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May 3, 2019

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: ***Request for Waiver of the Citizens Broadband Radio Service Transition
Deadline
WT Docket No. 18-353
Written Ex Parte Communication***

Dear Ms. Dortch:

The Wireless Internet Service Providers Association (“WISPA”) provides new information to support the Petition for Waiver of Sections 90.1307 (c) and (d) and Sections 90.1338(a) and (b) of the Commission’s Rules (“Petition”) filed jointly by WISPA and Utilities Technology Council (“UTC”) on October 4, 2018.¹ The information provided herein demonstrates that the need for a blanket waiver of the transition rules is even greater today than it was when the Petition was filed. This is especially true for the large number of small fixed wireless broadband providers, who will find it impossible to install Part 96 compliant equipment before the April 2020 deadline given the combined effects of the need to change out equipment in the dead of winter and install newly certified higher power equipment in an increasingly shorter time frame. Requiring individualized waiver requests will exacerbate this problem by tying up internal resources that would be better focused on serving rural consumers and planning for an orderly transition.

First, WISPA recently completed a survey of its members to determine the extent to which waiver is needed and the harmful impacts that would stem from denial of the waiver. The results are summarized as follows:

¹ *Public Notice*, Wireless Telecommunications Bureau Seeks Comment on Wireless Internet Service Providers Association and Utilities Technology Council Request for Waiver of the Citizens Broadband Radio Service Transition Deadline, DA 18-1206, WT Docket No. 18-353 (rel. Nov. 27, 2018).



- More than 85 percent of those responding to the survey indicated that they are currently using the 3650-3700 MHz band, and 75 percent of respondents indicated that they plan to use CBRS spectrum.
- Almost 70 percent of respondents indicated that some or all of their existing 3650-3700 MHz equipment would require a hardware change to comply with the Part 96 rules. The same percentage stated that tower-climbs would be required to replace equipment and that truck rolls to consumer premises would be required.
- Roughly half of the survey respondents reported that they had selected a CBRS equipment company.
- About 80 percent indicated that they had not made arrangements with contractors to install new equipment.
- More than half of the respondents estimated that it would cost them \$50,000 or more to transition to CBRS.
- More than 38 percent estimated that it would take them more than six months to comply with Part 96 rules once equipment is ordered, including replacing equipment if necessary. Another 29 percent predicted it would take them between three and six months.

The survey results clearly show that most of the incumbent 3650-3700 MHz licensees responding to the survey – around 70 percent – will need to undertake a hardware change to meet the Part 96 CBRS requirements, will need to climb towers to replace access point equipment, and will need to change out customer premise equipment. It will be impossible for small broadband providers that have been using the band to serve rural customers for many years to accomplish these tasks in the next 11 months, even without considering the delays inherent in equipment certifications discussed below. In addition to those fixed wireless broadband providers that must make hardware changes to meet Part 96 requirements, many others will need to effectuate software changes so that their existing Part 90 equipment complies with the Part 96 rules. At present, there appears to be only one Part 90 transmitter used by WISPs that is authorized as a Category B CBSD under Part 96.

Given the large percentage of respondents that are facing hardware changes, existing licensees and the Commission would likely be spending significant resources if it were asked to approve *individualized* waiver requests from dozens, if not hundreds, of existing fixed wireless



providers, as some commenters have suggested.² The better course would be to grant the Petition and to extend the transition period across the board.

Second, the intervening change to the Commission's Knowledge Database ("KDB") means that the Commission will not be able to certify equipment suitable for fixed wireless operations for several months.³ Customer premise equipment ("CPE") for fixed wireless broadband operations will require higher power to communicate to the CBSD used as an access point than the power allowed for End User Devices; these must operate as CBSDs. These CPE-CBSDs require a "handshake" with the associated BTS-CBSD (the base station) in order to obtain authorization from the Spectrum Access System ("SAS") and provide service.⁴

On April 19, 2019, the Commission approved the handshake KDB. The Commission acknowledged that:

there are circumstances where an End-User Device operating as a CPE could be receiving a signal from a BTS-CBSD or another CBSD that is already authorized by the SAS, but the CPE needs to operate at signal levels higher than the 23 dBm permitted by rules for End-User Devices. In that case, the rules permit such devices to be authorized as a CBSD operating at higher power levels [Section 96.47(b)], and the CPE must register with a SAS as a CBSD. Other resources, if available, such as a wireline or wireless broadband service should be used to access the SAS. If there are no other means to close the loop with a SAS, the CPE may establish a connection with the SAS by using the frequencies authorized for the BTS-CBSD ("in band" communications)....⁵

The table below summarizes a very optimistic, best-case timeline for certification of CPE-CBSDs:

² See Comments of CTIA, Docket No. 18-353 (filed Dec. 12, 2018); Comments of NCTA – The Internet and Television Association, Docket No. 18-353 (filed Dec. 12, 2018); Comments of Federated Wireless, Inc., Docket No. 18-353 (filed Dec. 12, 2018).

³ KDB Publication Number 940660.

⁴ According to the FAQs for the KDB: "For equipment authorization of devices which may need to use "in-band" communications, the specific protocol for communications must be pre-approved by the Commission under the Pre-Approval Guidance (PAG) procedures for manufacturers. These devices will fall under a new equipment class CBC (Customer Premise Equipment CBSD). The submission for such approval must include a description of the conditions under which such communications will occur, the maximum permitted transmission times, duration, and repetition rates for the messages for connecting to the SAS, and any arrangements for avoiding interference. The submission should also explain how the protocol will be verified to show compliance with the specifications and other technical requirements." (Footnotes omitted).

⁵ KDB Publication Number 940660 D02 (FAQs).



Responsible Party	Task	Date Range
WinnForum	Creates specifications and test cases: <ul style="list-style-type: none">a. Create system specification from KDB (Working Group 1)b. Create test cases to support system specification (Working Group 4)c. Specification review, balloting, issue final Specificationd. Specification review, balloting, issue final test cases	Drafts by mid-May Balloted Final by mid-June
TCBs	Implement additional test program from test cases: <ul style="list-style-type: none">a. Update CBSD submission to include CPE typeb. Update test procedures based on test cases defined by WinnForum Note: a new test harness version is not required, reducing the complexity of this effort	Mid-late June
TCBs	Test CPEs Submit test reports to OET	Early July – early August
FCC-OET	Conducts OEM lab tests at FCC lab according to PAG (Pre-Approval Guidance) requirements	Early August – mid August
FCC-OET	Issues equipment authorizations *Waiver of PAG process could eliminate ~4 weeks from timeline	Late August– early September*

Thus, assuming a best case scenario – which is likely to slip by a month or more given the number of steps in this first-time process – it will take several months for manufacturers to implement additional testing, obtain equipment certification and build up the supply chain. By then, winter will have arrived in much of the country and many sites will become hard to access. Providers will also require the services of Certified Professional Installers (“CPIs”) authorized to enter equipment registration into the SAS. The CPIs must first be certified by training bodies authorized by WinnForum. Then, after receiving new equipment, the provider must compete with others to hire tower-climbers and technicians, install new equipment at the base station and the customers’ premises, ensure that the equipment complies with the CPI procedures and begin commercial operations under the control of the SAS and the ESC. With a majority of existing fixed wireless providers in the 3650-3700 MHz band having to go through all of these steps, retaining the existing April 2020 deadline would create chaos in the industry and certainly lead to significant non-compliance. That is not a result that serves the public interest.



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Taken together, the survey results and the delays inherent in the CPE-CBSD certification process show that a waiver is needed to avoid an impending disaster in the transition. Requiring existing 3650-3700 MHz licensees to file individualized waiver requests would create unnecessary administrative obstacles that are not supported by the record, and discourage investment in the meantime. The Commission therefore should quickly approve the Petition and grant the waiver requested therein.

Pursuant to Section 1.1206 of the Commission's Rules, this letter is being filed in ECFS in the above-referenced docket. Please do not hesitate to contact the undersigned with any questions.

Respectfully submitted,

/s/ Stephen E. Coran

Stephen E. Coran

cc: Julius Knapp
Paul Powell
Navid Golshahi