Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Waiver of Sections 90.1307(c) and (d)	)	File No. _____
and Sections 90.1338(a) and (b)	)	
of the Commission's Rules	)	

To: Chief, Wireless Telecommunications Bureau

PETITION FOR WAIVER

The Wireless Internet Service Providers Association ("WISPA") and the Utilities Technology Council ("UTC") (together, "Petitioners"), pursuant to Section 1.925(b)(3) of the Commission's Rules, hereby respectfully request waiver of Sections 90.1307(c) and (d) and Sections 90.1338(a) and (b) (collectively, the "Transition Rules") to afford existing 3650-3700 MHz licensees ("Licensees") operating in the 3650-3700 MHz band additional time to complete the transition of their operations to the Part 96 Citizens Broadband Radio Service ("CBRS") rules. In light of the delays in opening the 3550-3700 MHz band for commercial service under the CBRS rules and the uncertainty created by the subsequent and ongoing rulemaking proceeding,[1] Licensees will require additional time beyond April 17, 2020 to transition to the Part 96 rules. Petitioners request an extension through January 8, 2023, the date on which the last 3650-3700 MHz license expires.

Background

When the Commission adopted the CBRS rules in 2015,[2] it was careful to protect the interests and investments that licenses had made in the 3650-3700 MHz band since it became

[1] *See Promoting Investment in the 3550-3700 MHz Band*, Notice of Proposed Rulemaking and Order Terminating Petitions, 32 FCC Rcd 8071 (2017).
[2] *See id.*; *see also Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, 31 FCC Rcd 5011 (2016).

commercially available in 2007.[3] Licensees have deployed service for a variety of purposes – fixed wireless broadband in rural areas,[4] utility management and communications,[5] enterprise broadband service,[6] municipal and governmental networks,[7] private networks,[8] and resorts.[9] Based on a recent review of the Commission's Universal Licensing System ("ULS"), since the Commission began accepting applications for nationwide non-exclusive 3650-3700 MHz Service licenses in November 2007, the Commission has granted more than 2,600 regular licenses that remain in active status and has registered more than 69,300 locations.

In the *CBRS Order*, the Commission made clear that it intended "to create a regulatory environment that will preserve, encourage, or even accelerate network deployments, including those providing smart grid and WISP services, which have taken root under the existing rules governing the 3650-3700 MHz band."[10] The Commission added that:

---

[3] *See Wireless Operations in the 3650-3700 MHz Band*, 20 FCC Rcd 6502 (2005), *as modified on reconsideration*, 22 FCC Rcd 10421 (2007).

[4] Examples include Sacred Wind Communications, Inc. (Call Sign WQII541) with 763 locations (many that are on or near Tribal lands), Kansas Broadband Internet, Inc. (Call Sign WQHV739) with 36 registered locations, Bug Tussel Wireless LLC (Call Sign WQIB703) with 54 locations, and Softcom Internet Communications, Inc. (Call Sign WQIG223) with 815 locations.

[5] Chevron USA Inc. (Call Sign WQHV404) was one of the first licensees in the band. It has registered 616 locations. San Diego Gas & Electric (Call Sign WQJD279) has 49 registered locations. American Electric Power Service Corporation (WQKM631) has 313 registered locations. Xcel Energy Services, Inc. (WQUI767) has 203 registered locations. ConocoPhillips Communications Inc. (Call Sign WQJC317) has two registered locations. RigNet Satcom, Inc. (Call Sign WQIQ622) has 13 registered locations and provides services to oil rigs in the Gulf of Mexico.

[6] For example, BOB, LLC dba Business Only Broadband (Call Sign WQIF263) has 54 registered locations at buildings in the Chicago and Milwaukee areas. KGT, LLC (Call Sign WQHV407) has 17 registered locations and serves businesses in the Phoenix area.

[7] Examples include the City of Houston, Texas (Call Sign WQJC308) with 1707 registered locations and the Utah Department of Transportation (Call Sign WQKL878) with 12 registered locations.

[8] For example, NASCAR (Call Sign WQJJ961) has 30 registered locations at race tracks around the country.

[9] Resort Broadband, Inc. (Call Sign WQHV745) has registered 67 locations in the Steamboat Springs, Colorado area. ResortNet, LLC (Call Sign WQJC428) has four registered locations at Keystone and Breckinridge, Colorado.

[10] *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Report and Order and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 3959, 4074 (2015) ("*CBRS Order*") (citation omitted).

> many of these Part 90 incumbents have made substantial investments in equipment deploying various services in the band. These investments were made under a non-exclusive licensing regime and subject to their statutory waiver against any claim to use of the spectrum "as against the regulatory power of the United States." Still, we strive to minimize the adverse effects of rule changes on incumbents to the extent possible without compromising the public interest benefits that we believe such rules changes will produce.[11]

The Commission adopted four rules to ensure that these investments would not be stranded and to encourage ongoing deployment. First, the Commission stated that it would not allow Priority Access Licenses ("PALs") in the 3650-3700 MHz band. Second, the Commission established technical rules for Category B CBSDs that would accommodate many existing 3650-3700 MHz deployments. Third, the Commission exempted equipment from the band-wide operability requirement. Fourth, the Commission authorized proxy controller devices to allow legacy Part 90 equipment to communicate with the Spectrum Access System ("SAS") for Part 96 operations.[12]

The Commission acknowledged, however, that these rules, standing alone, would not be sufficient to ensure a transition of thousands of access points and tens of thousands of end users, stating that "recognizing the potential challenges that may come with any regulatory transition, and in light of the significant investment many incumbent Licensees have made in the band, we provide *additional* protection for these incumbent operations during a reasonable transition period."[13] The Commission adopted a five-year transition period during which Licensees would be deemed Incumbent Access users and, accordingly, "will receive interference protection from other 3.5 GHz Band users operating in the 3650-3700 MHz segment (*i.e.*, GAA users) for

[11] *Id.* (footnote omitted).
[12] *See id.* at 4074-75.
[13] *Id.* at 4075-76 (emphasis in original).

network operations and frequencies that are in use at registered sites as of April 17, 2016."[14] At the time, the Commission and stakeholders believed that this one-year grandfathering period and the five-year transition period, ending on April 17, 2020, would ensure that Licensees would not lose their investments and would have sufficient time to conform their operations to the Part 96 rules.[15]

Unfortunately, this has proved to not be the case. Not only has the existing rulemaking sown doubt and uncertainty into the process, but the development of the SAS and Environmental Sensing Capability ("ESC") has proved to be a significant challenge that has taken a substantial amount of time. Development of proxy controller devices that can enable legacy 3650-3700 MHz service devices to communicate with the SAS has not occurred. Further, only three manufacturers are known to have obtained equipment authorizations for Part 96 compliant equipment to date, and such equipment is not yet commercially available.[16] Test procedures were only recently put in place, and no procedures are yet established for customer premise CBSDs. Certification processes for professional installers, required for most CBSDs, are not yet complete. Although limited Initial Commercial Deployments are authorized for late 2018, full-scale commercial deployment will not be practical until well into 2019.

[14] *Id.* at 4076. *See also* 47 C.F.R. § 96.21(a). The Commission also imposed a freeze on the granting of new 3650-3700 MHz licensees. *See* 47 C.F.R. § 90.1307(b).

[15] Licensees were required to meet certain criteria in order for specific devices to be treated as grandfathered, including the requirement that the operations were registered and "in use" by April 17, 2016. *See id.* at 4076-77. The Commission also permitted Licensees to continue to register locations after that date, although such operations would not be accorded grandfathered status and protection as an Incumbent during the transition period. *See id.* at 4079. The Petition applies to all devices registered in ULS under Part 90, not just those that were covered by the grandfathering registration process the Commission adopted.

[16] *See* FCC OET Equipment Authorization database (as of Oct. 1, 2018). Petitioners understand that these certifications are for low-power devices which may be used indoors as Category A or, in some cases, as outdoor "small cells." They are not replacements for existing Part 90 transmission equipment.

Even assuming that the SAS and ESC are certified soon, equipment is available soon, and GAA use commences soon, Licensees will have only one outdoor season – the summer of 2019 – to undertake the difficult, expensive and time-consuming outdoor work of climbing towers, changing out hardware, and installing equipment that complies with Part 96 technical rules. Although there is no requirement that legacy equipment be replaced, much of it will not meet the strict emission standards of CBRS, and equipment installed prior to 2015 may be too old for vendor support, or nearing the end of its economic lifespan, necessitating replacement. The limited time remaining for Licensees to transition to Part 96 rules, including the deployment of equipment that can operate across the entire 3550-3700 MHz band, would be severely constrained.

Discussion

I. WAIVER OF THE TRANSITION RULES WOULD BE CONSISTENT WITH COMMISSION RULES

The circumstances here justify waiver of the Transition Rules pursuant to Section 1.925(b)(3), which states that the Commission can waive a rule if:

> (i) The underlying purpose of the rule(s) 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 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.

Both parts of this rule apply.

First, the purpose underlying the Transition Rules is to establish a date by which Grandfathered Licensees would no longer be afforded Incumbent Access status and thereby lose interference protection over Part 96 GAA users. In 2014, when the Commission proposed rules for CBRS, it observed that "[t]here could be long term gains and significant public interest

benefits to extending the rules proposed here to the 3650-3700 MHz band, both in terms of spectrum efficiency and availability, and economies of scale for equipment across the full 150 MHz."[17] The Commission recognized, however, the "significant investment that incumbent 3650-3700 MHz licensees have made" and proposed a five-year transition period during which they would have Incumbent Access protection.[18] The Commission believed then that "[a]t the end of the transition period Grandfathered Wireless Broadband Providers would have the option, available to all eligible 3.5 GHz Band users, to apply for PALs or to operate on a GAA basis consistent with Part 96 rules."[19] This statement, subsequently embodied in the *CBRS Order* and the Transition Rules, was predicated on the belief that five years would be sufficient time for the SAS and ESC development process to be complete, the Part 96 equipment supply chain to be in full motion, commercial operations to have begun, and both GAA *and* PALs to be available such that Licensees could fully integrate with Part 96. In fact, the establishment of the transition period was a key component to including the 3650-3700 MHz band under the Part 96 CBRS service to create a contiguous 150 megahertz spectrum block.[20]

As of late 2018, however, none of this has occurred, leaving a limited – but still uncertain – amount of time for Licensees to continue to be protected from harmful interference. In particular, there is no GAA service yet in operation to which Licensees can transition their services, and PALs will likely not be available for auction until *after* the April 17, 2020 transition deadline, meaning that Licensees do not have the option of transitioning their services

[17] *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Further Notice of Proposed Rulemaking, 29 FCC Rcd 4273, 4323 (2014) ("*FNPRM*").
[18] *Id.*
[19] *Id.* In the *CBRS Order*, the Commission noted that Licensees "may continue to operate their networks under the GAA rules" at the end of the transition period. *CBRS Order* at 4076. This statement should not be construed as a limitation on Licensees to operate upgraded networks (with higher power) under PAL authorizations.
[20] *See FNPRM* at 4323.

to protected PAL spectrum. The significant reduction in the amount of time available for Licensees to complete the transition frustrates the application of the Transition rules by exposing them to interference not anticipated when the rules were proposed in 2014 and adopted in 2015.

Furthermore, thousands of additional devices, both base station and customer premise, have been installed by Licensees registered after the April 2015 grandfathering deadline, in anticipation of transition to CBRS. While not receiving Incumbent protection, they were installed with reliance that CBRS would be operational before their existing licenses expired. Additional time is needed to make the transition for these devices as well.

Moreover, grant of the requested waiver would be in the public interest. Licensees obtained significant reliance interests from the five-year transition period, namely that they would be protected from interference for a sufficient period of time and have the "option" to transition their services to GAA or PAL use. As discussed above, GAA is not commercially available and PAL auctions are not likely to occur until after the transition period ends. Licensees – particularly small rural providers – may not have the capital available in a single year's budget to undertake all of the transition activities necessary, meaning that many may choose to simply not deploy interoperable equipment in the near term. Even so, there is no guarantee that the equipment they installed can be software upgraded or that there will be choice or equipment in the supply chain to meet the end-of-transition obligations, especially if the demand for Part 96 equipment outstrips the supply – a likely scenario given the large amount of registered facilities.

Second, there are "unique and unusual factual circumstances" present and strictly applying the Transition Rules "would be inequitable, unduly burdensome or contrary to the public interest." When the Commission conceived and later adopted the CBRS rules, it believed

that Licensees would have sufficient time to transition to either GAA or PAL spectrum. This belief was predicated on the timely development of the SAS and the ESC and the availability of Part 96 equipment to enable Licensees to either upgrade or replace equipment over a reasonable period of time. As of this date, however, there is no certified SAS, no certified ESC, and equipment certification has only just begun. Even if commercial use of GAA were to become available soon, Licensees would still have a single construction season to undertake the necessary transition tasks. For small providers that cannot meet the capital costs in a single year and for larger providers that take significant time for capital budgets to be approved, these unique, unusual and unforeseen circumstances create inequities and undue burdens that are contrary to the public interest. As a simple matter of logistics and personnel, it may simply be physically impossible for Licensees to replace the necessary number of devices in such a short time frame. In sum, the "reasonable" transition period envisioned by the *CBRS Order*[21] has proved to be unreasonable in light of delays and uncertainty in the development of the steps necessary to enable Licensees to transition their services to Part 96.

Petitioners note that they are requesting a brief extension of less than three years, and have selected a date on which the last 3650-3700 MHz license expires. Petitioners believe that this will be sufficient for all Licensees to transition their operations to the Part 96 rules.

II. WAIVER OF THE TRANSITION RULES WOULD BE CONSISTENT WITH PRIOR COMMISSION DECISIONS

Waiver of the Transition Rules would be consistent with previous decisions where the Commission has waived its rules based, in part, on delays in the equipment supply chain. For example, in 2000, the Commission adjusted the wireless enhanced 911 ("E911") deployment schedule to allow carriers to seek additional time to achieve compliance, observing that "much

[21] *CBRS Orde*r at 4076.

progress has been made in developing technologies to make wireless E911 a reality, although much still remains to be done."[22] In large part, the Commission relied on a record that suggested that advancements in E911 technology were imminent. The Commission acknowledged that the E911 deployment schedule was aggressive in light of the need for further technological advancement and it recognized that waivers could be justified in situations where technology-related issues or exceptional circumstances might mean that the deployment schedule could not be met. Here, there are similar circumstances present – SAS and ESC certification and equipment certifications are imminent, but Licensees will not have access in time to reasonably comply with the April 17, 2020 transition deadline.

In another proceeding, the Commission in 2010 extended two of the interim deadlines associated with Part 90 narrowbanding in response to a petition filed by the National Public Safety Telecommunications Council that enforcement of upcoming deadlines prohibiting the manufacture, importation and certification of wideband equipment could frustrate the migration to narrowband technologies by the January 1, 2013 deadline.[23] In extending the deadline on the manufacture, importation or certification of equipment that included a 25 kHz mode to facilitate conversion of existing systems to narrowband technologies, the Commission cited the need "to ensure that necessary equipment remains available during the narrowbanding transition."[24] The Commission also granted a two-year extension of the deadline for manufacturers to incorporate a 6.25 kHz capability in equipment that is submitted for equipment certification "[b]ecause the standards [for equipment] still have not been finalized."[25] With

[22] *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Fourth Memorandum Opinion and Order, 15 FCC Rcd 17442,17443 (2000).
[23] *See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended*, Order, 25 FCC Rcd 8861 (2010).
[24] *Id.* at 8864.
[25] *Id.* at 8865.

respect to CBRS, the SAS and ESC have not been finalized and commercial use of the band is not yet available – and even if the band is available for GAA use soon, that does not enable additional sources of equipment to be available, supply chains to build up, equipment purchased, and facilities constructed, the latter of which can only occur in good climate conditions.

Subsequently, in the same rebanding docket, the Commission waived the deadline that cut off the manufacture or importation of equipment capable of operating with only one voice path per 25 kHz of spectrum because mandating compliance "could effectively prevent existing 470-512 MHz band systems from adding radios during the waiver period, which would hamper interoperability between systems."[26] Here, extending the transition period will advance the Commission's goal of interoperability across the entire 150 megahertz.

Conclusion

For the foregoing reasons, Petitioners respectfully request waiver of the Transition Rules to the extent set forth herein.

Respectfully submitted,

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

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

[26] *See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended*, Order, 25 FCC Rcd 4213, 4215 (2012).