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

In the Matter of

Options for Facilitating Access to Unassigned Auction Inventory Spectrum WT Docket No. 24-72

REPLY COMMENTS OF CTIA

CTIA respectfully submits these reply comments in response to the Public Notice seeking comment on regulatory tools the Federal Communications Commission ("Commission") could use to enable access to its inventory of currently unassigned spectrum in bands previously licensed for wireless services through auctions ("Inventory Spectrum").¹

I. INTRODUCTION.

CTIA and other commenters in the record commend the Commission and urge it to continue to work with Congress to restore the agency's auction authority so the most effective spectrum access tool at the Commission's disposal is again available to support growing consumer, business, and enterprise demands.²

In the interim, there is substantial record support for the Commission making Inventory Spectrum available on a temporary basis through Special Temporary Authority ("STA") authorizations. STAs have proven effective in the past in enabling access for a variety of users and could be implemented quickly so Inventory Spectrum can be put to use, consistent with the Commission's objective in this proceeding.

The Commission should refrain from moving forward with any proposals that would

¹ Wireless Telecommunications Bureau Seeks Comment on Ways to Facilitate Access to Currently Unassigned Auction Inventory Spectrum for Wireless Radio Services in Light of the Ongoing Lapse of Auction Authority, Public Notice, DA 24-215 ¶ 2 (WTB, Mar. 7, 2024) ("Public Notice").

² See Comments of CTIA, WT Docket No. 24-72, at 2-4, 7 (filed Apr. 8, 2024) ("CTIA Comments").

undermine the goal of making Inventory Spectrum available for near-term, licensed use, including calls for importing new sharing models that would take substantial time and additional record support to develop. The Commission should also disregard calls for adoption of shared access models in spectrum bands that are outside the scope of this proceeding.

II. THE RECORD SHOWS THAT SPECTRUM AUCTIONS ARE THE MOST EFFECTIVE TOOL FOR PROMOTING CONTINUED WIRELESS LEADERSHIP.

The record is clear that Congress should expeditiously restore the Commission's auction authority.³ Auctions remain the most efficient way of driving competition and ensuring commercial wireless spectrum is put to efficient use. As CTIA highlighted, spectrum auctions drive market-based competition for a variety of users, promote efficient spectrum use, and contribute billions of dollars annually to the U.S. GDP. In addition, auction proceeds have raised nearly a quarter of a trillion dollars for the U.S. Treasury, in support of a variety of government programs and the modernization of national defense systems.⁴

Other commenters agree. As AT&T highlights, "[t]he Commission's auction framework has made the United States a leader in 3G, 4G, and now 5G wireless services, unleashing innovation and promoting competition."⁵ Moreover, as Verizon details, the Commission's auction framework supports massive investment in innovations for today's mobile connected society and for driving 5G fixed wireless access solutions that are bringing new competition to

³ See id.; Comments of AT&T Services, Inc., WT Docket No. 24-72, at 2-3 (filed Apr. 8, 2024) ("AT&T Comments"); Comments of DeepSig, Inc., WT Docket No. 24-72, at 6 (filed Apr. 8, 2024); Comments of Enterprise Wireless Alliance, WT Docket No. 24-72, at 1 (filed Apr. 8, 2024) ("EWA Comments"); Comments of NCTA—The Internet & Television Association, WT Docket No. 24-72, at 1 (filed Apr. 8, 2024) ("NCTA Comments"); Comments of T-Mobile USA, Inc., WT Docket No. 24-72, at 3-4 (filed Apr. 8, 2024) ("T-Mobile Comments"); Comments of Verizon, WT Docket No. 24-72, at 1-2 (filed Apr. 8, 2024) ("Verizon Comments").

⁴ CTIA Comments at 4.

⁵ AT&T Comments at 2.

the home broadband marketplace.⁶ As T-Mobile notes, this investment is also bringing substantial benefits to America's economy, with the U.S. wireless industry investing more than \$309 billion into wireless networks since 2012, which rely primarily on auctioned spectrum.⁷ And the Enterprise Wireless Alliance correctly notes that spectrum auctions "have been an effective, efficient means of assigning significant amounts of wireless spectrum for commercial use that avoid the problem of mutual exclusivity."⁸

CTIA commends the Commission for its continued work to encourage Congress to restore its competitive bidding authority so auctioned licenses can once again be brought to market to support these public policy objectives.

III. THE EXISTING STA FRAMEWORK IS A WORKABLE VEHICLE FOR MAKING INVENTORY SPECTRUM AVAILABLE IN THE NEAR TERM.

Absent auction authority, and if the Commission wants to act quickly to make Inventory Spectrum available, STAs are the most reasonable alternative option.⁹ As commenters discuss, STAs will efficiently allow Inventory Spectrum to be promptly put to use, as "[t]here will be no need for the Commission to develop new application forms, filing processes, or technical rules."¹⁰

STAs have, moreover, proven effective in providing temporary spectrum access under unique circumstances. As CTIA and others discussed, the Commission has had success with the

⁶ See Verizon Comments at 1, 4-6.

⁷ See T-Mobile Comments at 3 (citing #*RestoreAuctionAuthority with a Spectrum Pipeline*, CTIA BLOG (Mar. 8, 2024), <u>https://www.ctia.org/news/restoreauctionauthority-with-a-spectrum-pipeline</u>).

⁸ EWA Comments at 1.

⁹ See CTIA Comments at 7-8; AT&T Comments at 3-6; T-Mobile Comments at 5-8; Verizon Comments at 9-10; see also WISPA—The Association for Broadband Without Borders, WT Docket No. 24-72, at 6-7 (filed Apr. 8, 2024).

¹⁰ AT&T Comments at 4.

STA framework in the context of the COVID-19 pandemic.¹¹ That example demonstrates how effective the STA model can be in not only putting spectrum to use quickly, but also in enabling access to a variety of providers.¹²

To that end, the Commission put out a Public Notice early in the pandemic providing guidance to all interested parties for obtaining STAs and relevant waivers,¹³ including specialized guidance for public safety entities.¹⁴ The relevant docket remains an active vehicle for STA requests and could be used to expand STA eligibility for Inventory Spectrum.¹⁵ Notably, STAs have been effective in putting spectrum to work by myriad providers, including: regional providers;¹⁶ rural providers;¹⁷ dozens of wireless internet service providers

¹¹ CTIA Comments at 7-8 (discussing that the Commission freed up roughly 80 to 100 megahertz of spectrum in the weeks following the declaration of emergency, which was put to use immediately to support increasing capacity needs); AT&T Comments at 4 (noting that the Commission "issued several STAs, *including for some of the Inventory Spectrum*, that allowed for the rapid expansion of wireless network capacity on a non-interfering basis" during the pandemic (emphasis original)); Verizon Comments at 9 (noting that STAs are a well-established mechanism for providing non-interfering spectrum use, which the Commission relied on to grant temporary access to spectrum during the coronavirus pandemic (quotations and citation omitted)).

¹² *Cf.* Comments of EchoStar Corporation, WT Docket No. 24-72, at 3 (filed Apr. 8, 2024) ("EchoStar Comments").

¹³ See Wireless Telecommunications Bureau Provides Guidance on Requesting Special Temporary Authority and Waivers in Response to COVID-19, Public Notice, 35 FCC Rcd 2984 (WTB 2020); see also WTB Special Temporary Authority and Waiver Request Filing Guide, FCC, https://www.fcc.gov/research-reports/guides/wtb-special-temporary-authority-and-waiver-request-filingguide (last visited Apr. 21, 2024).

¹⁴ See Public Safety and Homeland Security Bureau Provides Guidance to Public Safety Entities on Requesting Special Temporary Authority and Waivers in Response to COVID-19, Public Notice, 35 FCC Rcd 3078 (PSHSB 2020)

¹⁵ See Inbox-1.931, FCC Electronic Comment Filing System, <u>https://www.fcc.gov/ecfs/search/docket-detail/INBOX-1.931</u> (last visited Apr. 21, 2024); see also Coronavirus, FCC, <u>https://www.fcc.gov/coronavirus</u> (last visited Apr. 21, 2024).

¹⁶ See, e.g., FCC Grants Temporary Spectrum Access to US Cellular, FCC (rel. Mar. 27, 2020), https://www.fcc.gov/document/fcc-grants-temporary-spectrum-access-us-cellular.

¹⁷ See, e.g., FCC Grants Temporary Spectrum Access to Bluegrass Cellular, Inc., FCC (rel. Mar. 27, 2020), <u>https://www.fcc.gov/document/fcc-grants-temporary-spectrum-access-bluegrass-cellular-inc;</u> FCC Grants Temporary Spectrum Access to Union Wireless, FCC (rel. Apr. 9, 2020),

("WISPs")—including a consortium of 33 WISPs serving 330 counties in 29 states;¹⁸ and Tribal entities,¹⁹ in addition to nationwide providers. The STA framework could be similarly leveraged for Inventory Spectrum, providing access to a wide range of users for a variety of use cases and public benefits.

IV. ALTERNATIVE PROPOSED ACCESS MODELS WOULD NOT MEET THE GOALS OF THE PRESENT PROCEEDING.

Proponents of applying new shared access models to Inventory Spectrum do not solve for the Commission's primary objective in this proceeding: to speed access to Inventory Spectrum while the Commission's auction authority is lapsed. Specifically, as the Public Notice stated, "unless and until Congress decides to restore the Commission's auction authority, the Wireless Telecommunications Bureau [] is compelled to explore how its existing regulatory tools could be used to provide the public with access to spectrum that would otherwise lie fallow."²⁰ Shared access models would undermine this goal and should therefore be rejected.

¹⁹ See, e.g., FCC Grants Makah Tribe Temporary Spectrum Access to 2.5 GHz Band to Meet Increased Wireless Broadband Needs During COVID-19 Pandemic, FCC News Release (May 29, 2020), <u>https://docs.fcc.gov/public/attachments/DOC-364635A1.pdf</u>; FCC Grants STA to Confederated Salish and Kootenai Tribes, FCC (rel. Aug. 21, 2020), <u>https://docs.fcc.gov/public/attachments/DOC-370701A1.pdf</u>; FCC Grants Temporary Spectrum Access to The Pueblo of Santa Clara, FCC (rel. Aug. 19, 2020), <u>https://docs.fcc.gov/public/attachments/DOC-370701A1.pdf</u>; FCC Grants Temporary Spectrum Access to Crow Creek Sioux Tribe, FCC (rel. Dec. 23, 2020), <u>https://docs.fcc.gov/public/attachments/DOC-370124A1.pdf</u>; FCC Grants Temporary Spectrum Access to Lower Brule Sioux Tribe, FCC (rel. Jan. 12, 2021), <u>https://docs.fcc.gov/public/attachments/DOC-370126A1.pdf</u>.

²⁰ Public Notice ¶ 2.

https://docs.fcc.gov/public/attachments/DOC-363846A1.pdf; FCC Grants Temporary Spectrum Access to NTUA Wireless, LLC, FCC (rel. Apr. 20, 2020), https://docs.fcc.gov/public/attachments/DOC-363926A1.pdf; FCC Grants Temporary Spectrum Access to United Wireless, FCC (rel. Aug. 24, 2020), https://docs.fcc.gov/public/attachments/DOC-370127A1.pdf.

¹⁸ See FCC Grants Wireless ISPs Temporary Access to Spectrum in 5.9 GHz Band to Meet Increase in Rural Broadband Demand During Pandemic, FCC News Release (Mar. 27, 2020), https://docs.fcc.gov/public/attachments/DOC-363358A1.pdf.

First, it would take time to develop both the rules and technologies for database-driven sharing or other coordination mechanisms for Inventory Spectrum in a manner that ensures protection of existing licensees in the Inventory Spectrum bands, undermining the goal of this proceeding. Some commenters allege without support that existing sharing mechanisms can be "readily adapted" for use in the Inventory Spectrum.²¹ As CTIA has pointed out, however, it took years for the Citizens Broadband Radio Service ("CBRS") Spectrum Access System and Environmental Sensing Capability operations to be developed and operative, and the 6 GHz Automated Frequency Coordination system operations were only recently approved to enable commercial standard-power Wi-Fi operations.²² Verizon further highlights that the CBRS sharing model and its customized tools have proven challenging to manage, "particularly given the regular operational updates that are needed for base station products and the myriad ad hoc workarounds that are being used to accommodate General Authorized Access [("GAA")] grants."²³ It would be inefficient and contrary to the principal goal of the Public Notice for the Commission to continue to hold the Inventory Spectrum while database tools, and rules for their usage, are developed for this spectrum.

Second, even if an existing database mechanism could be timely and efficiently leveraged for Inventory Spectrum, which CTIA questions, commenters ignore the need for development of new equipment that is capable of being tethered to a coordination database. While some commenters tout the purported benefits of CBRS-style sharing, they fail to provide any

²¹ Comments of Federated Wireless, Inc., WT Docket No. 24-72, at 2 (filed Apr. 8, 2024) ("Federated Wireless Comments"); *see also* Comments of Open Technology Institute at New America and Public Knowledge, WT Docket No. 24-72, at 4, 5-6 (filed Apr. 8, 2024) ("OTI and Public Knowledge Comments").

²² See CTIA Comments at 9; see also T-Mobile Comments at 9-10. As CTIA discussed, efforts continue to establish a process for handling interference complaints in the 6 GHz band. See CTIA Comments at 9.

²³ Verizon Comments at 9.

meaningful insight regarding the availability of devices that could operate in the Inventory Spectrum.²⁴ As Blooston Rural Carriers discuss, "it is unclear how much time and resources would be needed to develop sensing and end user equipment needed to implement dynamic sharing."²⁵ The same is true for the equipment that would need to be developed to facilitate sitebased sharing. Thus, as AT&T notes, "it is entirely possible that by the time this work is complete, the Commission's auction authority will have resumed."²⁶ And, as CTIA highlighted, there is little incentive from a market perspective for manufacturers to invest in equipment or technologies tailored to the isolated and disconnected channels or geographic areas that comprise the Inventory Spectrum, and it would be inefficient to await standardization for new equipment.²⁷

Rather than addressing the problem at hand, supporters of shared access in the Inventory Spectrum are merely seeking a foothold for expanding a framework that has otherwise not yet borne out from an investment or deployment perspective.²⁸ As CTIA has demonstrated, evidence continues to show limited investment and deployment in complex shared spectrumbased offerings, and the cable industry has acknowledged that shared-use frameworks like CBRS cannot be relied on to deliver the wide-area coverage needed to help bridge the digital divide.²⁹

²⁴ Cf. NCTA Comments 2-6; OTI and Public Knowledge Comments at 4-5; Federated Wireless Comments at 2-3; Comments of Dynamic Spectrum Alliance, WT Docket No. 24-72, at 3 (filed Apr. 8, 2024).

²⁵ Comments of Blooston Rural Carriers, WT Docket No. 24-72, at 4 (filed Apr. 8, 2024) ("Blooston Comments"); *see also* Verizon Comments at 8.

²⁶ AT&T Comments at 7; see also Verizon Comments at 8-9.

²⁷ See CTIA Comments at 9-10; see also AT&T Comments at 8; Blooston Comments at 4; Verizon Comments at 8.

²⁸ See CTIA Comments at 8-9.

²⁹ See id. at 9; see also, e.g., Doug Brake, CBRS Spectrum Is Lightly Used, Whereas C-Band Is Deployed Extensively, CTIA BLOG (Sept. 25, 2023), <u>https://www.ctia.org/news/cbrs-spectrum-is-lightly-used-</u>

CTIA's drive tests confirm the same,³⁰ despite cable operators owning licenses in six of the eight cities examined and NTIA's findings that outdoor devices predominant the limited CBRS landscape.³¹ NTIA's Commerce Spectrum Management Advisory Committee has, moreover, acknowledged known challenges with the CBRS framework.³²

Even as NCTA supports restoration of the Commission's auction authority and states that the "authority to auction spectrum is critical for the Commission,"³³ it asks the Commission to "consider and prioritize coexistence-based spectrum access frameworks in *all* proceedings that propose to make new commercial spectrum available."³⁴ Tellingly, NCTA then focuses its filing on urging the Commission to adopt sharing models for spectrum bands that are wholly outside this proceeding and, indeed, currently not adapted for commercial wireless use—specifically, the 3.1-3.45 GHz, 7.125-8.4 GHz, 12.7-13.25 GHz, and 37.0-37.6 GHz bands.³⁵

whereas-c-band-deployed-extensively ("CTIA CBRS Blog"); Letter from Umair Javed, SVP, CTIA, to Scott Blake Harris, Senior Spectrum Advisor, NTIA, at 14-16 (dated Jan. 30, 2024) ("National Spectrum Strategy Implementation Plan Reply Letter"); Reply Comments of CTIA, WT Docket No. 23-319, RM-11966, at 6 (filed Nov. 8, 2023) (citing Reply Comments of NCTA – The Internet & Television Association, WT Docket No. 23-232, at 7 (filed Nov. 2, 2023)).

³⁰ See CTIA CBRS Blog; National Spectrum Strategy Implementation Plan Reply Letter at 14-15.

³¹ See Letter from Thomas C. Power, Sr. Vice President and General Counsel, CTIA, to Charles Cooper, Acting Director, Institute for Telecommunication Sciences, NTIA (dated May 31, 2023), https://www.ctia.org/positions/documents/ctiacomments-on-ntia-cbrs-data-report; Douglas Boulware et al., *An Analysis of Aggregate CBRS SAS Data from April 2021 to January 2023*, NTIA Technical Report 23-567 (May 2023), https://its.ntia.gov/umbraco/surface/download/publication?reportNumber=TR-23-567.pdf.

³² See CTIA Comments at 9; Commerce Spectrum Management Advisory Committee (CSMAC), Report of Subcommittee on CBRS, NTIA, at 6, 8, 10-11, 16-17 (Dec. 2023), https://www.ntia.gov/sites/default/files/2023-12/cbrs_subcommittee_final_report.pdf.

³³ NCTA Comments at 1.

³⁴ *Id.* at 2 (emphasis original).

³⁵ See id. at 7-10. Further, it should go without saying that calls to utilize shared access models in *non-Inventory Spectrum* are wholly outside the scope of this proceeding and should not be considered. *Cf. id.* at 7-10.

Other proposals likewise would undermine the basic principles of this inquiry. For example, several proposals would likely require further Commission evaluation, including potentially a rulemaking proceeding. This includes, for instance, establishing database coordination requirements and interference protection criteria for any shared framework that is applied to a band that is already licensed for full-power, flexible-rights use and with rights to interference protection. Calls to change the rules for the STA framework³⁶ or to import a potentially permanent GAA model to Inventory Spectrum³⁷ would likewise require a fulsome public record. Such evaluations would take significant time, further delaying access to Inventory Spectrum. As T-Mobile states, "[s]olutions that will take years to develop are no solutions at all because the [Commission's] spectrum auction authority will likely be restored before they can be implemented."³⁸

Additionally, several proposals would have the Commission adopt rules for Inventory Spectrum that would create access rights that most likely would exceed the timeframe of the auction authority lapse.³⁹ This, too, would undermine the goal of providing a temporary access model until competitive bidding authority is restored.

Finally, commenters indicate that enabling a leasing mechanism for Inventory Spectrum raises a variety of questions and concerns, including regarding its administration and pricing

³⁶ See, e.g., EchoStar Comments at 2-3.

³⁷ See OTI and Public Knowledge Comments at 4.

³⁸ T-Mobile Comments at 10.

³⁹ See, e.g., EchoStar Comments at 3 (calling for Inventory Spectrum to be offered on a market-wide basis for free for "non-incumbent" providers for a period of at least 36 months); OTI and Public Knowledge Comments at 4 (calling for the Commission to import a GAA model in the Inventory Spectrum "*at least* until such time as the Commission has the authority and makes a future decision to auction it" (emphasis original)).

structure.⁴⁰ Additionally, as Verizon notes, leasing Inventory Spectrum "would pose complicated legal questions as no licensees hold the Inventory Spectrum to lease it under Commission rules, and there may be legal hurdles to the FCC leasing spectrum to users without statutory authority."⁴¹ The Commission would need to consider these questions before implementing a leasing proposal.

V. CONCLUSION.

As the Public Notice makes clear, the goal of this proceeding is to find solutions for making Inventory Spectrum available while the Commission's auction authority is lapsed. This necessitates a workable, temporary access framework. The Commission's existing STA model can serve this purpose on an interim basis until the agency's auction authority is restored and the Inventory Spectrum can be made available through competitive bidding.

Respectfully Submitted,

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⁴⁰ See, e.g., Blooston Comments at 5; OTI and Public Knowledge Comments at 8; T-Mobile Comments at 11-12; Comments of Edison Electric Institute, the Utilities Technology Council, the Utility Broadband Alliance, FirstEnergy Corp., Southern California Edison, and Southern Company Services, Inc., at 5 (filed Apr. 8, 2024).

⁴¹ Verizon Comments at 9-10; *see also* CTIA Comments at 8; T-Mobile Comments at 11-12.