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

In the Matter of	)	
	)	
Wireless Telecommunications Bureau Seeks	)	WT Docket No. 06-150
Comment on Process for Relicensing 700 MHz	)	
Spectrum in Unserved Areas	)	

COMMENTS OF CTIA

CTIA[1] respectfully submits these comments in response to the Public Notice released by the Wireless Telecommunications Bureau (the "Bureau") of the Federal Communications Commission ("Commission") seeking comment on proposals related to the relicensing of 700 MHz unserved areas.[2]

I. INTRODUCTION.

In the *700 MHz Relicensing PN*, the Bureau seeks comment on the process for determining which areas are being served by 700 MHz licensees and for relicensing any areas deemed to be unserved. CTIA generally supports the overall framework that the Bureau proposes for managing the 700 MHz unserved area process. However, additional efforts should be made to ensure that 700 MHz licensees have the ability to accurately determine coverage provided by their networks in a flexible fashion.

---

[1] CTIA® (www.ctia.org) represents the U.S. wireless communications industry and the companies throughout the mobile ecosystem that enable Americans to lead 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, D.C.

[2] *See Wireless Telecommunications Bureau Seeks Comment on Process for Relicensing 700 MHz Spectrum in Unserved Areas*, Public Notice, DA 17-810, WT Docket No. 06-150 (WTB, rel. Aug. 28, 2017) ("*700 MHz Relicensing PN*").

Specifically, the Bureau should:

- ***Afford 700 MHz licensees the flexibility to accurately*** determine coverage provided by their networks by declining to adopt a specific field strength limit and allowing 700 MHz licensees to instead provide a coverage showing that is based on real-world service to the public, consistent with Commission requirements for other showings;
- ***Streamline the application process*** by (1) permitting applicants for reclaimed spectrum in unserved areas to list within a single application all the unserved areas for which they seek a license; (2) simplifying the means by which applicants can electronically select the unserved areas covered by the application; and (3) undertaking a *pro forma* evaluation of ownership, including both *de jure* and *de facto* control of the original licensee and the applicant; and
- ***Afford parties the time necessary*** to reach agreements to resolve mutually exclusive applications or attempt to reach a settlement.

By taking these steps, the Bureau can reduce burdens for both Commission staff and applicants so that relicensed 700 MHz spectrum can rapidly and efficiently be put to use for the benefit of consumers.

II. COVERAGE SHOWINGS FOR 700 MHZ LICENSEES SHOULD BE BASED ON ACTUAL SERVICE RATHER THAN FIELD STRENGTH LIMITS.

In the *700 MHz Relicensing PN*, the Bureau seeks comment on a process in which licensees would identify the "served" area of the license by filing a shapefile[3] showing a smooth enclosed 40 dBµV/m field strength contour ("Smooth Contour") of existing facilities as of the end-of-term construction deadline.[4] The portion of the licensed market area covered by the Smooth Contour would be deemed "served," and the licensee would ultimately "keep" the reduced licensed area.[5] Areas deemed "unserved" would be relicensed by the process to be adopted in response to the *700 MHz Relicensing PN*. Alternatively, the Bureau proposes that, if

[3] A shapefile is a geospatial vector data format for geographic information system software.

[4] *700 MHz Relicensing PN* ¶ 7.

[5] *Id.*

the 40 dBµV/m Smooth Contour would result in a diminished licensed area at least 25 percent smaller than the licensee's actual service area, then a 700 MHz licensee could demonstrate its service area using a lower dBµV/m field strength smooth contour ("Alternative Smooth Contour"). Under this proposed approach, a 700 MHz licensee would be required to demonstrate that: (1) the licensee is operating a viable service at the lower field strength; and (2) the service area, as measured using the lower dBµV/m field strength Alternative Smooth Contour, is at least 25 percent larger than it would be using the 40 dBµV/m field strength Smooth Contour.[6]

A. The Bureau's Smooth Contour Proposal Is Flawed And Should Be Rejected.

The Bureau should refrain from imposing an arbitrary field strength metric. The 40 dBµV/m field strength limit proposed by the Bureau for determining the Smooth Contour was designed to protect adjacent-area licensees (*i.e.*, for interference protection), not to predict coverage by a licensee.[7] As the Commission has stated previously, "field strength limit rules do not – and are not intended to – provide a method by which a defined service area *contour* is calculated."[8] Moreover, it also recently found in the Mobility Fund II proceeding that a specific signal strength benchmark is unnecessary and it "may not be closely correlated with actual on-the-ground data in a particular geographic area."[9] Therefore, adoption of the Smooth Contour

---

[6] *Id.*

[7] 47 C.F.R. § 27.55. *See also Amendment of Parts 1 and 22 of the Commission's Rules with Regard to the Cellular Service, Including Changes in Licensing of Unserved Area, et al.*, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 14100 ¶ 23 (2014) ("The applicable field strength limits – predicted or measured at the fixed geographic license boundaries in such service bands – are an effective way to ensure protection of neighboring licensees.") ("*Cellular Order*").

[8] *See Cellular Order* ¶ 23 (emphasis original).

[9] *See Connect America Fund; Universal Service Reform – Mobility Fund*, Order on Reconsideration and Second Report and Order, 32 FCC Rcd 6282, 6303 ¶ 40 (2017) ("*MF-II Second Report and Order*").

proposal would be incorrect technically and would not accurately represent coverage provided by 700 MHz licensees.

The Bureau's proposed approach could also prove challenging in light of evolving technology and the Bureau would be wise to recall the lengthy and complex path previously required to remove a similar metric from the Commission's rules. In 1990, the Commission proposed to require applications for unserved areas to reflect a Cellular geographic service area ("CGSA") coterminous with 39 dBμV/m contours and sought comment on the definition of "unserved area."[10] Then, in 1991, the Commission retreated from this proposal and admitted that "39 dBμV/m contours may not be the most accurate method for predicting propagation characteristics for the cellular service."[11] (The Commission later noted that the rules had caused conflict in the Gulf coastal region between carriers in the Gulf of Mexico and adjacent land carriers, and modified its requirements for carriers in this region.[12]) In 1994, the D.C. Circuit reversed and remanded parts of the rules, stating that the Commission failed to consider alternatives presented in the record.[13] The Commission again sought comment on this issue in 1997,[14] and finally, in 2002, after 12 years of notice, comment, litigation, and remand, the

[10] *See Amendment of Part 22 of the Commission's Rules to Provide for Filing and Processing of Applications for Unserved Areas in the Cellular Service and to Modify Other Cellular Rules*, Notice of Proposed Rulemaking, 5 FCC Rcd 1044, 1047 ¶¶ 21-22 (1990).

[11] *See Amendment of Part 22 of the Commission's Rules to Provide for Filing and Processing of Applications for Unserved Areas in the Cellular Service and to Modify Other Cellular Rules, et al*., First Report and Order and Memorandum Opinion and Order on Reconsideration, 6 FCC Rcd 6185 ¶ 24 (1991).

[12] *See generally Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico, et al*., Report and Order, 17 FCC Rcd 1209 (2002).

[13] *See Petroleum Commc'ns, Inc. v. F.C.C.*, 22 F.3d 1164, 1172 (D.C. Cir. 1994).

[14] *See Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico, et al.*, Second Further Notice of Proposed Rulemaking, 12 FCC Rcd 4578 ¶ 38 (1997).

Commission finally relaxed the contour requirement through the biennial review process.[15] This example demonstrates the inherent difficulties associated with codifying this type of specific limit and argues for avoiding such requirements in this instance.

Finally, the Bureau's proposed approach would unnecessarily penalize licensees providing service to consumers at a lower field strength. Under the Bureau's proposal, only 700 MHz licensees whose actual service is greater than 25 percent predicted by the Smooth Contour proposal would be able to utilize the Alternative Smooth Contour methodology to demonstrate the coverage it provides to subscribers. This means that a licensee utilizing the Smooth Contour method would be required to underestimate coverage to consumers by as much as 25 percent. Only if the Smooth Contour model under predicts coverage by *more* than 25 percent would a 700 MHz licensee be permitted to use an alternative method to accurately demonstrate coverage. In contrast, if the Smooth Contour methodology fails to capture less than 25 percent of actual service to consumers, a 700 MHz licensee would have no recourse or alternative. This is hardly fair to 700 MHz licensees or to consumers who are being provided service at a lower field strength, as it would grossly underestimate actual coverage within market areas.

In sum, the Bureau's proposal is inaccurate, difficult to modify, and inadvertently punishes certain 700 MHz licensees. CTIA recommends that the Bureau reject this proposal and instead consider more acceptable approaches that allow 700 MHz licensees to accurately and consistently report coverage to consumers.

---

[15] *See Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services,* Report and Order, 17 FCC Rcd 18401 ¶ 59 (2002).

B. 700 MHz Licensees Should Instead Be Permitted To Utilize Service Showings Based On Actual Coverage In A Market.

CTIA recommends that 700 MHz licensees instead be permitted to provide a coverage showing that is based on real-world service to the public and not be bound to a particular metric or technology in doing so. This approach would be consistent with past Commission precedent and would better represent actual service to consumers.[16] Moreover, the wireless industry is characterized by innovation and new services are emerging on a regular basis. In a little more than 20 years, the industry has moved from second generation ("2G") to third generation ("3G") to current fourth generation ("4G") technologies that have widely varying technical parameters and characteristics. In light of this, the Bureau should refrain from codifying a particular field strength figure to determine coverage by 700 MHz licensees. Allowing 700 MHz licensees to determine the appropriate methodology for accurately depicting coverage would be a more technologically neutral approach and would allow operators to seamlessly change technologies (*e.g.*, moving to 5G from 4G LTE) without the need to change Commission rules. Licensees in the 700 MHz band should be permitted to make showings of coverage that are based on *actual* coverage and utilize metrics that the wireless operator already uses for determining if an area is provided service.

---

[16] *See, e.g.*, 47 C.F.R. § 24.103(d) (permitting Narrowband PCS licensees to demonstrate "substantial service" but failing to prescribe how such a demonstration should be done); 47 C.F.R. § 24.203(c) (requiring that Broadband PCS licensees "file maps and other supporting documents showing compliance with the respective construction requirements" but otherwise not specifying how compliance should be shown); 47 C.F.R. § 22.911(b) (permitting licensees to use an alternative method for determination that is most accurate with respect to actual coverage); *see also MF-II Second Report and Order* ¶¶ 47-48 (stating that a party challenging an initial determination of an area eligible for MF-II support must submit "detailed proof of lack of unsubsidized, qualified 4G LTE coverage in support of its challenge" and that such proof must be in the form of "'on the ground' data," which are "a reliable form of evidence because they simulate consumers' actual experience").

In addition, permitting licensees to determine the most accurate method to demonstrate coverage could reduce regulatory burdens on both Bureau staff and licensees. 700 MHz licensees have rolling interim and final construction showings beginning this year and continuing over the next several years.[17] These construction filings are based on actual 700 MHz service and licensees have been permitted to self-determine the most accurate coverage methodology to depict service to the public.[18] Should the Bureau require the use of the Smooth Contour methodology, 700 MHz licensees will be required to file yet another showing (on top of the construction showings). Rather than requiring duplicative and potentially erroneous coverage showings based on the Smooth Contour, the Bureau should instead consider if the construction showing process (at least for the end-of-term showing) could be used to eliminate an additional filing for the Bureau to review and for 700 MHz licensees to submit. As the end-of-term construction filings are required to demonstrate coverage by the 700 MHz licensee, there does not appear to be a need for an additional showing of "unserved" area. At a minimum, 700 MHz licensees should retain the option of relying upon their existing construction showings or, alternatively, providing a separate coverage showing to delineate the served area within their licensed market.

III. THE APPLICATION PROCESS FOR RELICENSING 700 MHZ SPECTRUM SHOULD BE STREAMLINED.

As proposed in the *700 MHz Relicensing PN*, relicensing unserved areas will occur through a two-phase application process. Phase 1 begins with a 30-day window in which applicants can seek authorization for reclaimed service areas, and the 700 MHz licensee that failed to meet the construction benchmark for that area will be barred from applying to relicense

[17] *700 MHz Relicensing PN* ¶ 3.

[18] *See* 47 C.F.R. § 27.14(g)(2), (h)(2), (i)(2).

the area.[19] To implement this prohibition on original licensees applying for spectrum during Phase 1, the Bureau proposes to bar any applicant that has *any* interest, ownership, or control of the original licensee, as well as any applicant in which the original licensee has any interest, ownership, or control.[20] The Bureau proposes to provide applicants with access to a publicly available map that displays the areas available for relicensing, and from there, applicants would determine the areas they are interested in licensing.[21] Additionally, the Bureau proposes to limit a single application to include one shapefile of a contiguous shape, or, if non-contiguous, requiring that the shapes be within a single market boundary.[22] Mutually exclusive applications filed during Phase 1 would be permitted to resolve their mutually exclusive applications or attempt to reach a settlement during the public notice period that follows the Phase 1 filing window.[23] In Phase 2, interested applicants (including those that were barred during Phase 1) may file applications for available unserved areas that were not licensed during Phase 1, or for which there are no pending applications.[24]

CTIA generally agrees with the proposed 700 MHz unserved area application process but suggests a few enhancements. First, new applicants for reclaimed spectrum in unserved areas should not be required to file an individual application for each unserved area. Instead,

---

[19] *See* 47 C.F.R. § 27.14. Licensees must, as a performance requirement, make a showing of "substantial service" in their license area within the prescribed license term set forth in Rule 27.13. "Substantial service" is defined as service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal. Failure by any licensee to meet this requirement will result in forfeiture of the license and the licensee will be ineligible to regain it. *See also 700 MHz Relicensing PN* ¶ 13.

[20] *700 MHz Relicensing PN* ¶ 14.

[21] *Id*. ¶ 11.

[22] *Id*. ¶ 12.

[23] *Id*. ¶ 15.

[24] *Id*. ¶ 19.

applicants should be permitted to list within a single application *all* the unserved areas for which they seek a license, similar to the process for leases. Permitting applicants to submit applications in batches would greatly streamline the process, as interested parties would need to file only a single application, and fewer applications would result in a lesser burden on Bureau staff.

Second, rather than relying only on a map to indicate areas available for relicensing, CTIA suggests that the Bureau also provide a "drop-down list" of unserved areas that an interested party may select from when submitting its application. If a party desired to serve the entire unserved area, it would simply select that area from the drop-down list. Only applicants requesting to serve a specific portion of the unserved geographic area would be required to file shapefile data describing that area. This approach would eliminate the need for many applicants to provide additional technical data and simplify the overall unserved area process.

Third, CTIA agrees that spectrum should be licensed to parties that are most likely to use it, but barring parties with *any* interest in the original licensee from submitting Phase I applications may go too far. This bright-line rule could inadvertently exclude parties that were not in control of the initial 700 MHz license that failed to provide service. Instead, CTIA supports the Bureau's alternate proposal to do a *pro forma* evaluation of ownership, including both *de jure* and *de facto* control[25] of the original licensee and the applicant.[26] This method

[25] Generally speaking, *de jure* control exists when a party has lawful, legal control over an applicant, irrespective of whether the party exercises that control. *De facto* control exists when a party has control of an applicant as a matter of fact, irrespective of whether it lawfully claims control. *See, e.g., Federal Communications Bar Association's Petition for Forbearance from Section 310(D) of the Communications Act Regarding Non-Substantial Assignments of Wireless Licenses and Transfers of Control Involving Telecommunications Carriers et al.*, Memorandum Opinion and Order, 13 FCC Rcd 6293 ¶¶ 7-9 (1998).

[26] *700 MHz Relicensing PN* ¶ 14.

would allow the Bureau to effectively bar the correct parties from seeking relicensing of unserved 700 MHz areas in a precise fashion.

Finally, the Bureau should provide additional time for settlement discussions following the Phase I filing window. The 30-day public notice period accounted for in Phase 1 may be insufficient to allow settlement discussions to complete. CTIA recommends giving parties additional time following the completion of the public notice comment period. This additional time would likely allow for a greater number of interested parties to reach agreements on their own.

IV. CONCLUSION.

CTIA generally supports the framework proposed by the Bureau for managing the 700 MHz unserved area process but urges the Commission to afford 700 MHz licensees greater flexibility to accurately determine coverage provided by their networks and consider ways to streamline the relicensing application process. Doing so will create efficiencies that will benefit Commission staff, licensees, and ultimately consumers.

Respectfully Submitted,

/s/ Kara Romagnino Graves

Kara Romagnino Graves
Director, Regulatory Affairs

Thomas C. Power
Senior Vice President and General Counsel

Scott K. Bergmann
Vice President, Regulatory Affairs

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

Dated: September 27, 2017