

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

In the Matter of)	
)	
WTB Seeks Comment on Wireless Internet)	WT Docket No. 18-353
Service Providers Association and Utilities)	
Technology Council Request For Waiver of)	
CBRS Transition Deadline.)	

COMMENTS OF CTIA

Thomas C. Power
Senior Vice President and General Counsel

Scott K. Bergmann
Senior Vice President, Regulatory Affairs

Thomas K. Sawanobori
Senior Vice President and Chief Technology Officer

Kara Graves
Director, Regulatory Affairs

CTIA
1400 Sixteenth Street, NW
Suite 600
Washington, DC 20036
(202) 785-0081

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CTIA¹ hereby submits these comments opposing the request for waiver filed by the Wireless Internet Service Providers Association (“WISPA”) and the Utilities Technology Council (“UTC”) seeking to extend the temporary interference protection rights afforded to incumbent licensees in the 3650-3700 MHz band by the Citizens Broadband Radio Service (“CBRS”) transition rules.² A grant here would severely hamper the widespread introduction of General Authorized Access (“GAA”) CBRS in the band, as it would extend the grandfathered, interference-protected status of incumbent 3650-3700 MHz operators from April 17, 2020 to January 8, 2023 and apply protected status to never-before-protected network operations.

¹ CTIA® (www.ctia.org) represents the U.S. wireless communications industry and the companies throughout the mobile ecosystem that enable Americans to lead a 21st-century connected life. The association’s members include wireless carriers, device manufacturers, suppliers as well as apps and content companies. CTIA vigorously advocates at all levels of government for policies that foster continued wireless innovation and investment. The association also coordinates the industry’s voluntary best practices, hosts educational events that promote the wireless industry, and co-produces the industry’s leading wireless tradeshow. CTIA was founded in 1984 and is based in Washington, DC.

² *Wireless Telecommunications Bureau Seeks Comment on Wireless Internet Service Providers Association and Utilities Technology Council Request For Waiver of Citizens Broadband Radio Service Transition Deadline*, Public Notice, WT Docket No. 18-353, DA 18-1206 (rel. Nov. 27, 2018); *see also* WISPA UTC, Petition for Waiver of sections 90.1307 (c) and (d) and Sections 90.1338(a) and (b) of the Commission’s Rules, WT Docket No. 18-353 (filed Nov. 28, 2018) (“Petition”).

I. INTRODUCTION AND SUMMARY.

In 2015, the Commission adopted the *3.5 GHz Order* to “add much-needed capacity to meet the ever-increasing demands of wireless innovation.”³ In doing so, the Commission incorporated the 50 megahertz of spectrum from 3650-3700 MHz into the new CBRS band to “promot[e] spectrum availability, efficiency, and usability for all 3.5 GHz Band users, including prior 3650-3700 MHz licensees.”⁴ At the same time, the Commission adopted interim protections to ease the transition “in light of the significant investment many incumbent 3650-3700 MHz licensees have in the band.”⁵

Of note, the *3.5 GHz Order* granted certain incumbent 3650-3700 MHz licensees temporary interference protection rights vis-à-vis CBRS GAA operations operating in the band, even though these incumbent 3650-3700 MHz licensees do not otherwise enjoy interference protected status. Indeed, under the 3650-3700 MHz rules, licensees “[do] not have interference protection rights of primary, exclusive use licensees,” and “the licensing scheme imposes on all licensees the mutual obligation to cooperate and avoid harmful interference to one another.”⁶ Incumbent 3650-3700 MHz licensees thus invested in and deployed networks with no expectation of interference protection rights – precisely the status they return to at the end of the transition established in the *3.5 GHz Order*. The Commission’s decision to provide temporary

³ *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Report and Order, Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 3959 ¶ 1 (2015) (“*3.5 GHz Order*”).

⁴ *Id.* ¶ 393; *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Notice of Proposed Rulemaking, 27 FCC Rcd 15594 ¶ 77 (2012) (“*3.5 GHz Notice*”).

⁵ *3.5 GHz Order* ¶ 401.

⁶ *Wireless Operations in the 3650-3700 MHz Band; Rules for Wireless Broadband Services in the 3650-3700 MHz Band*, Report and Order, 20 FCC Rcd 6502 ¶ 29 (2005).

interference protection rights was a discretionary policy decision driven by its desire “to minimize the adverse effects of rule changes on incumbents to the extent possible without compromising the public interest benefits that we believe such rule changes will produce.”⁷ That period ends in April 2020 (or later for some licensees), and there is no reason to extend it.

The *3.5 GHz Order* granted long-term incumbent 3650-3700 MHz licensees interference protection from new CBRS operations for five years from the date of adoption of the *3.5 GHz Order* or for the remainder of the license term, whichever would be longer, with one exception.⁸ The *3.5 GHz Order* did not extend the transition period beyond five years for licensees that were “on notice” of pending CBRS operations in the band, *i.e.* those that were licensed after January 8, 2013, the date of publication of the NPRM proposing to incorporate the 3650-3700 MHz portion of the band into the CBRS band.⁹ Further, as part of the transition plan, only network operations in use at registered sites and frequencies as of April 17, 2016 would be protected.¹⁰ As discussed below, the Petition seeks to apply interference protection rights to all registered network operations, not just those that qualified previously.¹¹

As the Petitioners acknowledge, however, the Commission “was careful to protect the interests and investments that licensees had made in the 3650-3700 MHz band.”¹² The Commission limited CBRS operations in the 3650-3700 MHz band to GAA uses, thereby

⁷ *Id.* ¶ 394.

⁸ *Id.* ¶ 400.

⁹ *Id.*

¹⁰ *Id.* ¶ 402.

¹¹ Petition at 4 n.15.

¹² *Id.* at 1.

“retain[ing] the non-exclusive, shared characteristic of this spectrum.”¹³ Incumbent licensees could either “continue to operate their networks under the GAA rules, but without the priority accorded them during the transition,”¹⁴ with access to the full 150 megahertz of the 3.5 GHz band, and/or operate in the 3550-3650 MHz portion of the band under a Priority Access License (“PAL”). Moreover, the rules “preserve[d] the opportunity for continued use of Part 90 equipment rather than stranding investment in it even after the transition.”¹⁵

As discussed below, the Commission should dismiss the Petition because it seeks blanket relief despite the fact that the *3.5 GHz Order* expressly directed incumbent 3650-3700 MHz licensees to seek any relief on an individualized basis. To the extent that individual incumbent 3650-3700 MHz licensees face hardships, they can seek a waiver on a case-by-case basis as the *3.5 GHz Order* dictates. Further, the Petition fails to demonstrate any unique or unusual factual circumstances that justify upsetting this existing framework, and it is not in the public interest to extend the temporary interference protection rights afforded to incumbent 3650-3700 MHz operations where such extension will encumber the initial rollout of 3.5 GHz GAA services.

II. AS AN INITIAL MATTER, THE PETITION SHOULD BE DISMISSED AS THE COMMISSION ALREADY CONCLUDED THAT ANY REQUESTS FOR RELIEF SHOULD BE CASE-BY-CASE AND NOT A BLANKET WAIVER.

The Commission should dismiss the Petition as the blanket nature of the request thwarts the directive adopted in the *3.5 GHz Order* that any request for relief of the incumbent 3650-3700 MHz incumbent transition framework be submitted on an individualized basis. As the Commission stated:

¹³ *3.5 GHz Order* ¶ 411.

¹⁴ *Id.* ¶ 401.

¹⁵ *Id.* ¶ 401 n.856.

[W]e believe that we have made necessary and appropriate rule accommodations to allow prior existing 3650-3700 MHz licensees to continue operations in the band under a framework that provides access to greater spectrum that may better meet their needs in the long run. To the extent that we may have overlooked any technical obstacles to achieving this goal, we note that Part 90 incumbents may avail themselves of our waiver process on a case-by-case basis.¹⁶

To the extent an individual incumbent 3650-3700 MHz licensee believes it warrants an extension of the temporary interference protection rules, it may file an individualized waiver demonstrating why its unique circumstances warrant relief. The Commission should put any such waiver requests out for public comment. But here, the Commission should dismiss the request for blanket relief.

III. IN ANY EVENT, GRANT OF THE WAIVER WOULD CONTRAVENE THE COMMISSION'S CAREFULLY BALANCED FRAMEWORK INTENDED TO ACCELERATE NETWORK DEPLOYMENTS.

Under Section 1.925(b)(3), the Commission may waive its rules upon a showing that: (i) the underlying purpose of the rule would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of the unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.¹⁷ Waiver of the Commission's rules is appropriate only if special circumstances warrant a deviation from the general rule, and such deviation will serve the public interest.¹⁸

¹⁶ *Id.* ¶ 399 (citations omitted).

¹⁷ 47 C.F.R. § 1.925(b)(3).

¹⁸ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

The Petition fails to meet these rigorous standards and should be denied. As discussed below, the Petition is not necessary to ensure that grandfathered wireless broadband providers can continue operating, and it would frustrate, undermine, and encumber the imminent rollout of the CBRS band.

A. No Unique Circumstances Justify Extending the Temporary Interference Protection Rule or Disrupting the Transition Framework.

The Petition fails to demonstrate any unique or unusual circumstances that warrant a deviation from the existing framework. The incumbents have had adequate time to prepare for the rollout of CBRS – indeed, many have already – and there is no reason to extend the temporary interference protection rights for nearly three more years as the Petition seeks. To the contrary, incumbents have had every opportunity to plan for a transition to the CBRS rules.

First, since adoption of the *3.5 GHz Order*, nothing about the development of the CBRS ecosystem warrants a waiver to extend the temporary interference protection rule.¹⁹ Although the Petition asserts that there have been delays opening the 3550-3700 MHz band for CBRS services and uncertainty given lengthy rulemakings,²⁰ incumbent 3650-3700 MHz licensees have been on notice since at least 2013 that CBRS operations were coming, and the Commission has not proposed any changes to the rules governing 3650-3700 MHz operations – specifically, GAA operations – since 2015. In the *3.5 GHz Order*, the Commission adopted a five-year temporary interference protection rule for incumbent 3650-3700 MHz licensees knowing that the

¹⁹ See, e.g., *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Report and Order, GN Docket No. 17-258, FCC 18-149 (rel. Oct. 24, 2018).

²⁰ See Petition at 1, 4 (arguing that a longer transition is needed “[i]n light of the delays in opening the 3550-3700 MHz band for commercial services” and “uncertainty created by the subsequent and ongoing rulemaking”).

development and approval of a fully functional Spectrum Access System (“SAS”) “may take some time” and that “potential licensees, and other industry stakeholders will need to develop various implementation details to facilitate development of [CBRS].”²¹ In short, “recognizing the potential challenges that may come with any regulatory transition,” the Commission provided “*additional* protections for these incumbent operations during a reasonable transition period.”²²

Second, the evidence does not support the claim made by the petitioners that waiver is warranted because the CBRS Part 96 equipment or systems necessary to facilitate a transition from 3650-3700 MHz services from Part 90 to Part 96 operations are unavailable.²³ As an initial matter, there is ample evidence that many incumbent wireless broadband operators in the 3650-3700 MHz band have invested heavily in equipment that is upgradable to CBRS with a software update. Indeed, as WISPA described just last year:

[Incumbent] licensees are deploying LTE-based and other equipment that can be software updated to incorporate operations in the 3550-3650 MHz band in conjunction with the developing SAS and the [Environmental Sensing Capability (“ESC”)]. This innovative equipment enables [wireless Internet service providers] to increase spectrum capacity from small channels in 3650-3700 MHz to wider channels in 3550-3700 MHz on either a PAL or GAA basis without purchasing or changing out transmission or end user equipment.²⁴

²¹ *3.5 GHz Order* ¶¶ 57, 59 (the Commission concluded that the public interest benefits of moving directly to the three-tiered CBRS model “outweigh[ed] any possible risk of delay”).

²² *Id.* ¶ 400 (emphasis original).

²³ Petition at 4.

²⁴ WISPA Comments, GN Docket 17-258, at 19 (filed Dec. 28, 2017) (“WISPA Comments”).

WISPA estimated that over 60 percent of its members invested in software-defined equipment that can operate throughout the full CBRS band.²⁵ The Petition does not address this successful transition. It provides no evidence that incumbent operators are unable to prepare for the implementation of the Part 96 rules or that they will be unable to do so before the transition period ends, other than one conclusory statement that the development of proxy controller devices “has not occurred.”²⁶

As to the claims that Part 96 equipment is not yet commercially available and that initial commercial deployments using the ESC and SAS have not yet occurred,²⁷ Ericsson, Nokia, Sercomm, and Ruckus Networks have all introduced Citizens Broadband Radio Service Devices (“CBSDs”) certified by the Commission,²⁸ and the CBRS Alliance expects “many more certifications” to be announced in the coming months.²⁹ Commercial deployments using GAA spectrum are expected to begin in early 2019.

²⁵ *Id.* at 22; *see also, e.g.*, Comment of Rapid Systems, GN Docket 18-258, at 1 (filed Dec. 28, 2017) (noting that the company invested close to a million dollars in hardware for use in the 3650-3700 MHz band); Comments of BDA Wireless, LLC, GN Docket No. 18-258, at 2 (filed Dec. 28, 2017) (noting that the company has been preparing “since the day [it] deployed [its] first piece of CBRS compliant equipment”); Letter from Rick Harnish, Baicells Technologies, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 12-354, at 1 (filed July 24, 2017) (explaining that the company deployed more than 1,500 “CBRS-ready” access points that can operate in the 3550-3650 MHz band without the need for new hardware or truck rolls).

²⁶ *See* Petition at 5. The Petition also claims that licensees will have at most one outdoor season to change hardware to comply with the CBRS rules, which would constrain the deployment of equipment that “can operate across the entire 3550-3700 MHz band.” Petition at 4, 5. No such requirement exists, however, as the *3.5 GHz Order* specifically exempted incumbent 3650-3700 licensees’ equipment from the band-wide operability rule specifically so that existing users could “continue operating under the new 3.5 GHz Band rules, without need to retrofit or abandon their existing equipment.” *3.5 GHz Order* ¶ 397.

²⁷ Petition at 4

²⁸ CBRS Alliance and Wireless Innovation Forum Celebrate First Generation of Certified Devices, CBRS ALLIANCE (Oct. 9, 2018), <https://www.cbbsalliance.org/news/cbbs-alliance-and-wireless-innovation-forum-celebrate-first-generation-of-certified-devices/>.

²⁹ *Id.*

Third, the Petition incorrectly asserts that the Commission intended both GAA and PAL spectrum to be available by the end of the transition period.³⁰ The Petition uses the fact that PALs may not be available by the April 17, 2020 transition deadline as a reason incumbent licensees need additional years of interference protection from GAA users.³¹ However, the Commission’s framework was designed to allow incumbents to transition from the existing lightly-licensed framework to GAA.³² As the Commission explained, “Grandfathered Wireless Broadband Providers [] will have the option, available to all eligible 3.5 GHz Band users, *to operate on a GAA basis.*”³³

Further, the timing of the PAL auction is not relevant to grounds for waiver. There is never any guarantee that any bidder – including 3650-3700 MHz incumbents – will win a license at auction, and the Commission should not grant a waiver on the mistaken assumption that the transition plan was designed around 3650 MHz licensees winning a PAL at auction. There is no requirement that the PAL auction be held before the five-year transition period ended. Access to a PAL is not a prerequisite for 3650 MHz licensees to operate under Part 96 rules. And, in any event, the Petition too readily discounts the possibility that a PAL auction will occur before the transition deadline. At an industry event last week, Commissioner Michael O’Rielly expressed his hope that the auction would occur quickly now that the PAL rules are settled.³⁴

³⁰ Petition at 6-7.

³¹ *Id.* at 6.

³² *3.5 GHz Order* ¶ 401.

³³ *Id.* ¶ 410 (emphasis added).

³⁴ Remarks by Commissioner Michael O’Rielly at the Practicing Law Institute’s Annual Institute on Telecommunications Policy and Regulation (Dec. 6, 2018).

Finally, the Commission should deny the Petition’s request to extend grandfathered status to *all* registered devices. According to the Petition, “thousands of additional devices, both base station and customer premise” were installed after grandfathering deadline.³⁵ Licensees for these devices had zero expectation of *ever* receiving interference protection from GAA operations. If GAA users began operating in the 3650-3700 MHz band the day after the protection cutoff, these operations would have received no protection. Only devices at sites registered before April 17, 2016 had any expectation of interference protection from GAA users.³⁶ Nevertheless, incumbent 3650 MHz licensees installed these devices knowing that the SAS and ESC, among other components of CBRS, were still under development. In defining Grandfathered Wireless Protection Zones, the Commission sought to distinguish between “real networks” – those that invested in the band before they were put on notice about the pending changes who had actually deployed service – and “‘paper networks’ whose only effect is to restrict spectrum accessible by [CBRS].”³⁷ Whether the Commission grants a blanket waiver or an individual waiver, it should only be to licensees that actually had a legitimate expectation of protection; not all licensees as the Petition requests.

B. The GAA Tier is Nearing Launch and Would be Hampered by Grant of the Waiver, Contrary to the Public Interest.

Grant of the Petition would be contrary to the public interest, as it would affirmatively curtail the promise of GAA spectrum by imposing significant encumbrances in the only portion of the 3.5 GHz band dedicated to GAA use.

³⁵ Petition at 7.

³⁶ *Id.* at 4, n.15; *see also* WISPA Comments at 15.

³⁷ 3.5 GHz Order ¶ 402.

Just last week, Commissioner Michael O’Rielly observed that commercial GAA deployments are expected to begin by early 2019.³⁸ The standards process is largely complete, CBRS-compliant equipment is available,³⁹ and the Commission conditionally approved four ESC operators and six SAS Administrators, who are undergoing the last phase of approvals. This multiyear collaboration by the Commission, NTIA, equipment manufacturers, and prospective users is culminating and the GAA tier of the CBRS band is nearing its debut.

The 3.5 GHz band – and the GAA tier specifically – is the first mid-band spectrum that will be available for next-generation services in the United States. And stakeholders large and small are eager to gain access to GAA spectrum.⁴⁰ It is not in the public interest to grant an extension of interference-protection afforded to incumbent 3650-3700 MHz operations where such extension will encumber the initial rollout of 3.5 GHz GAA services. The transition rules as adopted struck the correct balance between protecting investments made by incumbent wireless broadband operations and “facilitat[ing] the development of a robust device ecosystem and promot[ing] new investment in the band.”⁴¹

³⁸ Remarks by Commissioner Michael O’Rielly at the Practicing Law Institute’s Annual Institute on Telecommunications Policy and Regulation (Dec. 6, 2018); *see also* *CBRS Status Summary*, CBRS WINNFORUM (Sept. 26, 2018), <https://cbrs.wirelessinnovation.org/cbrs-status-summary> (noting that full GAA operation may begin as early as the first quarter of FY19).

³⁹ *See, e.g., Collaboration is Key*, CBRS ALLIANCE BLOG (Nov. 12, 2018), <https://www.cbrsalliance.org/collaboration-is-key/>.

⁴⁰ Mike Dano, *Verizon: We’re ready to go with 3.5 GHz, will be primarily outdoors*, FIERCE WIRELESS (Oct. 18, 2018), <https://www.fiercewireless.com/tech/verizon-we-re-ready-to-go-3-5-ghz-will-be-primarily-outdoor> (noting plans to use 3.5 GHz GAA spectrum to provide additional capacity to customers); Monica Allevan, *T-Mobile eyes GAA use of 3.5 GHz band ahead of licensed availability*, FIERCE WIRELESS (Feb. 26, 2018), <https://www.fiercewireless.com/wireless/t-mobile-eyes-gaa-use-3-5-ghz-band-ahead-licensed-availability> (noting evaluation of use of GAA spectrum before PAL spectrum becomes available); *id.* (identifying Federated Wireless, ExteNet Systems, and others as looking to take advantage of 3.5 GHz spectrum as soon as it becomes available).

⁴¹ *3.5 GHz Order* ¶ 229.

IV. CONCLUSION.

The Bureau should deny the Petition and maintain the current transition timeline for wireless broadband incumbents in the upper 50 megahertz of the CBRS band. Access to that spectrum under the GAA rules is critical to the nation's spectrum strategy and the existing transition framework is functioning as intended.

Respectfully submitted,

/s/ Kara Graves

Kara Graves
Director, Regulatory Affairs

Thomas C. Power
Senior Vice President and General Counsel

Scott K. Bergmann
Senior Vice President, Regulatory Affairs

Thomas K. Sawanobori
Senior Vice President and Chief Technology Officer

CTIA
1400 Sixteenth Street, NW
Suite 600
Washington, DC 20036
(202) 785-0081

Dated: December 12, 2018

CERTIFICATE OF SERVICE

I, Alexandra Carr, hereby certify under penalty of perjury that the foregoing Comments of CTIA was served this 12 day of December, 2018, by depositing a true copy thereof with the United States Postal Service, first class postage pre-paid, addressed to:

Claude Aiken
President and CEO
Wireless Internet Service Providers Association
4417 13th Street #317
Saint Cloud, FL 34769

Brett Kilbourne
Vice President, Policy and General Counsel
Utilities Technology Council
1129 20th Street, NW, Suite 350
Washington, DC 20036

/s/ Alexandra Carr

Alexandra Carr