bidding incentives we intended, which did not include permitting lower T+L weight bidders to remain in the auction longer, as Viasat and TPI suggest that the auction procedures should allow. The suggested multiplicative approach would significantly change the intended bidding incentives. For example, under the adopted approach, at a clock percentage of 60, a bid with a T+L weight of 60 would no longer be eligible for support, while under the suggested multiplicative approach, at a clock percentage of 60 the bid would still be eligible for support equal to 24% of the area's reserve price, and would continue to be eligible for additional rounds. We continue to find that the subtractive formula, in connection with the weights we adopted, will provide the best incentives to support our goal of encouraging future-proofed networks and higher-quality services balanced against the need to consider cost efficiencies.

⁴³² For example, consider a bid at the clock percentage at the Baseline performance tier with low latency, which has a T+L weight of 35. If the clock percentage is 170, the implied support for the bid is equal to the lower of the reserve price for the area, R, and $\{(170-35)/100\} * R$, which is $(135/100) * R$ or $1.35 * R$. Since R is less than $1.35 * R$, the implied support for the bid is equal to the reserve price.

⁴³³ For example, for a bid with a T+L weight of 35 (a Baseline bid with low latency), implied support would be 0 when the clock percentage is 35: implied support equals the lower of the reserve price R, and $\{(35-35)/100\} * R$, which is 0. Such a bid would not be acceptable. A bid made at a price point percentage of 36 or higher, however, would be acceptable, since it is at least 1% of the reserve price: $\{(36-35)/100\} * R$ equals $(1/100) * R$.

227. We anticipate that the ability to submit bids at price points other than the clock percentage will be especially useful to a bidder when the lowest support amount it will accept for an area corresponds to a percentage between the clock percentages for two consecutive rounds. In such a case, the option will allow the bidder to more precisely indicate the point at which it wishes to drop out of bidding for the area. In contrast, a bidder still willing to accept a support amount equal to or less than that implied by the clock percentage would simply bid at the clock percentage. In rounds before the budget clears, a bidder may bid at an intermediate price point in one round and then bid again for the same area in a subsequent round, but its ability to do so is limited by the activity and switching rules.⁴³⁴ In rounds after the budget clears, a bidder is not permitted to switch the areas for which it is bidding.

d. Bidding for Geographic Areas

228. As discussed, we adopt CBGs as the appropriate minimum biddable area.⁴³⁵ A bid for support in a CBG is a bid for support for the locations within all eligible census blocks within that area.⁴³⁶

229. To simplify the bidding process, ensure manageable bid processing, and promote straightforward bidding, we will allow a bidder to place only one bid on a given geographic area in a round, whether that area is bid on singly or included in a package bid. We anticipate that the restriction on overlapping bids by a single bidder will simplify bid strategies for bidders and eliminate the need for the auction system to use mathematical optimization to consider multiple ways to assign winning bids to a bidder, thus simplifying bid processing.

230. We adopt our proposal that total implied support of a single bidder's bids at the clock percentage in any round may not exceed the total Rural Digital Opportunity Fund budget.⁴³⁷ This limit modifies the procedures used in the CAF Phase II auction. We agree with commenters that a limit is needed to prevent potential manipulation of the auction by a bidder that submits a large number of insincere bids to influence the timing of the clearing round.⁴³⁸ We are not persuaded, however, that a limit as low as one commenter suggests—25% and 10% for nascent technologies—would result in a fair or more efficient auction process.⁴³⁹ A much lower limit could have the effect of unreasonably restricting competition because a limit for round 1 of, for example, 25% imposes a much tighter limit in subsequent rounds, particularly for bidders with relatively high T+L weights. Accordingly, we find that limiting a bidder's total implied support at the clock percentage to 100% of the budget will strike an appropriate balance between the need to deter insincere bids while still permitting bidders to bid straightforwardly, especially in light of other procedures we adopt that help deter unproductive strategic bidding, such as bidder limits on switching areas and bid processing procedures in the clearing round that consider bids from the previous round's clock percentage under certain circumstances.

e. Bid for a Single Area

231. A bid is an offer to serve all locations in eligible census blocks within the indicated CBG

⁴³⁴ See *infra* Section IV.B.3.h (Activity Rules).

⁴³⁵ See *supra* Section IV.A.2 (Minimum Geographic Area for Bidding).

⁴³⁶ For purposes of bidding, CBGs will be referred to as “items” in the bidding system.

⁴³⁷ As we note in the *Rural Digital Opportunity Fund Order*, parties have suggested such a modification. See *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 697, para. 22 n.63 (citing Viasat Comments at 28 and CenturyLink Reply at 5).

⁴³⁸ Viasat alleges that a limit on a bidder's total implied support is needed to help prevent potential manipulation by a bidder that submits an insincerely large number of bids with the aim of strategically dropping bids to control the timing of the clearing round. See Viasat Comments at 2, 5. Commnet agrees with stricter limitation and submits tables of scenarios illustrating potential harms. See Commnet Reply at 1-10. Commnet also recommends that we consider “a bidding threshold tied to the bidder's annual revenue.” See Commnet Reply at 4.

⁴³⁹ See Viasat Comments at 2, 5.

at the indicated performance tier and latency combination for a total annual amount of support that is not less than the implied annual support at the price point percentage specified by the bidder and not more than the reserve price. In each round, a bid for a single available CBG with reserve price R consists of two pieces: a T+L weight⁴⁴⁰ and a price point that is a percentage not less than the current round's clock percentage and less than the previous round's clock percentage.⁴⁴¹ For a given round, a CBG can be included in at most one bid—whether a bid on a single area or a package bid on multiple areas—made by a bidder, and a bidder can only bid on areas that are in states that the bidder selected on its application and for which it qualified.

232. We conclude that bidders will not be allowed to change the performance tier and latency combination in a bid for a particular area from round to round. Once a bidder has submitted a bid for an area at a particular performance tier and latency combination (which must be a performance tier and latency combination for the state for which the bidder qualified at the application stage) any bids in subsequent rounds by that bidder for the same area must specify the same performance tier and latency combination. Although several commenters urge us to reject this approach, we agree with arguments that allowing such changes between auction rounds to the T+L weight a bidder associates with a bid for a CBG would create opportunities for anti-competitive behavior.⁴⁴² We recognize that, in some cases, permitting a bidder to increase its T+L weight may have benefits in terms of increased flexibility for a bidder. We find, however, that on balance the potential harms from anti-competitive strategic bidding,

⁴⁴⁰ Hughes proposes that we permit bidders to associate multiple performance tier and latency weights with a single bid for a single area, and then “apply a composite tier-and-latency score to such bids.” Hughes Comments at 5. ADTRAN disagrees, claiming that the approach would greatly complicate the auction process. See ADTRAN Reply at 5; Letter from Stephen L. Goodman, Counsel to ADTRAN, Inc., to Marlene H. Dortch, Secretary, FCC, AU Docket No. 20-34 et al., at 1-4 (filed May 6, 2020) (*ADTRAN ex parte*). Hughes, in turn, argues that the approach could be implemented more simply than ADTRAN asserts. See Letter from Jennifer A. Manner, Senior Vice President, Regulatory Affairs, Hughes Network Systems, to Marlene H. Dortch, Secretary, FCC, AU Docket No. 20-34 et al. (filed Apr. 29, 2020); Jennifer A. Manner, Senior Vice President, Regulatory Affairs, Hughes Network Systems, to Marlene H. Dortch, Secretary, FCC, AU Docket No. 20-34 et al., at 2 (filed May 11, 2020). We agree that the approach would complicate the auction design. Further, because we adopt CBGs rather than the larger census tracts as the minimum geographic area for bidding, we are not convinced that allowing a bidder to assign performance tier and latency weights on a more granular basis within a bidding area would warrant the additional complexity of the approach suggested by Hughes. Finally, Hughes's suggestion to apply a composite performance tier and latency weight is inconsistent with the *Rural Digital Opportunity Fund Order*, which established specific weights representing eight different unique combinations and performance standards associated with each separate combination. See *ADTRAN ex parte* at 4 (asserting that Hughes's proposal is procedurally defective because it would “effect a significant change to the framework adopted by the Commission”).

⁴⁴¹ For a given price point, P , the implied support is the smaller of R and $\left(\frac{P-(T+L)}{100}\right)R$. See *supra* para. 222.

⁴⁴² Commenters that favor allowing changes to the T+L weight of a bid include Viasat and Frontier. See Viasat Comments at 13; Frontier Comments at 1-3, LYA Attach. In particular, Frontier urges that changes from a low weight to a high weight be permitted, and WISPA agrees. See Frontier Comments at 1, LYA Attach.; WISPA Reply at 15-16. AT&T argues against allowing such changes because it would create the potential for undesirable strategic bidding, especially if information about the T+L weights of competing bids were made available. See AT&T Reply at 2-3. We agree with AT&T and note that the examples it provides argue in particular against the type of changes Frontier and WISPA support. AT&T asserts that “an insincere bidder could submit a bid for a particular geographic area with a low T+L weight to scare away competition in that area before ultimately increasing its T+L weight. Similarly, if the Commission were to adopt both its proposed information rule and Frontier's switching proposal, bidders may have an incentive to increase their T+L weights in uncontested areas.” *Id.* NTCA agrees that there are undesirable strategic implications of allowing a bidder to change the T+L weight it bids in an area and further asserts that such changes will “exacerbate uncertainty and complexity in the auction process.” NTCA Reply at 20-21. We agree with NTCA that procedures that open opportunities for undesirable strategic bidding, such as allowing a bidder to change the T+L weight from round-to-round, will complicate a bidder's choices in the auction and make it more difficult to interpret bidding data.

especially in light of the enhanced bidder information procedures we adopt, likely outweigh the benefits to the limited number of bidders that may have the flexibility to offer different levels of service in an area.

f. Bid for a Package of Areas

233. We adopt package bidding procedures that will give bidders the option to place bids to serve a bidder-specified list of CBGs. However, corresponding bid processing procedures may assign fewer than the full list of areas to the bidder as long as the funding associated with the assigned areas is at least equal to a bidder-specified percentage of the funding requested for the complete list of areas in the package. A bidder can specify a package bid by providing a list of CBGs, a single performance tier and latency combination, a single price point for the areas in the list, and a minimum scale percentage for the package. The minimum scale percentage must be no higher than a maximum value that we set at 75% for Auction 904.⁴⁴³ Thus, a package bid is an offer by the bidder to serve any subset of areas in the list at the support amount implied at the bid percentage, provided that the ratio of the total implied support of the subset to the total implied support of the list meets or exceeds the bidder-specified minimum scale percentage.⁴⁴⁴

234. A bidder must bid to serve each area in the package bid at the same performance tier and latency combination.⁴⁴⁵ Moreover, every area in a package bid must be in the same state. For a given round, a CBG can appear in at most one bid—either a single bid or a package bid—made by a given bidder. A bidder may change the minimum scale percentage in any package bid from round to round.

235. We sought comment on whether we should set a limit on the total amount of implied support that may be included in a single package. Limiting packages to the areas within a state will impose a *de facto* limit on the total support that may be included in a package bid, but we asked whether a limit, lower than the maximum possible state-level amount of support, should also be implemented. We received no feedback in this regard and conclude that we will not restrict packages beyond the single state limitation on the total amount of implied support in a package.

236. We adopt 75% as the Commission-defined maximum of the minimum scale percentage. We adopt an upper limit less than 100% so that a small overlap in the areas included in a package bid does not prevent support from being assigned to a potentially much larger number of areas included in the package bid, which could occur if packages were assigned on an all-or-nothing basis. While an upper limit that is too high will not be effective for this purpose, an upper limit that is too low will hinder bidders' ability to achieve a minimum amount of funding necessary to provide service to the assigned areas in the package.

237. SBI opposes our proposal to permit package bidding in any form, asserting that it would

⁴⁴³ With the maximum value for the scale percentage set at 75%, the bidder may not specify a minimum scale percentage of more than 75%. That is, as proposed, a bidder may not submit an all-or-nothing package bid. As an example of how the minimum scale percentage will be applied, if the maximum scale percentage is 75% and a bidder bids for a package of four areas with the same reserve prices and specifies a scale percentage of 50%, then the bidder may be assigned support for two, three, or four of the areas (50, 75, or 100%, respectively), but not for only one of the areas.

⁴⁴⁴ When determining whether the minimum scale condition is met, the system will use support amounts as implied at the bid percentage. Because all areas in a package bid are required to be bid at the same performance tier and latency, the minimum scale condition is met if and only if the sum of the reserve prices of the assigned areas is at least equal to the bidder-specified percentage of the sum of reserve prices for the complete list of areas in the package.

⁴⁴⁵ The requirement that a package bid must specify the same tier and latency combination for each area in the package differs from the procedures adopted for the CAF Phase II auction, which allowed package bids to include bids with different T+L weights for different areas. We adopt this change in order to facilitate the modified bid processing procedures providing a preference for bids at a lower T+L weight after clearing the budget.

be very difficult for a bidder to conduct sufficient analysis to support a package bid.⁴⁴⁶ We disagree and note that package bids will be strictly optional in Auction 904. A number of bidders used package bids in Auction 903, apparently finding it helpful; we trust that a bidder will use package bids in Auction 904 only if it is comfortable with the rules and limitations of the specific package bidding format we adopt. We therefore adopt the package bidding format we proposed, which will permit a bidder to ensure that it will receive a minimum amount of support equal to the bidder's specified minimum scale requirement if the bid is assigned, or no support if the bid is not assigned.

g. Bids Placed by Proxy Bidding Instructions

238. We will permit proxy bidding, which may reduce a bidder's need to submit bids manually every bidding round and provide the bidder with a safeguard against accidentally failing to submit a bid. With proxy bidding, a bidder may submit instructions for the system to continue to bid automatically for an area with a specified performance tier and latency combination in every round until either (1) the clock percentage falls below a bidder-specified proxy amount, (2) the bidder intervenes to change its bid, or (3) the area is assigned, whichever happens first. Proxy bidding instructions for a single area or a package of areas will contain all the information required for these bids, and the specified price point percentage will potentially be valid for multiple rounds, as described below. Proxy bidding instructions cannot include instructions for changes to the minimum scale percentage of a package bid nor to the specified area or areas.

239. During a round, the bidding system will generate a bid at the clock percentage on behalf of the bidder as long as the percentage specified in the proxy instruction is less than or equal to the current clock percentage. If the proxy percentage exceeds the current clock percentage but is lower than the prior round's clock percentage, then the bidding system will generate a bid at the price point percentage of the proxy. These bids will be treated by the auction system in the same way as any other bids placed in the auction.⁴⁴⁷ During a bidding round, a bidder may cancel or enter new proxy bidding instructions. Because proxy instructions may expire as the clock percentage descends and as areas get assigned, even with proxy bidding, bidders are strongly urged to monitor the progress of the auction to ensure that they do not need to cancel or adjust their proxy instructions.

240. Proxy bidding instructions will be treated as confidential information and will not be disclosed to the public at any time because they may reveal cost information that would not otherwise be made public (e.g., if proxy bidding instructions are not fully implemented because the clock percentage does not fall as low as the specified proxy percentage). However, all submitted bids and the amount of support awarded for any assigned bid, regardless of whether they were placed by the bidder or by the bidding system according to proxy bidding instructions, will be publicly disclosed after the auction concludes.

241. We received no comments on our proposal to permit proxy bidding instructions.

h. Activity Rules

242. We will measure a bidder's bidding activity in a round in terms of implied support dollars. We adopt activity rules that prevent a bidder's activity in a round from exceeding its activity in

⁴⁴⁶ See SBI Comments at 7. SBI also cites to the argument against package bidding submitted by ACA in the Auction 903 proceeding. *Id.* ACA, however, supports the package bidding procedures for Auction 904, which are essentially the same as those used in Auction 903. See ACA Comments at 8. ACA notes that package bidding in Auction 904 can help a bidder ensure benefits of scale and adds bidding flexibility. *Id.*

⁴⁴⁷ As set forth below, proxy instructions will generally continue to apply after the budget clears, including proxy instructions for any unassigned remainder areas in a package that met the minimum scale condition. However, after the budget clears, a proxy instruction will expire in the case of a package bid that did not meet the minimum scale condition and where one or more of the areas in the package bid were assigned to other bidders (to bids with lower T+L weights). See *infra* Section V.B.4 (Bids and Bid Processing if the Budget Cleared in a Previous Round).

the previous round. Activity rules for bidding are used in multiple round auctions to encourage bidders to express their bidding interests early and sincerely, thus generating reliable information about the level of bidding across the various geographic areas in the auction. Activity rules promote the orderly collection of bids across rounds and limit undesirable strategic bidding behavior such as insincerely switching bids across areas or suddenly increasing the number of areas for which bids were submitted. Activity rules balance these concerns with allowing bidders some freedom to react to competition and price changes.

243. Under the procedures we adopt, a bidder's activity in a round: (1) is calculated as the sum of the implied support amounts (calculated at the bid percentage) for all the areas bid for in the round; and (2) may not exceed its activity from the previous round.⁴⁴⁸ A bidder will be limited in its ability to switch to bidding for support in different areas from round to round. Specifically, a bidder's activity in a round from areas that the bidder did not bid on at the previous round's clock percentage cannot exceed an amount determined by a percentage (the "switching percentage") of the bidder's total implied support from bids at the previous round's clock percentage.⁴⁴⁹ As proposed, we will set this switching percentage at 20% for the second round of the auction only, at 10% for subsequent rounds, and we give OEA the discretion to change the switching percentage, with adequate notice, before a round begins. We also will not allow any switching once the budget has cleared. That is, once the budget has cleared, a bidder will be allowed to bid for an area only if the bidder bid for that area at the previous round's clock percentage and if that area has not yet been assigned.⁴⁵⁰

244. We sought comment on the appropriate size of the switching percentage, and, if it is to be changed across rounds, when and how it should be changed. No commenters addressed this issue, and thus we conclude that we will adopt the proposed switching percentage of 20% for the second round of the auction only and 10% for subsequent rounds, consistent with the procedures used in the CAF Phase II auction.

4. Bid Processing

245. Once a bidding round closes, the bidding system will consider the submitted bids to determine whether an additional round of bidding at a lower clock percentage is needed to bring the amount of requested support down to a level within the available budget.⁴⁵¹ If the total requested support at the clock percentage exceeds the budget, another bidding round occurs. In a round in which the amount of overall requested support falls to a level within the budget (i.e., the budget "clears"), bid processing will take the additional steps of beginning to assign support.

246. If, after the bids have been processed in the clearing round, some areas bid at the clock percentage have not been assigned (e.g., because there were multiple bids for an area at the same T+L weight—and no bids at a lower T+L weight—at the clock percentage), the bidding system will commence another round of bidding to resolve the competition, and rounds will continue with bidding for these areas at lower clock percentages.

247. As a result, the bids that can be assigned under the budget in the round when the budget clears and in any later rounds will determine the areas that will be provided Rural Digital Opportunity Fund support. At most, one bid per area will be assigned support. The specifications of that bid, in turn,

⁴⁴⁸ We also note that the activity of a bidder that submits the same bids in every round (for the same areas) will decline across rounds because the clock percentage is decremented across rounds.

⁴⁴⁹ Activity includes bids made at all price points in a round, while the switching percentage applies only to implied support from bids made at the previous round's clock percentage.

⁴⁵⁰ The budget clearing determination is contingent on having sufficient support funds to provide support for the areas for which bids are submitted in that round. If bids for additional areas were permitted after the budget cleared, there may be insufficient funds in the budget to support them.

⁴⁵¹ See Section IV.B.4.b.(i) (Aggregate Cost at the Clock Percentage) (describing how requested support in this context is calculated).

determine the performance tier and latency combination at which service will be provided to the eligible locations in the area. Additional details and examples of bid processing will be provided in the technical guide.

248. Our specific bid processing procedures fall into three categories: before, during, and after the round in which the budget clears. We address them in order below, after first addressing the clock percentage.

a. Clock Percentage

249. In each of a series of discrete bidding rounds, a bidder will be offered an amount of support for an area at a specified performance tier and latency combination that is determined by the clock percentage for the round and the area's reserve price. By bidding at that clock percentage, the bidder indicates that it is willing to provide the required service in the bid area in exchange for a payment at least as large as that implied by the clock percentage and the T+L weight.⁴⁵² The opening percentage will determine the highest support amount that the bidder will be offered in the auction for a given area and performance tier and latency combination.

(i) Opening Percentage

250. We will set the opening percentage at 100% plus an additional percentage equal to the largest T+L weight that is submitted by any qualified bidder in the auction, as proposed. Therefore, if any applicant is qualified to bid to provide service at the Minimum performance tier and high latency—a performance tier and latency combination assigned a weight of 90—the opening percentage will be set at 190%. Starting the auction at this level will allow bidders at higher T+L weights multiple bidding rounds in which to compete for support simultaneously with bidders offering lower T+L weights (i.e., higher performance).⁴⁵³

(ii) Clock Decrements

251. We adopt our proposal to begin the auction by decrementing the clock percentage by 10 points in each round. Also, as proposed, we provide OEA with the discretion to change that amount during the auction if it appears that a lower or higher decrement would better manage the pace of the auction. For example, if bidding is proceeding particularly slowly, we may increase the bid decrement to speed up the auction, recognizing that bidders have the option of bidding at an intra-round price point percentage if the clock percentage falls to a percentage corresponding to an amount of support that is no longer sufficient. We will begin the auction with a decrement of 10% and limit any further changes to the decrement to between 5% and 20%.

252. We sought comment on using a decrement larger than 10% in the early rounds of the auction, when the implied support amounts of many bidders are capped at the reserve price and therefore are not changing from round to round. We also sought comment on circumstances under which we should consider changing the decrement during the auction. Viasat supports a 10% decrement because it “reflects a reasonable balance between speed and consistency,” and urges us to maintain a 10% decrement throughout the auction for predictability.⁴⁵⁴ We agree with Viasat that a 10% decrement is an appropriate starting point for the auction. We are, however, not convinced that we should commit to maintaining the 10% decrement throughout the auction. Therefore, we delegate to OEA authority to adjust the decrement, within the proposed 5-20% range and with adequate notice to all bidders. We recognize that

⁴⁵² Under the second-price rule, a winning bidder will receive an annual support amount that is at least as large as the amount implied by the bid percentage.

⁴⁵³ At clock percentages above 100, the implied support amounts of bids at lower T+L weights may not decrease from round to round, remaining instead at the area's full reserve price.

⁴⁵⁴ Viasat Comments at 12.

predictability may be beneficial to bidders, and direct that it will be considered as changes to the decrement during the auction are considered.

b. Bid Processing After a Round that Occurs Before the Clearing Round

(i) Aggregate Cost at the Clock Percentage

253. After each round until the budget has cleared, the bidding system will calculate an “aggregate cost,” an estimate of what it would cost to assign support at the clock percentage to the bids submitted in the round, in order to determine whether the budget will clear in that round. More precisely, the aggregate cost is the sum of the implied support amounts for all the areas receiving bids at the clock percentage for the round, evaluated at the clock percentage. The calculation counts each area only once, even if the area receives bids, potentially including package bids, from multiple bidders. If there are multiple bids for an area at different performance tier and latency combinations, the calculation uses the bid with the highest implied support amount. If the aggregate cost for the round exceeds the budget, the bidding system will implement another round with a lower clock percentage.

(ii) Clearing Determination

254. The first round in which the aggregate cost is less than or equal to the overall support budget is considered the “clearing round.” In the clearing round, the bidding system will further process bids submitted in the round and, if necessary, bids submitted at the previous round’s clock percentage, to determine those areas that can be assigned and the support amounts winning bidders will receive.

c. Bid Processing in the Clearing Round

255. In the clearing round, the bidding system will consider bids in more detail to determine which can be identified as winning, or “assigned,” bids in that round; the “second prices” to be paid for winning bids; and which bids will carry forward to an additional bidding round. We adopt our proposed procedures for these determinations below.

(i) Assignment

256. Once bid processing has determined that the current round is the clearing round, the bidding system will begin to assign winning bids, awarding support to at most one bid for a given area. The system considers all the bids submitted in the round in ascending order of price point percentage to determine which bids can be assigned within the budget. Bids at the same price point are considered in ascending order of T+L weight.

257. As it considers bids in ascending price point percentage order and then in ascending T+L weight order,⁴⁵⁵ the system assigns a bid with a given T+L weight if no other bid for the same area has already been assigned, as long as the area did not receive bids at the clock percentage at the same or at a lower T+L weight and the areas to be assigned in a package bid meet the bid’s minimum scale percentage. The bidding system also checks to ensure that sufficient budget is available to assign the bid.

258. To determine whether there is sufficient budget to support a bid, the bidding system keeps a running sum of support costs. This cost calculation at price point percentages between and including the current and previous clock percentages extends the concept of the aggregate cost calculation (which identifies the clearing round) to take into account, at sequential intermediate price points, the cost of bids that have been assigned so far and the estimated cost for areas bid at the clock percentage that have not been assigned.

259. At each ascending price point increment, starting at the clock percentage, the running cost calculation is the sum of support for three types of bids: (1) for assigned bids for which there were

⁴⁵⁵ If there are multiple bids at the same price point and at the same T+L weight, the tie is broken using pseudo-random numbers.

no other bids for support for their respective areas at price points lower than the currently-considered price point percentage, the system calculates the cost of providing support as the amount of support implied by the currently considered price point; (2) for assigned bids for areas that did receive other bids at price points lower than the currently-considered price point, support is generally calculated as the amount implied by the next-higher price point at which the area received a bid (where next-higher is relative to the price point of the assigned bid, not the currently-considered price point);⁴⁵⁶ and (3) bids at the clearing round's clock percentage that have not been assigned are evaluated as they were in the pre-clearing aggregate cost calculation: only one bid per area is included in the calculation, namely, the bid with the highest implied support amount (i.e., the lowest T+L weight) evaluated at the clock percentage.

260. Once the system has determined which of the bids submitted in the round are assigned, it then determines the highest price point percentage at which the total support cost of the assigned bids does not exceed the budget (the "clearing price point").⁴⁵⁷ There will be no assigned bids at price point percentages above the clearing price point.

261. Once the system has processed all the bids submitted in the round, if the system has determined that the clearing price point is equal to the clock percentage of the previous round and there is still available budget, as proposed in the *Auction 904 Comment Public Notice*,⁴⁵⁸ the system will proceed to consider bids submitted at the clock percentage of the previous round.⁴⁵⁹ These carried-forward bids will be considered in ascending order of T+L weights, and bid-specific pseudo-random numbers will be used to break ties. This process is addressed in more detail in the technical guide.

262. AT&T was the only commenter to address our proposal to consider assigning bids submitted in the previous round at the previous round's clock percentage in the event that the budget is more than adequate to support the assigned bids submitted in the clearing round.⁴⁶⁰ AT&T indicated it would favor the proposal only if we also implemented the full information procedures it suggests, namely releasing the number of bids in each area and the T+L weight associated with each bid, so that a bidder can assess more accurately the likelihood of its carried-forward bids being assigned in the next round. We disagree with AT&T that adoption of this bid processing procedure for the clearing round should be dependent on also adopting the full information procedures it suggests. As noted in the *Auction 904 Comment Public Notice*, one of our objectives in adopting this modification to the procedures used in Auction 903 is to "discourage behavior that is arguably anti-competitive."⁴⁶¹ AT&T's suggestion would enable a bidder to determine that it can make bids for which it will not be held accountable, which would undermine auction integrity. In addition to the activity and switching rules, the procedure we adopt here

⁴⁵⁶ The only exception to this arises if there is a bid for the area with a bid percentage below the bid percentage of the winning bid for the area and the former bid cannot be assigned because it is a package bid that does not meet the scale condition. In that case, the support is calculated as the amount implied by the bid percentage of the winning bid.

⁴⁵⁷ The clearing price point is greater than or equal to the current clock percentage and less than or equal to the previous round's clock percentage.

⁴⁵⁸ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2324-25, para. 114.

⁴⁵⁹ Thus, if the budget has not cleared after a round, a bid at the round's clock percentage carries forward to the next round at the same percentage. In contrast, in the CAF Phase II auction only bids submitted in the clearing round could be considered during the bid processing for the clearing round. The modification may enable more complete use of the budget in the event that the total requested support declines dramatically from one round to the next and should discourage insincere bidding.

⁴⁶⁰ See AT&T Comments at 5.

⁴⁶¹ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2316, para. 70 n.116 ("These proposed modifications to the bidding procedures are responsive to comments received in the proceeding to establish the Rural Digital Opportunity Fund asserting that certain competitive bidding procedures should be more stringent than for the CAF Phase II auction to discourage behavior that is arguably anti-competitive.").

to consider bids submitted at the previous round's clock percentage under certain circumstances will encourage sincerity and consistency in bidding.

263. We also received comment on our proposed procedures for the order in which the bidding system considers bids during bid processing. Several commenters argue for alternative bid processing approaches and assert that the process we adopt to consider bids above the clock percentage in the clearing round first in order of price point and then in order of lowest T+L weight is inconsistent with language we used earlier to describe the preference for bids at lower T+L weights in the clearing round.⁴⁶² We disagree that the proposed procedures we adopt are inconsistent with the Commission's stated preference for assigning support to bidders offering a higher level of service—i.e., bids with a lower T+L weight. As an initial matter, our intention was clear in the *Rural Digital Opportunity Fund Order* to adopt a preference in the clearing round for assigning bids with a lower T+L weight when comparing bids “at the base clock percentage.”⁴⁶³ We addressed the mathematical details of the bidding procedures to implement that intention in the pre-auction notice and comment process.⁴⁶⁴ Under the procedures we adopt, consistent with our high-level guidance, when bids for support for a CBG are tied at the clock percentage of the clearing round, assignment preference is given to the lowest T+L weight. Bids at different price points above the clock percentage in the clearing round are considered first in ascending price point percentage order. For bids at the same price point above the clock percentage, assignment preference is given to the lowest T+L weight.⁴⁶⁵ We therefore decline to modify our bid processing procedures, and we adopt them as proposed.

(ii) Support Amount Determination

264. To determine the support amount for an assigned area, the system considers whether there were any other bids for the area in the round below the clearing price point. If there were no other bids below the clearing price point, the assigned area is supported at the clearing price point.⁴⁶⁶

265. If a bid is assigned for an area that received more than one bid in the round below the clearing price point, the assigned bid is generally supported at the next higher price point percentage at which there is a bid for the area.⁴⁶⁷ For example, if there are two bids for an area below the clearing price point, the lower bid is supported at the bid percentage of the higher bid.

266. For any carried-forward bids assigned in the clearing round, the support amounts will be calculated based on the clock percentage of the previous round. We note that a carried-forward bid can be assigned in the clearing round only if the system has determined that the clearing price point is equal to the clock percentage of the previous round.

⁴⁶² See USTelecom Comments at 8; Frontier Comments at 3-5; NTCA Reply at 21. *But see* WISPA May 15, 2020 *ex parte* at 5 (arguing the Commission should not modify the proposed bid processing order in the clearing round).

⁴⁶³ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 695-96, para. 20.

⁴⁶⁴ See *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 694, para. 17.

⁴⁶⁵ See *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2324, para. 110.

⁴⁶⁶ The support amount for a winning bid will not exceed the reserve price even if the clearing price point is greater than 100%.

⁴⁶⁷ The only exception to this arises if there is a bid for the area with a bid percentage below the bid percentage of the winning bid for the area and the former bid cannot be assigned because it is a package bid that does not meet the scale condition. In that case, the support is calculated as the amount implied by the bid percentage of the winning bid.

d. Bids and Bid Processing in Rounds After the Budget Clears**(i) Carried-Forward and Acceptable Bids**

267. Once the budget clears, further bidding resolves competition for areas that were bid at the clock percentage of the previous round and have not yet been assigned. Therefore, bidding rounds continue after the clearing round at lower clock percentages, but bids are restricted to areas for which the bidder had bid at the previous round's clock percentage but that could not be assigned. Such bids may be for a given unassigned area that received multiple single bids, package bids that were not assigned because the bidder's minimum scale percentage for the package was not met, or remainders of package bids—unassigned areas that formed part of package bids that were partially assigned.

268. Bids at the clock percentage for unassigned areas will carry forward automatically to the next bidding round at the previous round's clock percentage, since the bidder had previously accepted that percentage.⁴⁶⁸ In the round into which the bids carry forward, the bidder may also bid for support for these areas at the current round's clock percentage or at intermediate price points. In rounds after the clearing round, a bidder cannot switch to bidding for an area for which it did not bid at the previous round's clock percentage.

269. While bids for unassigned packages will carry forward at the previous clock percentage, the bidder for such a package may group the bids for the areas in the package into smaller packages and bid on those smaller packages at the current round's percentages. However, the unassigned remainders of package bids partially assigned to the bidder will carry forward as individual area bids. Any bids the bidder places for the remainder areas at the new round's percentages must be bids for individual areas—that is, the bidder cannot create a new package of any of the unassigned remainders.

270. Proxy instructions, if at a price point percentage below the clock percentage of the previous round, generally continue to apply in rounds after the clearing round under the same conditions that apply to other bids. In the case of a proxy instruction for a package bid that is only partially assigned to the bidder, the proxy instruction continues to apply to the unassigned areas in the package bid. That is, the price point percentage specified in the proxy instructions would apply to bids for the individual remainder areas.⁴⁶⁹

(ii) Bid Processing

271. When processing the bids of a round occurring after the clearing round, the system considers bids for assignment and support amount determination in ascending order of T+L weight and then in ascending order of price point percentage. The system assigns a bid with a given T+L weight if the area has not already been assigned, as long as the area did not receive bids at the clock percentage at the same or at a lower T+L weight and, in the case of a package bid, as long as the areas to be assigned in the package meet the bid's minimum scale percentage.⁴⁷⁰

⁴⁶⁸ Because of the priority given to bids with lower T+L weights, some areas within a package bid might be assigned to another bidder, even if the package bid was at the round's clock percentage. If the package bid did not meet the minimum scale condition, then a bid for the entire package (including any areas that have already been assigned to other bidders) will carry forward to the following round. The areas that have already been assigned are included in the carried-forward bid so that the bidding system can take the areas into consideration when evaluating the minimum scale condition as the system processes the carried-forward bid in the following round. The system will never reassign an area that has already been assigned. The technical guide will provide more details and examples on carried-forward bids.

⁴⁶⁹ However, if the package bid is not assigned to the bidder, but one or more areas in the package are assigned to another bidder, the proxy instruction for the package bid will expire.

⁴⁷⁰ The technical guide provides further details on how the minimum scale condition will be applied and how package bids will be assigned in rounds after the clearing round, both for bids submitted in the round and for carried-forward bids.

272. To determine the support amount for an assigned area, the system considers whether there were any other bids for the area in the round at the same or at a lower T+L weight. If there were no other bids, the assigned area is supported at the clock percentage of the previous round, consistent with the second-price rule. If a bid is assigned for an area that received more than one bid in the round at the same or at a lower T+L weight, the assigned bid is generally supported at the next higher price point percentage at which there was a bid for the area at the same or at a lower T+L weight.⁴⁷¹

273. If, after the bids of the round have been processed, one or more of the areas with bids at the clock percentage have not yet been assigned, there will be another bidding round at a lower clock percentage, with the same restrictions on bids and following the same assignment and pricing procedures.⁴⁷²

C. Closing Conditions

274. The auction will end once the overall budget has cleared if all areas that were bid at the round's clock percentage were assigned during the bid processing of the round.

D. Availability of Bidding Information

275. As in past Commission auctions, bidders will have secure access to certain non-public bidding information while bidding is ongoing. As proposed,⁴⁷³ after each round ends, and before the next round begins, we will make the following information available to individual bidders:

- The clock percentage for the upcoming round.
- The aggregate cost at the previous round's clock percentage for rounds prior to the clearing round.
 - The aggregate cost at the clock percentage is not disclosed for the clearing round or any later round.
- For all eligible areas in all states, including those in which the bidder was not qualified to bid or is not bidding, whether the number of bidders that placed bids at the previous round's clock percentage was 0, 1, or 2 or more, and for areas that received 1 bid or 2 or more bids, the lowest T+L weight that was associated with a bid in the previous round for the area.
 - For the clearing round and any subsequent round, bidders are also informed about which areas have been assigned.

⁴⁷¹ The only exception to this arises if there is a bid for the area at the same or at a lower T+L weight with a bid percentage below the bid percentage of the winning bid for the area and the former bid cannot be assigned because it is a package bid that does not meet the scale condition. In that case, the support is calculated as the amount implied by the bid percentage of the winning bid.

⁴⁷² AT&T addresses an implication of the single-clock procedures used in Auction 903 and that we adopt here. In particular, in rounds after the clearing round, AT&T urges us to freeze the price clock that applies to bids for areas in a package for which there was not competition at the clock percentage of the previous round, and which were not assigned because the scale percentage for the package was not met. AT&T asserts that "In Auction 903, 'strict adherence to the use of a single price clock resulted in continued price decreases after the budget cleared for some CBGs that only had a single bidder. . . .' The practical effect of this rule is to discourage efficiency-enhancing package bidding." See AT&T Comments at 6 (internal citation omitted). We are not persuaded that we should modify the bid processing procedures in this way, for several reasons. We are not convinced that the loss of efficiency alleged by AT&T as a result of this circumstance is significant enough to merit a modification to the basic single-clock characteristic of the auction format we propose. Moreover, the procedures we adopt allow a bidder to break a package into subsets to help mitigate continued reductions in the price clock. Finally, package bidding is optional, and a bidder should consider any tradeoffs before deciding to submit any bids in this way. Accordingly, we do not accept AT&T's recommendation to modify the bid processing procedures we adopt.

⁴⁷³ See Auction 904 Comment Public Notice, 35 FCC Rcd at 2327, paras. 129-30.

- Bidder-specific results:
 - The implied support of the bidder's carried-forward bids for the next round and a list of those carried-forward bids.
 - The number of areas for which proxy instructions are in effect for future rounds.
 - After the clearing round, areas and support amounts that have been assigned to the bidder.
- Summary statistics of the bidder's bidding in the previous round, including:⁴⁷⁴
 - The bidder's activity, based on all bids in the previous round, and the implied support of the bidder's bids at the clock percentage.
 - The number of areas for which the bidder bid, at the clock percentage and at other price points.

276. Prior to each round, we will also make available to each bidder the implied support amounts at the round's clock percentage for the areas and performance tier and latency combinations for which the bidder is eligible to bid.⁴⁷⁵

277. We adopt information procedures that will provide more information to bidders than proposed. Specifically, the bidding system will make available to bidders the T+L weight associated with the bid in an area that received a single bid in the previous round, and it will disclose the lowest T+L weight of any bid received in the previous round in an area with 2 or more bids. We sought comment on making available to bidders the lowest T+L weight of any bid for each area in which there were 2 or more bids at the round's clock percentage, and we expand on those procedures here. We received significant comment in favor of this approach. We also received comment urging us to make available additional information on T+L weights, including making available the T+L associated with a bid for areas with a single bid.⁴⁷⁶ We provide this additional information so that bidders, as asserted by WISPA, "can maximize their chances of receiving support in areas that might otherwise not be funded."⁴⁷⁷

278. We do not, however, adopt procedures to provide the full information requested by AT&T.⁴⁷⁸ We conclude that providing all of the information requested by AT&T, including disclosure of bidding ties at the lowest T+L, could facilitate insincere bidding aimed at disadvantaging competitors and goes beyond the information needed by bidders to bid confidently and straightforwardly. Accordingly, consistent with the Commission's previous practice the CAF Phase II auction and in spectrum auctions, in order to protect the competitiveness of the auction, we limit the information that will be available to that deemed necessary.⁴⁷⁹

⁴⁷⁴ A bidder will also have access to a downloadable file with all its bids submitted for each round.

⁴⁷⁵ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1510, para. 278.

⁴⁷⁶ See AT&T Comments at 3-5; WISPA Comments at iv, 6; WISPA Reply at 14 and 16; Viasat Comments at 15; US Telecom at 10. Some commenters also support making available information on areas with a single bid. See WISPA Comments at 16; US Telecom Comments at 10. AT&T advocates for a more complete information policy (including whether 2 or more bidders are tied at the lowest T+L weight), in order to deter inefficient switchbacks performed only to obtain information. AT&T Comments at 5; see also WISPA May 15 *ex parte* (arguing for disclosure of the number of bidders in an area and the T+L of each bidder in an area). Moreover, AT&T urges us not to make available any information about competing bids if we also permit changes in the T+L weight a bidder associates with its bid in an area to deter anti-competitive strategic behavior. See AT&T Reply at 2. We are persuaded by this argument and do not permit changes in the T+L weight a bidder associates with an area.

⁴⁷⁷ See WISPA Reply at 14.

⁴⁷⁸ See AT&T Reply at 2.

⁴⁷⁹ See, e.g., *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1510, para. 279; See *Auctions of Priority Access Licenses for the 3550-3650 MHz Band; Notice and Filing Requirements, Minimum Opening Bids, Upfront*

279. We adopt the proposal to withhold information on the progress of the auction from the general public until after the close of bidding when auction results are announced.⁴⁸⁰ Accordingly, during the auction, the public will not have access to such interim information as the current round, the clock percentage, the aggregate cost, or any summary statistics on bidding or assigned bids. Although auction participants will have access to information that is needed to inform their bidding, such information will be made publicly available only after the close of the auction in order to help preserve the integrity of the auction while it is in progress.

280. As proposed in the *Auction 904 Comment Public Notice*,⁴⁸¹ after the close of bidding and announcement of auction results, we will make publicly available all bidding data, except for proxy bidding instructions.⁴⁸² This promotes our interest in a transparent auction process and is consistent with the Commission's typical practice post-auction.⁴⁸³

E. Auction Announcements

281. The bidding system will report necessary information to bidders through auction announcements. All auction announcements will be available by clicking a link in the Rural Digital Opportunity Fund Bidding System.

F. Auction Results

282. OEA will determine the winning bids as described elsewhere in this Public Notice.⁴⁸⁴ After OEA and the Bureau announce the auction results, they will provide a means for the public to view and download bidding and results data.

V. POST-AUCTION PROCEDURES

A. General Information Regarding Long-Form Applications

283. For the Rural Digital Opportunity Fund, the Commission adopted a two-phase auction application process. Pursuant to section 1.21004(a), each Auction 904 winning bidder is required to file an application for Rural Digital Opportunity Fund support, referred to as a long-form application, by the applicable deadline.⁴⁸⁵ Shortly after bidding has ended, OEA and the Bureau will issue a public notice declaring the auction closed, identifying the winning bidders, and establishing the deadline for the long-form application. Winning bidders will then have the opportunity to assign their winning bids to related entities or individual members of a consortium. Winning bidders or their designees will use the FCC

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Payments, and Other Procedures for Auctions 105; Bidding in Auction 105 Scheduled to Begin June 25, 2020, Public Notice, 35 FCC Rcd 2140, 2153, para. 37 (Mar. 2, 2020) (noting that limited information disclosure procedures used in past auctions have helped safeguard against potential anticompetitive behavior such as retaliatory bidding and collusion).

⁴⁸⁰ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2329, para. 135.

⁴⁸¹ *Id.* at 2329, para. 136.

⁴⁸² Bidding data does not include the confidential short-form application information that we address in Section II.F (Procedures for Limited Disclosure of Application Information).

⁴⁸³ See, e.g., *Auction 901 Procedures Public Notice*, 27 FCC Rcd at 4766-67, para. 147; *Auction 97 Procedures Public Notice*, 29 FCC Rcd at 8428-29, para. 149. No commenter objected to the Commission's proposal even though the Rural Digital Opportunity Fund Phase I auction bidding data released would presumably include bids for eligible areas that do not receive Rural Digital Opportunity Fund support (and information about which areas did not receive bids) and therefore may be eligible for support in a subsequent auction.

⁴⁸⁴ See *supra* Section IV.B.4.b (Bid Processing in the Clearing Round).

⁴⁸⁵ 47 CFR § 1.21004(a). If the winning bidder is a holding/parent company or a consortium/joint venture that decides to designate an operating company as the entity that will be authorized to receive Rural Digital Opportunity Fund support, that operating company must file the long-form application in its own name.

Form 683 and the Auction Application System to participate in the Divide Winning Bids process and to submit their long-form applications. We expect long-form applicants to expeditiously complete their applications and respond in a timely manner to staff requests for additional or missing information.

284. Details regarding the submission and processing of long-form applications will be provided in a public notice after the close of the bidding. After a long-form applicant's application has been reviewed and is considered to be complete, and after the long-form applicant has submitted an acceptable letter of credit and accompanying Bankruptcy Code opinion letter, a public notice will be released authorizing the long-form applicant to receive Rural Digital Opportunity Fund support.⁴⁸⁶

B. Divide Winning Bids

285. Any winning bidder that intends to assign some or all of its winning bids to related entities must do so by submitting the Divide Winning Bids portion of the FCC Form 683 during the Divide Winning Bids filing window. The Divide Winning Bids filing window will be announced in the public notice declaring the auction closed.

286. A winning bidder in Auction 904 may only assign its winning bids to a related entity that is named in its short-form application or that was formed after the short-form application deadline (i.e., July 15, 2020). A related entity is an entity that is controlled by the winning bidder or is a member of (or an entity controlled by a member of) a consortium/joint venture of which the winning bidder is a member.⁴⁸⁷ Thus, if a holding company/parent company is a winning bidder, the winning bidder may designate at least one operating company that it controls to complete the long-form application to receive Rural Digital Opportunity Fund support for some or all of the winning bids in a state. If a consortium/joint venture is a winning bidder, the entity may designate at least one member of (or an entity controlled by a member of) the consortium/joint venture to complete the long-form application to receive Rural Digital Opportunity Fund support for some or all of the winning bids in a state.⁴⁸⁸

287. A winning bidder may assign winning bids to more than one entity in a single state, but it cannot assign a single winning bid to more than one entity. Thus, a winning bidder may not split among multiple entities either: 1) eligible census blocks within a winning bid for an individual CBG, or 2) separate CBGs within a winning package bid.⁴⁸⁹

288. Each entity that is assigned a winning bid through the Divide Winning Bids process is the entity that must file the long-form application portion of FCC Form 683 in its own name. Except for one limited exception, that long-form applicant must be designated as the eligible telecommunications carrier to serve the relevant area(s), be named in the requisite letter(s) of credit, and fulfill the public interest obligations associated with receiving Rural Digital Opportunity Fund support.

289. For administrative convenience, if a winning bidder is a holding/parent company that has multiple operating companies in a state and intends to assign its winning bids to multiple operating

⁴⁸⁶ We refer to an authorized long-form applicant as a "support recipient."

⁴⁸⁷ The Auction Application System will not permit a winning bidder to assign its winning bids to another winning bidder.

⁴⁸⁸ See *supra* Section II.E.1 (Applicants and State Selections).

⁴⁸⁹ For example, assume a winning bidder has three winning bids—package bid A, package bid B, and single bid (i.e., one CBG) C. The winning bidder could assign package bid A to one related entity, package bid B to another related entity, and single bid C to a third entity. The winning bidder could not assign some CBGs from package bid A to one related entity and then the remaining CBGs from package bid A to another entity. The entire package bid must be assigned to one related entity. Similarly, the winning bidder could not assign some eligible census blocks from single bid C to one entity and then the remaining eligible census blocks from single bid C to another related entity. The entire CBG covered by the single winning bid must be assigned to one related entity.

companies in a state, it may choose one of those entities to be the lead operating company.⁴⁹⁰ In such circumstances, the winning bids should be assigned to that lead operating company, the long-form application should be filed in the name of the lead operating company, the letter of credit should be in the name of the lead operating company, and payments will be made to the study area code associated with the lead operating company. However, the long-form application must identify which operating companies will meet the public interest obligations for which CBGs and documentation must be submitted that demonstrates that each of the operating companies has an ETC designation covering the relevant CBGs. As decided in the *Rural Digital Opportunity Fund Order*, compliance with the service milestones will be determined on a statewide basis across all the relevant operating companies.⁴⁹¹

290. A winning bidder that assigns some or all its winning bids to a related entity must make a number of certifications in the Divide Winning Bids portion of FCC Form 683. In particular, it must certify and acknowledge that it: 1) has assigned the winning bids to related entities that were named in the short-form application or are newly formed, 2) will inform each entity of its filing obligation and cause each entity to submit a timely FCC Form 683 long-form application, 3) will be at risk for default if any of the related entities do not submit a timely FCC Form 683 long-form application, and 4) will submit a timely FCC Form 683 long-form application for any of the winning bids that it did not assign to another entity.

C. Long-Form Application: Disclosures and Certifications

291. Within the number of days specified by the Auction 904 closing public notice, a long-form applicant must electronically submit a properly completed long-form application (FCC Form 683) for the areas for which it (or its parent/holding company or consortium/joint venture) was deemed a winning bidder. Further instructions and filing requirements will be provided to long-form applicants in the auction closing public notice.

1. Ownership Disclosure

292. A long-form applicant must fully disclose in its long-form application its ownership structure as well as information regarding the real party- or parties-in-interest in the applicant or application as set forth in section 1.2112(a).⁴⁹² A long-form applicant that was also a winning bidder will already have ownership information on file with the Commission that was submitted in its short-form application during the pre-auction process, which may simply need to be updated as necessary.

2. General Universal Service Certifications

293. A long-form applicant must certify in its long-form application that it is in compliance with all statutory and regulatory requirements for receiving the universal service support that it seeks as of the long-form application filing deadline,⁴⁹³ or that it will be in compliance with such requirements before being authorized to receive Rural Digital Opportunity Fund support. A long-form applicant must also certify that it will comply with all program requirements, including service milestones.⁴⁹⁴ In addition, a long-form applicant must certify that it is aware that if it is not authorized to receive support based on its application, the application may be dismissed without further consideration and penalties may apply.⁴⁹⁵

⁴⁹⁰ Frontier Comments at 6-7; USTelecom Comments at 6-7 (describing how otherwise a holding company would be required to obtain multiple letters of credit in the state for each of the operating companies).

⁴⁹¹ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 712, para. 54.

⁴⁹² 47 CFR §§ 1.2112(a), 54.804(b)(2)(i); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 726, para. 87.

⁴⁹³ 47 CFR § 54.804(b)(2)(v).

⁴⁹⁴ *Id.*

⁴⁹⁵ 47 CFR § 54.804(b)(6).

294. We are not persuaded that we need to adopt a separate certification requiring long-form applicants to certify “that they will not use the facilities constructed or deployed using [Auction 904] support to provide any service in ineligible areas.”⁴⁹⁶ A similar proposal was raised for the CAF Phase II auction and the rationale for declining to adopt the proposal in that context also applies here.⁴⁹⁷ Specifically, we conclude that such a certification is unnecessary because we already require a long-form applicant to certify that it will “comply with all program requirements.”⁴⁹⁸ This includes the requirement that all universal service support recipients “use that support only for the provision, maintenance, and upgrading of facilities and services for which the support is intended.”⁴⁹⁹ Moreover, as an added safeguard, the states that designated support recipients as ETCs (or the support recipients themselves if they were designated as ETCs by the Commission) certify that the support was used for its intended purposes in the preceding calendar year and will be used for its intended purposes in the coming calendar year.⁵⁰⁰

3. Financial and Technical Capability Certification

295. As in its pre-auction short-form application, a long-form applicant must certify in its long-form application that it is financially and technically capable of meeting the relevant public interest obligations for each performance tier and latency combination in the geographic areas in which it seeks support.⁵⁰¹ A long-form applicant should be aware that in making a certification to the Commission it exposes itself to liability for a false certification. A long-form applicant should take care to review its resources and its plans before making the required certification.

4. Public Interest Obligations Certification

296. A long-form applicant must certify in its long-form application that it will meet the relevant public interest obligations for each performance tier and latency combination for which it (or its parent/holding company or consortium/joint venture) was deemed a winning bidder, including the requirement that it will offer service at rates that are equal to or lower than the Commission’s reasonable comparability benchmarks for fixed services offered in urban areas.⁵⁰²

5. Eligible Telecommunications Carrier Certification

297. A long-form applicant must acknowledge in its long-form application that it must be designated as an ETC in the relevant areas prior to being authorized to receive Rural Digital Opportunity Fund support in those areas.⁵⁰³ Specifically, the long-form applicant must certify that, if it has already been designated as an ETC in the relevant areas, it has provided a certification of its status in each such area and the relevant documentation supporting that certification in its long-form application. If the long-form applicant has not yet been designated as an ETC in the relevant areas, the long-form applicant must certify that it will submit a certification of its status as an ETC in each such area and the relevant documentation supporting that certification prior to being authorized to receive such support. This certification of ETC status and documentation must be submitted by the applicant within 180 days after

⁴⁹⁶ Gogo Reply at 6.

⁴⁹⁷ *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1513, para. 294.

⁴⁹⁸ 47 CFR § 54.804(b)(v).

⁴⁹⁹ *Id.* § 54.7(a).

⁵⁰⁰ *Id.* § 54.314.

⁵⁰¹ *Id.* § 54.804(b)(2)(ii); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 726, para. 88.

⁵⁰² 47 CFR § 54.804(b)(2)(iii); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 726, para. 89.

⁵⁰³ 47 CFR § 54.804(b)(5); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 727-28, para. 92.

the release of the Auction 904 closing public notice.⁵⁰⁴

6. Description of Technology and System Design

298. Pursuant to the Commission's rules, each long-form applicant will be required to demonstrate that it has a design plan with supportable technologies to meet the relevant Rural Digital Opportunity Fund public interest obligations in the areas covered by the winning bids by submitting technical information to support the operational assertions made in the short-form application. A long-form applicant is required to submit a detailed technology and system design description that explains how the design and technologies chosen will meet the relevant performance requirements,⁵⁰⁵ including information regarding quality, coverage, voice service, network management and on-going operations. This submission must include a detailed network diagram. The network diagram must be certified by a professional engineer.⁵⁰⁶ The professional engineer must certify that "the network is capable of delivering, to at least 95% of the required number of locations in each relevant state, voice and broadband service that meets the requisite performance requirements."⁵⁰⁷ Because it may take time for a long-form applicant to create a detailed technology and system design description that is tailored to such areas, it will submit its technology and system design description in two stages.

299. *Stage I - Initial Overview.* First, a long-form applicant must submit with its long-form application (due within the number of business days specified after the release of the Auction 904 closing public notice) an overview of its intended technology and system design for each state in which winning bids were made. The overview must describe at a high level how the long-form applicant will meet its Rural Digital Opportunity Fund public interest obligations for the relevant performance tier and latency combination(s) using Rural Digital Opportunity Fund support (e.g., building a new network or expanding an existing network, deploying new technology or existing technology). This overview should avoid highly technical terminology or jargon unless such language is integral to explaining the project. The overview will be made publicly available, so a long-form applicant should not include any confidential trade secrets or commercial information in its overview.

300. *Stage II - Detailed Description.* Second, within the specified number of days after the release of the Auction 904 closing public notice, a long-form applicant must submit, for each state in which winning bids were made, a more detailed description of its technology and system design. This second submission must describe the network to be built or upgraded, demonstrate the project's feasibility, and include the network diagram certified by a professional engineer.⁵⁰⁸ It must describe in detail a network that fully supports the delivery of consumer voice and broadband service that meets the requisite performance requirements to at least 95% of the required number of locations in each state by the end of the six-year build-out period and for the duration of the 10-year support term, assuming a 70% subscription rate by the final service milestone. It also must contain sufficient detail to demonstrate that the long-form applicant can meet the interim service milestones if it becomes authorized to receive support. If a long-form applicant submits a technology and system design description that lacks sufficient detail to demonstrate that the long-form applicant has the technical qualifications to meet the relevant

⁵⁰⁴ See *infra* Section V.E (Documentation of ETC Designation). See also *supra* Section II.E.6 (Eligible Telecommunications Carrier Certification) (describing certain requirements applicable to ETCs).

⁵⁰⁵ 47 CFR § 54.804(b)(iv); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 726, para. 90.

⁵⁰⁶ 47 CFR § 54.804(b)(iv); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 726, para. 90. For purposes of this requirement, while it is not necessary that the professional engineer certifying the network have a Professional Engineer license, the certification should describe the professional engineer's qualifications such that the certifier's expertise is apparent.

⁵⁰⁷ 47 CFR § 54.804(b)(iv); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 726, para. 90.

⁵⁰⁸ A long-form applicant can submit the detailed description as early as its initial long-form application filing deadline but no later than the specified number of days after the public notice's release.

Rural Digital Opportunity Fund obligations, the long-form applicant will be asked to provide further details about its proposed network. We will treat all the information submitted with this second submission as confidential and will withhold it from routine public inspection.⁵⁰⁹

301. Below, we provide guidance on how a long-form applicant can successfully meet the Stage II requirement in section 54.804(b)(2)(iv) to provide a description of its technology and system design. Specifically, we describe the types of information we would expect a long-form applicant to include, at a minimum, in a detailed description of its technology and system design in order to demonstrate that it has the technical qualifications to meet its Rural Digital Opportunity Fund obligations. Our guidance is informed by the types of information that long-form applicants submitted for Auction 903 during the long-form application stage to demonstrate that they had the technical qualifications to meet the relevant CAF Phase II public interest obligations.⁵¹⁰ These are also the types of information on which we expect a technically qualified long-form applicant will have made preliminary decisions in order to determine how much support it would need to meet the relevant Rural Digital Opportunity Fund auction public interest obligations and also to begin planning how it will meet the required service milestones.

302. We understand that long-form applicants will be in a variety of implementation stages throughout the support term. For example, a long-form applicant may have already completed its network construction, may be in the process of constructing its network, or may be planning how it will construct its network. Indeed, the long-form applicant may have portions of its network(s) in different stages at the same time for different states, areas, or technology design solutions. Therefore, we expect that the detailed descriptions that a long-form applicant submits will be based upon its current actions or intentions and that changes may and in many cases will be made throughout the support term. With that understanding, we are looking for the long-form applicant to demonstrate that it has a technically feasible solution that will meet the Rural Digital Opportunity Fund support requirements by the relevant service milestones.

303. *Overall Network Design.* A long-form applicant, regardless of the technology (or technologies) it proposes to use, is expected to:

- Describe the proposed last mile architecture(s), design, and technologies.⁵¹¹
- Describe the proposed middle mile/backhaul topology,⁵¹² architecture, design, and technologies.
- Describe the proposed interconnection architecture, design, and technologies solution to connect to the Internet. This will include the likely service providers, link data-rate/size, locations, dual-homing, and multi-homing characteristics.

⁵⁰⁹ As we do with short-form applications, we will treat long-form applicants that submit this information as having made a request to treat this information as confidential trade secrets and/or commercial information. See 47 CFR § 0.459(a)(4). If a request for public inspection under section 0.461 is made, however, the long-form applicant will be notified and will be required to justify confidential treatment of its request if the long-form applicant has any objections to disclosure. 47 CFR § 0.461.

⁵¹⁰ See 47 CFR 54.315(b)(iv) (requiring CAF Phase II support recipients to submit “[a] description of the technology and system design . . . used to deliver voice and broadband service, including a network diagram which must be certified by a professional engineer”).

⁵¹¹ Such architectures and technologies include, for example, wireless licensed or unlicensed, fiber, coaxial cable, satellite, digital subscriber line, hybrids, etc.

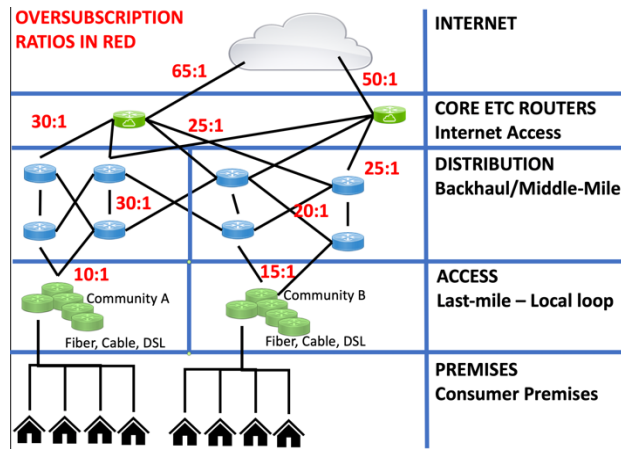
⁵¹² For example, describe ring, mesh, tree and branch, and hybrid topologies.

- Describe the proposed architecture that will be used to provide voice service.⁵¹³ Describe whether the proposed voice services will: 1) be internally provided, 2) use a managed voice service provider, 3) use a voice over the top service, or 4) use another type of voice service.⁵¹⁴
- Describe the network's scalability to support customer growth and network data usage growth to account for: 1) ever increasing application requirements, 2) increasing quality demands, and 3) lower response/latency demands for ever increasing usage of highly interactive applications.
- Describe the design and features that it proposes to implement that will: improve reliability (such as redundancy) for equipment, links and software; dual homing; and multi-homing connectivity.
- Describe network infrastructure ownership. Indicate which parts of the network will use the long-form applicant's or another party's existing network facilities, including both non-wireless and wireless facilities extending from the network to customers' locations. For non-wireless facilities that do not yet exist, the description should indicate whether the new facilities will be aerial, buried, or underground. This includes leased lines, transit services, rented tower space for radios, etc.

⁵¹³ This description should include the long-form applicant's Session Initiation Protocol (SIP) proxies, session border controllers, and various network databases. If the long-form applicant obtains these or other voice service functions as services from another provider or providers (for example, an over-the-top VoIP provider, or an incumbent or competitive local exchange carrier), the description should so indicate.

⁵¹⁴ See *supra* Section II.E.6 (Eligible Telecommunications Carrier Certification) (describing how an ETC must offer qualifying voice service using its own facilities, at least in part).

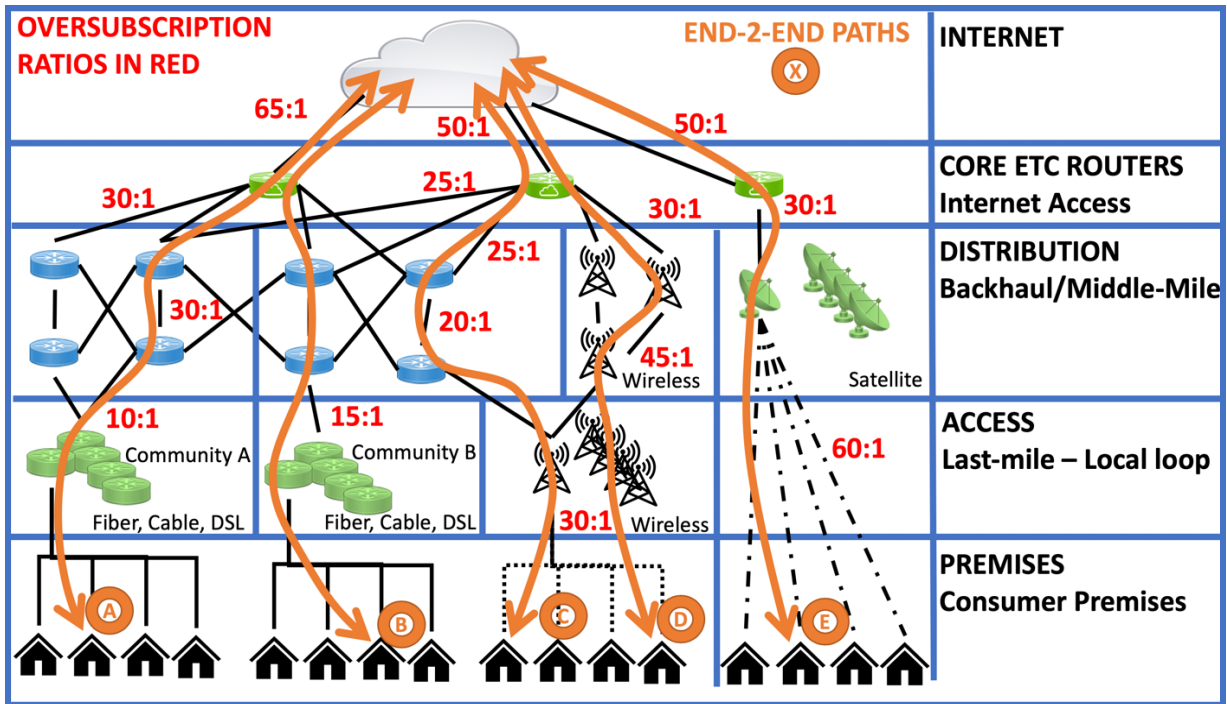
- Provide technical information about the design methods, “rules of thumb,” and engineering assumptions used to size the capacity of the network’s nodes (or gateways), links and wireless base stations. These are often expressed as ratios, such as “oversubscription ratio” applied in the middle-mile/backhaul and interconnection network levels that funnel the consumer traffic to the Internet. The information provided should demonstrate how the required performance for the relevant performance tier will be achieved during periods of peak usage, downstream and upstream speed, and latency assuming a 70% subscription rate by the final service milestone. For example, the diagram below shows the various oversubscription ratios, link media (wired, wireless, etc.), redundancy and multi-homing in a visual format.⁵¹⁵ It can also be described in text with no need for a diagram. Regardless, we do expect sufficient technical detail rather than a simplistic approach.⁵¹⁶ We expect several ratios as shown and not a simple statement that the network “will use a 20:1 ratio” since ratios are generally different at different levels and locations.



- Finally, describe how the long-form applicant’s design will meet the peak period end-to-end performance requirements for the path from the consumer premises to the Internet. This requires that the applicant detail consumer path use case(s) that the long-form applicant will use to move traffic to and from the consumer premises to the Internet. This description should define the technical, planning and capacity parameters that a stream of packets would experience along this end-to-end path. For example, the diagram below shows five paths labelled A through E. This includes various oversubscription ratios, link media (wired, wireless, etc.), redundancy, and multi-homing characteristics. However, the diagram does not show the equipment types and other information that might be relevant to the long-form applicant’s network. The diagram below is merely representational for purposes of this document. We expect individual path use cases to describe the pathway: links (media, technology, data-rates, redundancy, etc.); frequencies, channels, antenna and wireless parameters; topology (mesh, ring, hierarchical) that also note redundant links or multi-homing, etc.; network devices (equipment type, redundancy, reliability); protocols; oversubscription ratios; and ETC owned vs leased infrastructure.

⁵¹⁵ Note: The oversubscriptions in this diagram example are not meant to be representative or recommendations for the actual subscription ratios that ETCs should use in their networks.

⁵¹⁶ For wireless base stations and their pertinent backhaul, provide the planned number of subscribers, monthly target GB (Gigabytes) per subscriber and oversubscription ratio. Provide if and how a mix of speed tiers could be provided.



304. *Project Plan.* The applicant will provide a project plan that describes a network build-out schedule that includes but is not restricted to plans for constructing last mile and middle mile facilities.

- The build-out schedule should include when (month, quarter or projected date) and where (geographic description, county, city, town, CBG, census tract; note the state or higher level is not acceptable).
- The build-out schedule should show the long-form applicant’s projected milestones on an annual basis, including achievement of the interim service milestones described in section 54.802(c) of the Commission’s rules and completion of the network for the number of locations determined by the CAM by the end of the sixth year of support.
- The project plan and included schedule should incorporate detailed information showing how the long-form applicant plans to offer, to at least 95% of the required number of locations in each relevant state, voice and broadband service meeting the relevant performance requirements when the system is complete.

305. *Network Management and On-going Operations.* The applicant’s detailed description should:

- Describe the applicant’s plans for monitoring network usage/capacity, performance, congestion, and other parameters.
- Describe how the applicant will maintain the performance and quality of the service for the duration of the 10-year support term.
- Describe who will provide these services. Will the applicant: 1) use existing internal organizations, 2) use contracted management service providers, 3) create new internal organizations, or 4) engage new contractors?

- Describe how the applicant will comply with Commission performance measures for speed and latency.⁵¹⁷ The description should include whether the applicant plans to use the Measuring Broadband America (MBA) system, off-the-shelf testing mechanisms such as existing network management systems and network management tools, or provider-developed self-testing mechanisms.

306. *Network Diagram.* The network diagram must be certified by a professional engineer and should:

- Identify all wireline and wireless segments of the proposed networks. This should include applicable middle-mile/backhaul and interconnection network infrastructure. These are also commonly referred to as “links” between the nodes. These descriptions should indicate the media/link technology, data-rate/speed, and topology if point-to-point, ring, etc.
- Uniquely identify (i) major network nodes⁵¹⁸ including their manufacturer and model, as well as their functions, locations,⁵¹⁹ and throughput/capacity;⁵²⁰ (ii) access nodes or gateways,⁵²¹ including their technology, manufacturer and model, location, and throughput/capacity; and (iii) major inter-nodal links (not last mile),⁵²² and their throughput/capacity.
- Indicate how many locations/consumers will be offered service from each access node or from each gateway, and which performance tier or tiers will be supported at each access node.
- Indicate what parts of the network will be new deployment and what parts will use existing network facilities.
- Identify specialized nodes used in providing voice service, such as SIP servers, PSTN gateways or voice OTT providers.
- Explain how nodes or gateways are connected to the Internet backbone and Public Switched Telephone Network. Show redundancy, dual- or multi-homing configurations.

307. *Terrestrial Fixed Wireless.* A long-form applicant that proposes to use terrestrial fixed wireless technologies should:

⁵¹⁷ See generally *CAF Performance Measures Order*, 33 FCC Rcd 6509; *CAF Performance Measures First Reconsideration Order*, 34 FCC Rcd 8081; *CAF Performance Measures Second Reconsideration Order*, 34 FCC Rcd 10109 (describing the methodologies for the Commission’s performance measures).

⁵¹⁸ Major nodes include, but are not necessarily restricted to, routers, SIP Proxies, soft switches, and databases, e.g., DNS services, used to route Internet communications and voice calls; and Points of Interconnection with the Public Switched Telephone Network and the Internet core.

⁵¹⁹ A long-form applicant should provide a reasonably descriptive label for where the node is located. For example, identify the city or town, village or suburb where the node is located. Street address and latitude/longitude are not required but can also be used.

⁵²⁰ Capacity should be measured in Gigabits per second for routers, calls per hour for SIP proxies and soft switches, queries per minute for databases, and appropriate units for other nodes.

⁵²¹ An access node connects a customer’s connection to the core of the network. Access nodes include wireless base stations, digital subscriber line access modules, cable modem termination systems, and optical line terminations, among others. Access nodes are sometimes referred to as aggregation nodes. When we reference gateways, we are referring to the gateway earth stations used by satellite providers.

⁵²² Include links that connect access nodes to the network core, among other major inter-nodal links. Each inter-nodal link should be identified by specifying the nodes at the ends of the link.

- Explain, with technical detail, how the proposed spectrum can meet or exceed the relevant performance requirements at peak usage periods.⁵²³ Clearly identify the licensed and unlicensed spectrum that will be used.
- Provide the calculations used,⁵²⁴ for each performance tier and frequency band, to design the last mile link budgets in both the upload and download directions at the cell edge,⁵²⁵ using the technical specifications of the expected base station and customer premise equipment. Submit assumptions regarding fading statistics, cell edge probability of coverage, and cell loading for each relevant performance tier.
- Provide coverage maps for the planned and/or existing networks that will be used to meet the Rural Digital Opportunity Fund public interest obligations, indicating where the upload and download speeds will meet or exceed the relevant performance tier speed(s).⁵²⁶ The coverage maps should be provided for each interim and final service milestone and should display the required service areas and target locations (or a representation thereof).
- Provide detailed radio access network (RAN) infrastructure information used to generate the coverage maps for each unique cell including longitude, latitude, antenna height, antenna orientation, antenna down-tilt, antenna model, antenna system configuration,⁵²⁷ effective radiated power, operating spectrum amount, operating spectrum type, and operating radio technology.
- Describe the underlying propagation model used to prepare the coverage maps and how the model incorporates the operating spectrum, antenna heights, distances, fading statistics, terrain resolution, and clutter resolution.⁵²⁸

⁵²³ The justification should clearly define all relevant assumptions including, but not limited to, oversubscription ratio, number of locations, spectrum efficiency, bandwidth, peak periods required user data rate, and peak periods network loading.

⁵²⁴ This should include a description of all design assumptions, including, but not limited to, coverage reliability, fade margins, required frame error rate, required signal-to-noise ratio, and modulation/coding scheme associated with frame error rate and signal to noise ratio.

⁵²⁵ The term cell edge is commonly used to describe the edge of the base station coverage area beyond which performance goals cannot be achieved. A support recipient cannot report a location as served in satisfaction of its Auction 904 deployment obligations until it is capable of providing a voice and broadband service meeting the relevant performance tier and latency public interest obligations to that location within 10 business days upon request.

⁵²⁶ Typically, a coverage plot must demonstrate that service to a proposed location will meet or exceed the prerequisite broadband speed and voice service requirements. Unlike legacy technologies, current and future generation technologies typically use speed for such coverage plots.

⁵²⁷ For example, transmit diversity, multiple-in-multiple-out (MIMO) and beam switching.

⁵²⁸ A long-form applicant should provide vendor references and publicly available publications for the utilized model, digital elevation, and clutter data.

- Describe the underlying cell site and generally, radio frequency (RF) access network capacity management and traffic engineering models or concepts.⁵²⁹ Also describe any adjunct carrier aggregation or spectrum sharing techniques and if the proposed system could accommodate these features, if needed.
- Describe, for each relevant performance tier and latency combination, the base station equipment that the long-form applicant plans to use.⁵³⁰
- Describe the planned customer premise equipment configuration.⁵³¹

308. *Satellite Technologies.* A long-form applicant that proposes to use primarily satellite technologies should:⁵³²

- Describe how many satellites that are in view simultaneously from any specific location will be required to meet the relevant Rural Digital Opportunity Fund public interest obligations.
- Describe how many uplink and downlink gateway antenna beams will be required on each satellite, and the capacity of each beam in megabits per second. For each winning bid area/state to be served, provide both the uplink and downlink beams, provide the gateway call sign, beam ID, frequency bands used, and location (city/state).
- Describe how many uplink and downlink user antenna beams will be required on each satellite, and the capacity of each beam in megabits per second.
- Describe how the gateway capacity is connected to user beams on the satellite, in terms of beams and data capacity per beam.
- Describe how much satellite capacity (in gigabits per second) the applicant plans to reserve, by winning bid area/state, to serve the locations required under applicant's award and to achieve the required service milestones.
- Describe whether the capacity on the uplink and downlink beams would be able to be reallocated once a satellite commences operation, if the subscription rate is less than 70% in one beam but more than 70% in another beam. If there are circumstances in which such reallocation would not be possible, please describe those circumstances and the states impacted.

7. Available Funds Certification and Description

309. A long-form applicant must certify in its long-form application that it will have available funds for all project costs that exceed the amount of Rural Digital Opportunity Fund support to be received for the first two years of its support term.⁵³³ A long-form applicant must also describe how the required construction will be funded in each state.⁵³⁴ The description should include the estimated project

⁵²⁹ In order to fulfill this requirement, the long-form applicant could describe the concept and specific best practices the applicant currently follows or intends to implement.

⁵³⁰ Such a description should include technology, speed, number of sectors, average number of subscribing locations per sector, frequency band, channel bandwidth, frequency reuse, antenna gain, diversity configuration, estimated losses, estimated height above ground, base station coordinate in NAD 83, and any other relevant information. A long-form applicant should also include vendor specification data sheets or other supporting documents.

⁵³¹ Such a description should include technology, applicable frequency band, speed options, antenna gain, diversity scheme and modem specifications. A long-form applicant should also include vendor specification data sheets or other supporting documents.

⁵³² This does not include long-form applicants that intend to use satellite technologies primarily for backhaul.

⁵³³ 47 CFR § 54.804(b)(2)(v); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 727, para. 91.

⁵³⁴ 47 CFR § 54.804(b)(2)(vi); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 727, para. 91.

costs for all facilities that are required to complete the project, including the costs of upgrading, replacing, or otherwise modifying existing facilities to expand coverage or meet performance requirements. The estimated costs must be broken down to indicate the costs associated with each proposed service area at the state level and must specify how Rural Digital Opportunity Fund support and other funds, if applicable, will be used to complete the project. The description must include financial projections demonstrating that the long-form applicant can cover the necessary debt service payments over the life of any loans. We will treat all the information submitted with this submission as confidential and will withhold it from routine public inspection.⁵³⁵

8. Spectrum Access

310. A long-form applicant that intends to use wireless technologies to meet the relevant Rural Digital Opportunity fund public interest obligations must demonstrate that it currently has sufficient access to spectrum.⁵³⁶ Specifically, as in its pre-auction short-form application, a long-form applicant must, in its long-form application (i) identify the spectrum band(s) it will use for the last mile, backhaul, and any other parts of the network;⁵³⁷ (ii) describe the total amount of uplink and downlink bandwidth (in megahertz) that it has access to in each spectrum band for the last mile; (iii) describe the authorizations (including leases) it has obtained to operate in the spectrum, if applicable;⁵³⁸ and (iv) list the call signs and/or application file numbers associated with its spectrum authorizations, if applicable.⁵³⁹ To the extent that a long-form applicant will use licensed spectrum, it should provide details about how the licensed service area covers its winning bid area(s) (e.g., provide a list of geographic areas that the spectrum license covers and describe how those areas relate to the winning bid area(s)).

311. A long-form applicant must also certify that the description of the spectrum access is accurate and that it will retain such access for at least 10 years after the date on which it is authorized to receive support.⁵⁴⁰ Applications will be reviewed to assess the reasonableness of this certification.

⁵³⁵ We will also treat long-form applicants that submit this information as having made a request to treat this information as confidential trade secrets and/or commercial information. See 47 CFR § 0.459(a)(4). If a request for public inspection under section 0.461 is made, however, the long-form applicant will be notified and will be required to justify confidential treatment of its request if the long-form applicant has any objections to disclosure. 47 CFR § 0.461.

⁵³⁶ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 726, para. 90.

⁵³⁷ A long-form applicant may propose to use more than one spectrum band to meet its Rural Digital Opportunity Fund public interest obligations. Each applicant must identify for which part of the network (e.g., last mile, backhaul, etc.) it intends to use each spectrum band.

⁵³⁸ If the licensee is a different party than the long-form applicant, the licensee name and the relationship to the long-form applicant should be described. If the long-form applicant is leasing spectrum, the lease number should be provided along with the license information.

⁵³⁹ As in the short-form application, a long-form applicant that intends to provide service using satellite technology should describe its expected timing for applying for earth station license(s), and an applicant that intends to obtain microwave license(s) for backhaul should describe its expected timing for applying for microwave license(s) if these licenses have not already been obtained. Additionally, if an applicant that is participating or intends to participate in the Auction 102, Auction 103, Auction 105, Auction 107, 2.5 GHz Rural Tribal Priority Window, lower 37 GHz, and 6 GHz proceedings; and use the spectrum to meet its Rural Digital Opportunity Fund public interest obligations, to the extent the proceeding is still ongoing the long-form applicant must indicate the status of its participation (consistent with auction procedures regarding the disclosure of non-public auction-related information) and must provide alternatives for if it does not ultimately obtain a license (if applicable) or is unable to operate in the spectrum in time to meet its interim service milestones. See *supra* Section II.E.4.d (Spectrum Access). Such an alternative may not include spectrum bands that are subject to pending spectrum processes.

⁵⁴⁰ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2314, para. 64.

D. Letter of Credit Commitment Letter

312. Within the specified number of days after the release of the Auction 904 closing public notice, a long-form applicant must submit a letter from a bank acceptable to the Commission, as set forth in section 54.804(b)(3), committing to issue an irrevocable stand-by letter of credit, in the required form, to the long-form applicant.⁵⁴¹ The letter must, at a minimum, provide the dollar amount of the letter of credit and the issuing bank's agreement to follow the terms and conditions of the Commission's model letter of credit in Appendix C of the *Rural Digital Opportunity Fund Order*.⁵⁴²

E. Documentation of ETC Designation

313. Within 180 days after the release of the Auction 904 closing public notice, a long-form applicant is required to submit appropriate documentation of its high-cost ETC designation in all the areas for which it will receive support.⁵⁴³ Appropriate documentation should include the original designation order, any relevant modifications, e.g., expansion of service area or inclusion of wireless, along with any name-change orders. A long-form applicant is also required to provide documentation showing that the designated areas (e.g., census blocks, wire centers, etc.) cover the relevant winning bid areas so that it is clear that the long-form applicant has high-cost ETC status in each winning bid area.⁵⁴⁴ Such documentation could include maps of the long-form applicant's ETC designation area, map overlays of the winning bid areas, and/or charts listing designated areas. Additionally, a long-form applicant is required to submit a letter with its documentation from an officer of the company certifying that the long-form applicant's ETC designation for each state covers the relevant areas where the long-form applicant will receive support.⁵⁴⁵

314. In the event a long-form applicant is unable to obtain the necessary ETC designations within this timeframe, the Commission explained that it would be appropriate to waive the 180-day timeframe if the long-form applicant is able to demonstrate that it has engaged in good faith efforts to obtain an ETC designation, but the proceeding is not yet complete.⁵⁴⁶ We will presume that a long-form applicant acted in good faith if it files its ETC application with the state commission or this Commission as applicable within 30 days of the release of the Auction 904 closing public notice.⁵⁴⁷ Absent a waiver of the deadline, a long-form applicant that fails to obtain the necessary ETC designations by this deadline will be subject to an auction forfeiture and will not be authorized to receive Auction 904 support.

F. Audited Financial Statements

315. Within 180 days after the release of the Auction 904 closing public notice, a long-form applicant that did not submit audited financial statements in its pre-auction short-form application must

⁵⁴¹ 47 CFR § 54.804(b)(3), (c)(2). See also *id.* § 54.804(c); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 729-35, paras. 96-113 (describing the letter of credit requirements).

⁵⁴² 47 CFR § 54.804(b)(3); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 773-77, Appx. C. A Tribal Nation or Tribally owned and controlled long-form applicant that is unable to obtain a letter of credit may file a petition for a waiver of the letter of credit requirement. See *infra* Section V.G (Letter of Credit and Bankruptcy Code Opinion Letter).

⁵⁴³ 47 CFR § 54.804(b)(5). A Lifeline-only ETC designation is not sufficient; the long-form applicant must obtain a high-cost ETC designation in areas where it seeks to be authorized to receive Rural Digital Opportunity Fund support.

⁵⁴⁴ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 727-28, para. 92.

⁵⁴⁵ 47 CFR § 54.804(b)(5); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 728, para. 92. See also *supra* Section II.E.6 (Eligible Telecommunications Carrier Certification) (describing certain requirements applicable to ETCs).

⁵⁴⁶ See *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 723, para. 81.

⁵⁴⁷ *Id.*

submit the financial statements from the prior fiscal year that are audited by an independent certified public accountant.⁵⁴⁸ Any long-form applicant that fails to submit the audited financial statements as required by the 180-day deadline will be subject to a base forfeiture of \$50,000, which will be subject to adjustment upward or downward as appropriate based on the criteria set forth in the Commission's forfeiture guidelines.⁵⁴⁹

G. Letter of Credit and Bankruptcy Code Opinion Letter

316. After a long-form applicant's application has been reviewed and is considered complete, the Commission will issue a public notice identifying each long-form applicant that may be authorized to receive Rural Digital Opportunity Fund support. No later than 10 business days after the release of the public notice, a long-form applicant must obtain one irrevocable standby letter of credit at the value specified in section 54.804(c)(1) from a bank acceptable to the Commission as set forth in section 54.804(c)(2) for each state where the long-form applicant is seeking to be authorized.⁵⁵⁰ The letter of credit must be issued in substantially the same form as set forth in the model letter of credit provided in Appendix C of the *Rural Digital Opportunity Fund Order*.⁵⁵¹ The first letter of credit must cover the first year of support at a minimum.⁵⁵² The value of the letter of credit must increase each year until it has been verified that the support recipient has met certain milestones as described in more detail in section 54.804(c)(1) of the Commission's rules.⁵⁵³

317. In addition, a long-form applicant will be required to provide with the letter of credit an opinion letter from outside legal counsel clearly stating, subject only to customary assumptions, limitations, and qualifications, that, in a proceeding under the Bankruptcy Code, the bankruptcy court would not treat the letter of credit or proceeds of the letter of credit as property of the long-form

⁵⁴⁸ 47 CFR § 54.804(b)(4). This option is only available to short-form applicants that indicated that they were not audited in the ordinary course of business and that certified in their short-form applications that they have provided voice, broadband, and/or electric distribution or transmission services for at least two years. *Id.* § 54.804(a)(7)(i); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 722-23, para. 80.

⁵⁴⁹ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 722-23, para. 80 & n.224. *See also* 47 U.S.C. § 503(b)(2)(B); 47 CFR § 1.80(b)(8), note to paragraph (b)(8). This forfeiture will be applied in lieu of the forfeiture we will impose for other auction defaults and will be applied per defaulting entity rather than per bid or CBG.

⁵⁵⁰ 47 CFR § 54.804(c)(1), (c)(2). The Bureau also issued guidance announcing that a non-U.S. bank that has a branch office located in New York City, New York and that will accept a letter of credit draw certificate from USAC via overnight courier, in addition to in-person presentations, will be considered qualified to issue letters of credit if the bank also meets the Commission's other non-U.S. bank eligibility requirements. *Wireline Competition Bureau Provides Guidance Regarding the Eligibility of Non-United States Banks Issuing Letters of Credit for Universal Service Competitive Bidding Mechanisms*, WC Docket No. 19-126 et al., Public Notice, DA 20-307 (WCB Mar. 20, 2020).

⁵⁵¹ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 773-77, Appx. C. If any Tribal Nation or Tribally owned and controlled long-form applicant for Auction 904 is unable to obtain a letter of credit, it may file a petition for a waiver of the letter of credit requirement. Such long-form applicants must show, with evidence acceptable to the Commission, that the Tribal Nation is unable to obtain a letter of credit because of limitations on the ability to collateralize its real estate, that Rural Digital Opportunity Fund support will be used for its intended purposes, and that the funding will be used in the best interests of the Tribal Nation and will not be wasted. *See Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 733, para. 109. All Tribally owned and controlled CAF Phase II auction winning bidders were able to obtain a commitment letter from a qualified bank to issue a letter of credit without needing to seek waiver of this requirement.

⁵⁵² 47 CFR § 54.804(c)(1).

⁵⁵³ 47 CFR § 54.804(c)(1)(i)-(vii); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 729-31, paras. 98-104.

applicant's bankruptcy estate, or the bankruptcy estate of any other bidder-related entity requesting issuance of the letter of credit, under section 541 of the Bankruptcy Code.⁵⁵⁴

H. Default Payment Requirements

1. Auction Forfeiture

318. Any Auction 904 winning bidder or long-form applicant will be subject to a forfeiture in the event of a default before it is authorized to begin receiving support.⁵⁵⁵ A winning bidder or long-form applicant will be considered in default and will be subject to forfeiture if it fails to timely file a long-form application, fails to meet the document submission deadlines, is found ineligible or unqualified to receive Rural Digital Opportunity Fund support by the Bureau on delegated authority, and/or otherwise defaults on its winning bids or is disqualified for any reason prior to the authorization of support.⁵⁵⁶ Any such determination by the Bureau shall be final, and a winning bidder or long-form applicant shall have no opportunity to cure through additional submissions, negotiations, or otherwise. Agreeing to such payment in the event of a default is a condition for participating in bidding in Auction 904.⁵⁵⁷

319. In the event of an auction default, we will impose a base forfeiture per violation of \$3,000 subject to adjustment upward or downward based on the criteria set forth in our forfeiture guidelines, as adopted in the *Rural Digital Opportunity Fund Order*.⁵⁵⁸ A violation is defined as any form of default with respect to the CBG. In other words, there shall be separate violations for each CBG assigned in a bid.⁵⁵⁹ To ensure that the amount of the base forfeiture is not disproportionate to the amount of a winning bidder's bid, we will limit the total base forfeiture to 15% of the bidder's total assigned support for the bid for the support term.⁵⁶⁰

2. Non-Compliance Measures Post-Authorization

320. A long-form applicant that has received notice from the Commission that it is authorized to receive Rural Digital Opportunity Fund support will be subject to non-compliance measures once it becomes a support recipient if it fails or is unable to meet its minimum coverage requirement, other public interest obligations, or fails to fulfill any other term or condition of Rural Digital Opportunity Fund support.⁵⁶¹ As described in the *Rural Digital Opportunity Fund Order*, these measures will scale with the extent of non-compliance, and include additional reporting, withholding of support, support recovery, and

⁵⁵⁴ 11 U.S.C. § 541; 47 CFR § 54.804(c)(3); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 735, para. 113.

⁵⁵⁵ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 735-36, paras. 114-17.

⁵⁵⁶ The technical guide will provide a detailed explanation of what is considered a winning bid.

⁵⁵⁷ This forfeiture payment satisfies the requirements of section 1.21004(b) of the Commission's rules with respect to default payments. 47 CFR § 1.21004(b).

⁵⁵⁸ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 735-36, para. 115. See also 47 U.S.C. § 503(b)(2)(B); 47 CFR § 1.80(b)(8), note to paragraph (b)(8). In determining the final amount of the forfeiture, consistent with the Commission's rules, the Enforcement Bureau shall take into account the nature, circumstances, extent, and gravity of the violations. 47 CFR § 1.80(b)(8).

⁵⁵⁹ A winning bidder or long-form applicant would violate the Commission's rules for each of the CBGs assigned in its defaulting bid. If a winning bidder or long-form applicant defaults on a bid that includes 10 CBGs, that entity could be subject to a base forfeiture of \$30,000 (10 CBGs multiplied by the base forfeiture of \$3,000).

⁵⁶⁰ *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 736, para. 117. This would occur in situations where the dollar amount associated with the bid is low. For example, assume Bidder A bids to serve 100 CBGs for \$100,000 over the support term. We would impose a base forfeiture of \$15,000 (15% of \$100,000) because otherwise the base forfeiture would be \$300,000, three times the entire bid amount (\$3,000 x 100 CBGs). In contrast, if Bidder B bids to serve 50 CBGs for \$1,000,000 over the support term, we would impose a base forfeiture of \$150,000 (\$3,000 x 50 CBGs), which is 15% of the total bid.

⁵⁶¹ 47 CFR §§ 54.320, 54.804(c)(4), 54.806.

drawing on the support recipient's letter of credit if the support recipient cannot pay back the relevant support by the applicable deadline.⁵⁶² A support recipient may also be subject to other sanctions for non-compliance with the terms and conditions of Rural Digital Opportunity Fund support, including, but not limited to, potential revocation of ETC designations and suspension or debarment.⁵⁶³ Additionally, support recipients are subject to the non-compliance measures that have been adopted in conjunction with the methodology for high-cost support recipients to measure and report speed and latency performance to fixed locations.⁵⁶⁴

VI. PROCEDURAL MATTERS

321. *Legal Authority.* We establish procedures for Auction 904 pursuant to the authority contained in sections 4(i)-(j), 214, 254, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 214, 254, and 303(r).

322. *Paperwork Reduction Act Analysis.* This document implements the information collections adopted in the *Rural Digital Opportunity Fund Order* and does not contain any additional information collection(s) subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. The Commission is currently seeking PRA approval for information collections related to the short-form application and long-form application processes. In addition, therefore, this document does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198.⁵⁶⁵

323. *Supplemental Final Regulatory Flexibility Analysis.* As required by the Regulatory Flexibility Act of 1980 (RFA),⁵⁶⁶ the Commission prepared an Initial Regulatory Flexibility Analysis (IRFA) in connection with the *Rural Digital Opportunity Fund NPRM*,⁵⁶⁷ and a Final Regulatory Flexibility Analysis (FRFA) in connection with the *Rural Digital Opportunity Fund Order*.⁵⁶⁸ A Supplemental Initial Regulatory Flexibility Analysis (Supplemental IRFA) was also filed in the *Auction 904 Comment Public Notice* in this proceeding.⁵⁶⁹ The Commission sought written public comment on the proposals in the *Rural Digital Opportunity Fund NPRM* and in the *Auction 904 Comment Public Notice*, including comments on the IRFAs and the Supplemental IRFA. No comments were filed addressing the IRFAs. The Commission included a Final Regulatory Flexibility Analysis (FRFA) in connection with the *Rural Digital Opportunity Fund Order*.⁵⁷⁰ This Supplemental Final Regulatory Flexibility Analysis (Supplemental FRFA) supplements the FRFA in the *Rural Digital Opportunity Fund Order* to reflect the actions taken in this Public Notice and conforms to the RFA.⁵⁷¹

324. *Need for, and Objectives of, this Public Notice.* This Public Notice establishes procedures for the Rural Digital Opportunity Fund auction (auction or Auction 904). In particular, this Public Notice establishes procedures for, among other things, how an applicant can become qualified to

⁵⁶² *Id.* §§ 54.320, 54.804(c)(4), 54.806; *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 713-16, paras. 58-64.

⁵⁶³ 47 CFR § 54.320, 54.806(b); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 715-16, para. 63.

⁵⁶⁴ *CAF Performance Measures Order*, 33 FCC Rcd at 6531-33, paras. 60-67.

⁵⁶⁵ *See* 44 U.S.C. 3506(c)(4).

⁵⁶⁶ 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Public L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁵⁶⁷ *Rural Digital Opportunity Fund et al.*, WC Docket Nos. 19-126, 10-90, Notice of Proposed Rulemaking, 34 FCC Rcd 6778 (2019).

⁵⁶⁸ *Rural Digital Opportunity Fund Order* (Appx. B, Final Regulatory Flexibility Analysis).

⁵⁶⁹ *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2329-30, paras. 138-42.

⁵⁷⁰ *Rural Digital Opportunity Fund Order* (Appx. B, Final Regulatory Flexibility Analysis).

⁵⁷¹ *See* 5 U.S.C. § 604.

bid in the auction, how bidders will submit bids, and how bids will be processed to determine winners and assign support amounts.

325. Following the release of the *Rural Digital Opportunity Fund Order*, the Commission released the *Auction 904 Comment Public Notice*.⁵⁷² The *Auction 904 Comment Public Notice* proposed specific procedures for implementing the rules proposed in the *Rural Digital Opportunity Fund NPRM* and adopted in the *Rural Digital Opportunity Fund Order*. The *Auction 904 Comment Public Notice* did not change matters adopted in the *Rural Digital Opportunity Fund Order*, but did request comment on how the proposals in the *Auction 904 Comment Public Notice* might affect the previous regulatory flexibility analyses in this proceeding.

326. This Public Notice establishes procedures for awarding support in Auction 904 through a multi-round, reverse auction, the minimum biddable area for the auction, aggregating eligible areas into larger geographic units for bidding, setting reserve prices, and the availability of application and auction information to bidders and to the public during and after the auction. This Public Notice also establishes detailed bidding procedures for conducting Auction 904 using a descending clock auction format, including bid collection, clock prices, bid format, package bidding format, proxy bidding, bidder activity rules, bid processing, and how support amounts are determined.

327. To implement the rules adopted by the Commission in the *Rural Digital Opportunity Fund Order* for the pre-auction process, this Public Notice establishes specific procedures and requirements for applying to participate and becoming qualified to bid in Auction 904, including designating the state(s) and performance tier/latency combinations in which an applicant intends to bid, and providing operational and financial information designed to allow the Commission to assess the applicant's qualifications to meet the public interest obligations for each area for which it seeks support. This Public Notice also sets forth information that a winning bidder will be required to submit in its post-auction long-form application in order to become authorized to receive Auction 904 support.

328. Accordingly, the procedures established in this Public Notice are consistent with the *Rural Digital Opportunity Fund Order* and the prior regulatory flexibility analyses set forth in this proceeding, and no changes to our earlier analyses are required.

329. *Summary of Significant Issues Raised by Public Comments in Response to the Supplemental IRFA.* There were no comments filed that specifically addressed the proposed procedures presented in the Supplemental IRFA.

330. *Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration.* Pursuant to the Small Business Jobs Act of 2010,⁵⁷³ which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed procedures as a result of those comments.

331. The Chief Counsel did not file any comments in response to the auction procedures proposed in this proceeding.

332. *Description and Estimate of the Number of Small Entities to which the Procedures Will Apply.* The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the procedures adopted herein.⁵⁷⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁵⁷⁵ In addition, the term "small business" has the

⁵⁷² See generally *Auction 904 Comment Public Notice*.

⁵⁷³ 5 U.S.C. § 604(a)(3).

⁵⁷⁴ *Id.* § 603(a)(4).

⁵⁷⁵ *Id.* § 601(6).

same meaning as the term “small business concern” under the Small Business Act.⁵⁷⁶ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁵⁷⁷

333. A FRFA was incorporated into the *Rural Digital Opportunity Fund Order*. In that analysis, we described in detail the small entities that might be significantly affected. In this Public Notice, we hereby incorporate by reference the descriptions and estimates of the number of small entities from the previous FRFAs in the *Rural Digital Opportunity Fund Order*.⁵⁷⁸

334. *Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities*. The data, information and document collection required by the *Rural Digital Opportunity Fund Order* as described in the previous FRFA and the Supplemental IRFA in the *Auction 904 Comment Public Notice* in this proceeding are hereby incorporated by reference.⁵⁷⁹

335. *Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered*. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for small entities.”⁵⁸⁰

336. The analysis of the Commission’s efforts to minimize the possible significant economic impact on small entities as described in the previous *Rural Digital Opportunity Fund Order* FRFA is hereby incorporated by reference.⁵⁸¹ In addition, in establishing the bidding and application procedures for Auction 904, we anticipate the challenges faced by small entities. Specifically, the bidding procedures established in this Public Notice are designed to facilitate the participation of qualified service providers of all kinds, including small entities, in the Rural Digital Opportunity Fund program, and to give all bidders, including small entities, the flexibility to place bids that align with their intended network construction or expansion, regardless of the size of their current network footprints. For example, we will use census block groups (CBGs) containing one or more eligible census blocks as the minimum biddable area for the auction in order to provide bidders, including small providers, with flexibility to target their intended areas of network expansion or construction without significantly complicating the bidding process. To help ensure that all bidders—both large and small—understand the bidding procedures, including those related to package bidding, further educational opportunities and materials will be provided well in advance of the auction.

337. Furthermore, the pre-auction application procedures set forth in this Public Notice are intended to require applicants to submit enough information to permit the Commission to determine their

⁵⁷⁶ *Id.* § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

⁵⁷⁷ 15 U.S.C. § 632.

⁵⁷⁸ *Rural Digital Opportunity Fund Order* (Appx. B, Final Regulatory Flexibility Analysis).

⁵⁷⁹ *Rural Digital Opportunity Fund Order* (Appx. B, Final Regulatory Flexibility Analysis); *Auction 904 Comment Public Notice*, 35 FCC Rcd at 2329-30, paras. 138-42.

⁵⁸⁰ 5 U.S.C. § 603(c)(1)-(4).

⁵⁸¹ *Rural Digital Opportunity Fund Order* (Appx. B, Final Regulatory Flexibility Analysis).

qualifications to participate in Auction 904, without requiring so much information that it is cost-prohibitive for any entity, including small entities, to participate.

338. Finally, recognizing that some entities may be new to Commission auctions, we announce the types of materials and other information we will make available to help educate parties that have not previously applied to participate or bid in a Commission auction. Specifically, OEA will compile and release a guide that provides further technical and mathematical detail regarding the bidding, assignment, and support amount determination procedures. Two online tutorials will be available to serve as references for potential applicants and bidders. Additionally, a mock auction will be conducted that will enable all qualified bidders, including small entities, to become familiar with the bidding system and to practice submitting bids prior to the auction. By providing these resources, we seek to minimize any economic impact on small entities and help all entities—both large and small—fully understand the bidding and application procedures. The Commission’s Office of Communications Business Opportunities will also engage with small providers.

339. *Report to Congress.* We will send a copy of this Public Notice, including this Supplemental FRFA, in a report to Congress pursuant to the Congressional Review Act. In addition, we will send a copy of this Public Notice, including this Supplemental FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of this Public Notice and Supplemental FRFA (or summaries thereof) will also be published in the *Federal Register*.⁵⁸²

VII. CONTACT INFORMATION

340. Contact Information Table:

General Auction 904 Information

General Auction Questions
Auction Process and Procedures

FCC Auctions Hotline

(888) 225-5322, option two; or
(717) 338-2868

FCC Email & Webpages

auction904@fcc.gov
<http://www.fcc.gov>
www.fcc.gov/auction/904

Auction 904 Legal Information

Auction Rules, Policies, and Regulations

Rural Broadband Auctions Task Force

Michael Janson, (202) 418-0627
Kirk Burgee, (202) 418-1599
Jonathan McCormack, (202) 418-1065

Office of Economics and Analytics Auctions Division

Mark Montano
Daniel Habif
(202) 418-0660

⁵⁸² See 5 U.S.C. § 604(b).

General Universal Service Questions**Wireline Competition Bureau
Telecommunications Access Policy Division**

Alex Minard
Heidi Lankau
Lauren Garry
Ian Forbes
(202) 418-0660

Technical Support

Electronic Filing
Auction Application System and Rural Digital
Opportunity Fund Bidding System
(Hardware/Software Issues)

FCC Auctions Technical Support Hotline

877) 480-3201, option nine; or (202) 414-1250
(202) 414-1255 (TTY)
Hours of service: 8:00 a.m. – 6:00 p.m. ET,
Monday through Friday

Auction Bidder Line

Will be furnished only to qualified bidders

Press Information

Anne Veigle, (202) 418-0500

FCC Forms

(800) 418-3676 (outside Washington, DC)
(202) 418-3676 (in the Washington area)
<http://www.fcc.gov/formpage.html>

Accessible Formats

Braille, large print, electronic files, or
audio format for people with disabilities

Consumer and Governmental Affairs Bureau

(202) 418-0530 or (202) 418-0432 (TTY)
fcc504@fcc.gov

Small Businesses

Additional information for small and
disadvantaged businesses

**Office of Communications Business
Opportunities**

(202) 418-0990
<http://www.fcc.gov/ocbo/>

Tribal Issues

Additional information for entities seeking to provide
service to Tribal lands and Tribal governments

Office of Native Affairs and Policy

(202) 418-2930
native@fcc.gov

- FCC -

APPENDIX A**Auction 904 Short-Form Application Operational Questions***Operational History*

1. Has the applicant previously deployed consumer broadband networks (Yes/No)? If so:
 - a. Provide the date range when broadband service was offered and in which state(s) service was offered. Specify dates for each state.
 - b. Provide an estimate of how many subscribers are currently served in each state. (If the applicant is no longer providing service in any state, estimate the number of customers that were served at the beginning of the last full year that the applicant did provide service.)
 - c. What services (e.g., voice, video, broadband Internet access) were or are provided in each state?
 - d. List any data-usage limit (data cap) used as part of existing broadband access services.
 - e. What specific technologies and network architecture are used for last-mile; middle-mile/backhaul; and internet interconnections?
 - f. What are the deployed voice technologies and how are these voice services implemented?

Proposed Network(s) Using Funding from Auction 904

Answer for each state the applicant selected in its application:

2. Network Infrastructures:
 - a. Briefly describe from a high-level network perspective which network architectures and technologies will be used in the applicant's proposed deployment. If there are variations by state, region, or other criteria, describe each network or location.
 - b. Last-mile: What are the relevant topologies, technologies and protocols and the corresponding industry standards for the last-mile network infrastructure in the applicant's proposed deployment?
 - c. Middle-Mile/Backhaul: What are the relevant topologies, technologies and protocols and the corresponding industry standards for the middle-mile/backhaul network infrastructure in the applicant's proposal?
 - d. Internet Access: What are the relevant topologies, technologies and protocols and the corresponding industry standards for the Internet access network infrastructure in the applicant's proposal? This is the connection to major IXPs, transit providers, etc.
 - e. If the applicant is proposing to use non-standard technologies and protocols, the applicant should identify which vendor(s) and product(s) are being considered and provide links to the vendors' websites and to publicly available technical specifications of the product(s).¹
3. Voice Services:

¹ If technical specifications for the non-standard technologies are not available on a vendor's website, technical documents may be submitted with the application.

- a. Briefly describe the anticipated system(s) that will be used to provide voice services to the applicant's subscribers, including a standalone voice service. Examples of such solutions could include: (1) internally designed and operated; (2) provided by a Managed Voice Service Provider; or (3) or an OTT (Over-The-Top) solution available to subscribers via the applicant. If the applicant is considering multiple solutions, provide information on each one and identify possible vendors or service providers.
 - b. If the applicant plans to use an internally designed and operated system, provide specific information on any existing voice system the applicant operates.
 - c. If the applicant plans to implement a new system to meet these requirements, provide specific information on the technology, standards, latency, planned QoS, architecture; design; protocols; equipment; vendors; public switched telephone network (PSTN) interconnections (links, speed and to whom you interconnect); capacity (projected peak call rates versus total projected subscribers); reliability and availability design and procedures; and the applicant's specific plans to control, manage, monitor, and recover/repair/troubleshoot outages. If any of these issues are addressed in response to the other questions in this Appendix, it is permissible to cross-reference that information here.
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)?
 - b. Briefly describe the capabilities of the network technologies that will enable performance tier (speed and usage allowance), latency and (where applicable) voice service mean opinion score (MOS) requirements to be met. This can include traffic management, Quality of Service, over-building/scalability, using equipment that easily allows upgrades and other techniques.
 - c. For both broadband and voice services, state the target or design peak period over-subscription ratio(s) for the last-mile, middle-mile/backhaul and Internet interconnection that will be used. Additionally, describe the basic assumptions and calculations that will be used in determining these ratios.
 - d. What general rules-of-thumb will be used to determine if any portion of the network infrastructure needs to be improved, upgraded or expanded to ensure the network is able to meet the required speed, latency and where required voice quality? For example, taking action when (1) when middle-mile link average peak period load is greater than 70%; when a link peak period load exceeds 95% more than 10 times; when a router's average peak period processing utilization exceeds 70%; when an Internet access link load exceeds 75% for a specified time period; when call setup, call drop, call completion rates meet or exceed applicant targets.
 - e. For fixed broadband wireless access networks, describe how the proposed frequency band(s) and technology attributes, for both last mile and backhaul, will achieve the performance tier(s) and latency requirements to all locations for both broadband and voice services. Specifically, describe how the planned frequency bands, base station configuration, channel bandwidths, traffic assumptions and propagation assumptions and calculations yield sufficient capacity to all the planned locations.

5. Network Buildout: Can the applicant demonstrate that all the network buildout requirements to achieve all service milestones can be met (Yes/No)? The applicant will be required to submit a detailed project plan in the long-form application if it is named as a winning bidder. Describe concisely the information that the applicant would make available in such a detailed project plan.
6. Network Equipment, Consultants and Deployment Vendors: For the proposed performance tier and latency combination(s), can the applicant demonstrate that potential vendors, integrators and other partners are able to provide commercially available and fully compatible network equipment/systems, interconnection, last mile technology and customer premise equipment (CPE) at cost consistent with applicant's buildout budget and in time to meet service milestones (Yes/No)? Describe concisely the information and sources of such information that the applicant could make available to support this response.
7. Network Management:
 - a. Briefly describe the method(s) that will be used to monitor, operate, problem resolution, provision and optimize the network and associated services such as voice. Identify if the proposed solution is internally developed and operated; expands existing systems; uses a third-party network management provider; or is some variant or combination of these methods.
 - b. Remember to include how voice operations will be monitored, operated, problems resolved, provisioned and optimized as appropriate.
 - c. If the applicant will expand existing network management systems, describe how the current system provides successful operations.
 - d. If the applicant will use a third-party network management provider, identify any providers the applicant is currently considering.
 - e. If the applicant will develop, deploy and operate a new system can the applicant demonstrate that it can provide internally developed operations systems for provisioning and maintaining the proposed network including equipment and segments, interconnections, CPE and customer services at cost consistent with applicant's buildout budget and in time to meet service milestones (Yes/No)? If not, can the applicant demonstrate that potential vendors, integrators, and other partners are able to provide commercially available and fully compatible operations systems and tools for provisioning and maintaining the proposed network at cost consistent with applicant's buildout budget and in time to meet service milestones (Yes/No)? Describe concisely the information and sources of such information that the applicant could make available to support these responses.
8. Satellite Networks: If the applicant is using satellite technologies, identify which satellites would be used, and describe concisely the total satellite capacity available, that is, capacity that is not currently in use for existing subscribers.

APPENDIX B

Auction 904 Spectrum Chart

Spectrum Band/Service	Paired Licensed		Unpaired Licensed	Unlicensed
	Uplink Freq. (MHz)	Downlink Freq. (MHz)	Uplink & Downlink Freq. (MHz)	Unlicensed (MHz)
600 MHz	663-698	617-652		
Lower 700 MHz	698-716	728-746	716-728 (Downlink only)	
Upper 700 MHz	776-787	746-757		
800 MHz SMR	813.5/817-824	858.5/862-869		
Cellular	824-849	869-894		
Broadband PCS	1850-1915	1930-1995		
AWS-1	1710-1755	2110-2155		
AWS (H Block)	1915-1920	1995-2000		
AWS-3	1755-1780	2155-2180	1695-1710 (Uplink only)	
AWS-4			2000-2020 2180-2200 (Downlink only ¹)	
BRS/EBS			2496-2690	
WCS	2305-2315	2350-2360	2315-2320 2345-2350	
CBRS (3.5 GHz)			3550-3700	
3.7 GHz Service ²			3700-3800 3800-3900 3900-3980	
Lower 37 GHz			37000 - 37600	

¹ As a result of licensee's election pursuant to *DISH Network Corporation; Petition for Waiver of Sections 27.5(j) and 27.53(h)(2)(ii) of the Commission's Rules and Request for Extension of Time*, WT Docket No. 13-225, Memorandum Opinion and Order, 28 FCC Rcd 16787 (WTB 2013), *app. for review dismissed*, 33 FCC Rcd 8446 (2018) (*vacated and remanded, NTCH v. FCC*, 950 F3d 871 (D.C. Cir. 2020)).

² Bidding is expected to begin for flexible-use licenses in the contiguous United States on December 8, 2020 (Auction 107). See AU Docket No. 20-25 for details and updates. Flexible-use licensees cannot operate in the band until incumbents are relocated. The default clearing deadline for FSS incumbents is December 5, 2025, but accelerated clearing may occur if enough eligible space station operators voluntarily agree to clear 100 megahertz for flexible use by December 5, 2021, and another 180 megahertz by December 5, 2023, which is also the deadline for terrestrial fixed incumbents to clear the band. See GN Docket No. 18-122 for details and updates.

Spectrum Band/Service	Paired Licensed		Unpaired Licensed	Unlicensed
	Uplink Freq. (MHz)	Downlink Freq. (MHz)	Uplink & Downlink Freq. (MHz)	Unlicensed (MHz)
UMFUS (terrestrial)			24,250-24,450 24,750-25,250 27,500-28,350 37,600-38,600 38,600-40,000 47,200-48,200	
70-80-90 GHz unpaired & 70-80 GHz paired (point-to-point terrestrial)	Point-to-Point Pairs for 70-80 GHz 71,000-76,000 with 81,000-86,000		71,000-76,000 81,000-86,000 92,000-94,000 94,100-95,000	
TV White Spaces				54-72 76-88 174-216 470-698
900 MHz				902-928
2.4 GHz				2400-2483.5
5 GHz				5150-5250 5250-5350 5470-5725 5725-5850
6 GHz				5925-6425 6525-6875
24 GHz				24,000-24,250
57-71 GHz				57,000 – 71,000
Ku Band (satellite)	12,750-13,250 14,000-14,500	10,700-12,700		
Ka Band (satellite)	27,500-30,000	17,700-20,200		
V Band (satellite)	47,200-50,200 50,400-52,400	37,500-42,000		

Abbreviations

AWS	Advanced Wireless Services
BRS/EBS	Broadband Radio Service / Education Broadband Service
CBRS	Citizens Broadband Radio Service
PCS	Personal Communications Service
SMR	Specialized Mobile Radio
UMFUS	Upper Microwave Flexible Use Service
WCS	Wireless Communications Service

APPENDIX C

Commenter Short Names

Short Name	Name of Filer
ACA	ACA Connects — America's Communications Association
ADTRAN	ADTRAN, Inc.
AT&T	AT&T Services, Inc.
Cambium	Cambium Networks, LTD.
Canadian Valley	Canadian Valley Electric Cooperative
Commnet	Commnet Wireless, LLC
Conexon	Conexon, LLC
CPUC	California Public Utilities Commission
Ericsson	Ericsson
FBA	Fiber Broadband Association
Frontier	Frontier Communications Corporation
GeoLinks	California Internet, L.P. DBA GeoLinks
Gibson	Gibson Electric Membership Corporation and Gibson Connect, LLC
Gogo	Gogo Inc.
Hughes	Hughes Network Systems, LLC
Inmarsat	Inmarsat Inc.
Intelsat	Intelsat License LLC
Microsoft	Microsoft Corporation
NCTA	NCTA – The Internet & Television Association
NRECA/UTC	National Rural Electric Cooperative Association and Utilities Technology Council
NTCA	NTCA—The Rural Broadband Association
NTCH/Flat	NTCH, Inc. and Flat Wireless, LLC
SBI	Smith Bagley, Inc.
SES	SES Americom, Inc. and O3b Limited
Siklu	Siklu Communication Ltd.
SpaceX	Space Exploration Technologies Corp.
Starry	Starry, Inc.
TECA	Tennessee Electric Cooperative Association
Telesat	Telesat Canada
TPI	Technology Policy Institute
USTelecom	USTelecom Association
Viasat	Viasat, Inc.
VTDPS	Vermont Department of Public Service
WATCH	W.A.T.C.H. TV Company
WISPA	Wireless Internet Service Providers Association
WTA	WTA – Advocates for Rural Broadband