

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

In the Matter of	)	
	)	
Partitioning, Disaggregation, and	)	WT Docket No. 19-38
Leasing of Spectrum	)	

**REPLY COMMENTS OF CTIA**

CTIA respectfully submits these reply comments in response to the *Notice of Proposed Rulemaking* (“*NPRM*”) released by the Federal Communications Commission (“Commission”) in the above-referenced proceeding.<sup>1</sup>

**I. INTRODUCTION.**

The initial comments in this proceeding highlight the importance of secondary market transactions and their ability to increase access to spectrum by small and rural carriers and to close the digital divide. As CTIA discussed, the Commission can further promote the availability of advanced services in rural areas and increase spectrum availability for rural and small carriers through modest revisions to its partitioning, disaggregation, and spectrum leasing rules.<sup>2</sup> CTIA continues to support the reforms discussed in its initial comments, but files here to focus on two specific issues.

First, as CTIA and others state, the Commission should permit, but not require, licensees to reaggregate, as a procedural matter, previously partitioned or disaggregated licenses. Allowing spectrum reaggregation would reduce the administrative burdens on licensees that choose to partition or disaggregate their licenses and then re-consolidate their holdings, which, in turn, could encourage those licensees to lease or sell their spectrum in the first instance.

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<sup>1</sup> See *Partitioning, Disaggregation, and Leasing of Spectrum*, Notice of Proposed Rulemaking, WT Docket No. 19-38, FCC 19-22 (rel. Mar. 15, 2019) (“*NPRM*”).

<sup>2</sup> See generally Comments of CTIA, WT Docket No. 19-38 (filed June 3, 2019) (“*CTIA Comments*”).

Second, the Commission should reject calls for use-it-or-share-it licensing mechanisms. Adopting broad use-it-or-share-it mechanisms would not only undermine licensees' existing investments, but could also threaten the deployment of next-generation wireless services. The Commission should likewise reject proposals for wholesale application of automated databases because those databases are still being developed and, even when potentially viable, would not likely be as effective in ensuring the efficient deployment of spectrum as flexible, exclusive-use licensing.

## **II. THE COMMISSION SHOULD ALLOW LICENSEES TO REAGGREGATE SPECTRUM THAT HAS BEEN PARTITIONED OR DISAGGREGATED.**

### **A. The Record Confirms That the Commission Should Permit, But Not Require, Licensees to Reaggregate Previously Partitioned or Disaggregated Licenses.**

Commenters agree with CTIA that requiring licensees to hold multiple licenses for what was once a single license may impose regulatory and administrative burdens, including by requiring licensees to comply with multiple construction, renewal, and continuous service requirements.<sup>3</sup> As CTIA noted and others observe, those burdens can deter licensees from engaging in secondary market transactions in the first instance.<sup>4</sup> To further incentivize licensees to engage in secondary market transactions, the Commission should assure licensees that they may reaggregate their licenses if and when all the pieces of the license are once again held by the licensee.<sup>5</sup> Such clarification would encourage secondary market transactions at the outset

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<sup>3</sup> See, e.g., Comments of Competitive Carriers Association, WT Docket No. 19-38, at 3 (filed June 3, 2019); Comments of Google LLC, WT Docket No. 19-38, at 15 (filed June 3, 2019) ("Google Comments").

<sup>4</sup> See CTIA Comments at 13-15; Google Comments at 14-15; Comments of R Street Institute, WT Docket No. 19-38, at 4 (filed June 3, 2019).

<sup>5</sup> As CTIA noted in its initial comments, the Commission need not adopt a rule to effectuate this result, as the Commission has appropriately recognized that spectrum reaggregation may be implemented by Commission staff as a procedural matter. CTIA Comments at 14-15.

because licensees would be assured that, if they re-acquire spectrum holdings later, their burdens will be no greater than had they not partitioned or disaggregated their licenses in the first place.

While GeoLinks claims that allowing large carriers to reaggregate their spectrum holdings will not help promote the goal of increasing access to spectrum by small and rural carriers,<sup>6</sup> the exact opposite is true. Large carriers hold many individual licenses, and per-license regulatory burdens are multiplied further when licensees are required to hold even more licenses that once comprised a single authorization. To the extent those burdens can be reduced, licensees will have a greater incentive and opportunity to partition or disaggregate their spectrum holdings at the outset, benefitting small and rural carriers. As Google states, allowing reaggregation “could enhance the fluidity of spectrum holdings and thus make secondary transactions more attractive for *all* parties.”<sup>7</sup>

**B. Concerns That Allowing Licensees to Reaggregate Their Spectrum Holdings May Result in the Avoidance or Gaming of Construction Requirements are Unwarranted and Should Be Dismissed.**

The Commission should reject the claims of the few commenters that argue reaggregation would encourage carriers to circumvent construction requirements. The Wireless Internet Service Providers Association (“WISPA”), for instance, argues that allowing larger carriers to reabsorb the licenses “would potentially lead to gamesmanship by larger carriers, *i.e.*, using an unaffiliated small or rural provider as a middleman to convey spectrum indirectly from one large carrier to another.”<sup>8</sup> It is unclear, however, how WISPA’s assertion relates to spectrum

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<sup>6</sup> See Comments of California Internet, L.P. dba GeoLinks, WT Docket No. 19-38, at 4 (filed June 3, 2019).

<sup>7</sup> Google Comments at 14 (emphasis added).

<sup>8</sup> Comments of the Wireless Internet Service Providers Association, WT Docket No. 19-38, at 8-9 (filed June 3, 2019) (“WISPA Comments”).

reaggregation. Reaggregation allows the *same* licensee to reconsolidate the pieces of an original license—it would not, by itself, result in a large carrier using an unaffiliated small or rural provider as a middleman to convey spectrum to *another* large carrier. And, in any case, there is no prohibition on large carriers engaging in spectrum exchanges with one another, provided such exchanges are otherwise consistent with the Commission’s rules and policies.<sup>9</sup>

The Rural Wireless Association (“RWA”) also states that reaggregation would enable large carriers to avoid construction obligations and engage in spectrum warehousing by partitioning undesirable spectrum but later reaggregating that same spectrum.<sup>10</sup> However, as CTIA previously explained, the Commission already addressed these concerns in its *2017 WRS Order*, and clarifying that a licensee may reaggregate its spectrum would not change that result.<sup>11</sup> As the *2017 WRS Order* made clear, reaggregation of a license would result in only one license with one overall buildout obligation spread across the originally authorized license—*i.e.*, the licensee’s coverage requirements would be the same as if it had never partitioned or disaggregated its license in the first place.<sup>12</sup>

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<sup>9</sup> For similar reasons, the Commission should also reject WISPA’s call for a minimum holding period for partitioned or disaggregated licenses. *See* WISPA Comments at 8. Such a requirement could have the effect of inhibiting carriers from engaging in spectrum swaps, one means by which carriers can acquire the spectrum they need to build out networks and deliver communications services. Such swaps allow spectrum to be put to efficient use and, moreover, can allow a carrier to obtain a contiguous block of spectrum to enable enhanced network performance and numerous other efficiencies. A mandated holding period would hamper the ability of carriers to engage in these beneficial transactions and prevent entities who most want to build out the spectrum from acquiring it, undermining Congress’s and the Commission’s goal of promoting the availability of advanced telecommunications services, particularly in rural areas.

<sup>10</sup> *See* Comments of the Rural Wireless Association, Inc., WT Docket No. 19-38, at 5 (filed June 3, 2019).

<sup>11</sup> *See* CTIA Comments at 15-16; *Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, & 101 to Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services*, Second Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 8874, 8877 ¶¶ 74-80 (2017) (“*2017 WRS Order*”).

<sup>12</sup> *See* CTIA Comments at 15-16.

Moreover, the Commission's actions in the *2017 WRS Order* ensure that a license's original buildout deadlines are met. If reaggregation of a license occurs *after* the performance deadline, then the buildout would have already occurred in the partitioned area and there would be no way to manipulate the construction requirements. On the other hand, if reaggregation occurs *prior to* the performance deadline, then the licensee would be required to meet the precise obligation imposed on the original license.

### **III. THE COMMISSION SHOULD PRIORITIZE FLEXIBLE, EXCLUSIVE-USE LICENSES OVER SHARING REGIMES.**

Some commenters suggest licensees should be subject to use-it-or-share-it mechanisms, coupled with or without onerous database requirements, in order to encourage secondary market transactions and prevent spectrum warehousing.<sup>13</sup> However, exclusive-use licensees already have strong incentives to make efficient use of their spectrum, including by engaging in secondary market transactions. Because policies supporting exclusive-use licenses have been key to driving the efficient and successful generations of wireless networks that American consumers and businesses enjoy today, the Commission should disregard suggestions to adopt use-it-or-share-it mechanisms and instead focus on promoting flexible, exclusive-use licenses.

#### **A. Regulatory Certainty Included in Exclusive-Use Licenses Creates Strong Incentives for Licensees to Use Spectrum Efficiently.**

As CTIA has previously explained, flexible, exclusive-use licenses are the cornerstone of the U.S.'s successful wireless strategy.<sup>14</sup> Not only do exclusive-use licenses provide licensees

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<sup>13</sup> See, e.g., WISPA Comments at 7-8; Google Comments at 17-19; Comments of Dynamic Spectrum Alliance, WT Docket No. 19-38, at 4, 7-11 (filed June 3, 2019) ("DSA Comments"); Comments of Open Technology Institute at New America and Public Knowledge, WT Docket No. 19-38, at 8-13 (filed June 3, 2019) ("OTI and PK Comments").

<sup>14</sup> See, e.g., Comments of CTIA, GN Docket No. 19-128, at 4 (filed May 31, 2019) ("CTIA Bidirectional Sharing Comments"); Comments of CTIA, NTIA Docket No. 181130999-8999-01, at 13-14 (filed Jan. 22, 2019); Reply Comments of CTIA, GN Docket No. 18-122, *et al.*, at 13 (filed Dec. 11, 2018).

with the predictability and certainty necessary to assure them that their investments will be protected against harmful interference, but they also allow licensees to fully “mine” the spectrum, resulting in more intense and efficient utilization. Indeed, on a MBs/MHz level, U.S. wireless providers have increased their spectrum efficiency by a factor of 42 since 2010 by taking steps such as actively refarming existing spectrum holdings, quickly putting new spectrum to use, and deploying iterative generations of technology that increase spectrum efficiency.<sup>15</sup>

In addition to facilitating greater wireless innovation and investment, the spectrum efficiencies associated with exclusive-use licenses can enable licensees to create additional capacity within their existing spectrum resources. The resulting potential excess capacity, in turn, may encourage licensees to offer spectrum resources to others, including to small and rural carriers. The Commission should recognize these benefits associated with exclusive-use licenses and maintain that approach when adopting proposals in this proceeding.

**B. Wholesale Application of a Use-it-or-Share-it Framework Would Undermine Existing Investments.**

While sharing frameworks may be necessary in certain cases, they should not be pursued as a primary means of encouraging efficient spectrum use or secondary market transactions. First, use-it-or-share-it regimes undermine the rights of licensees and the investments they have made. Licensees will purchase spectrum at great cost only with the understanding that they will have exclusive use of the license for the duration of the license term.<sup>16</sup> Eroding those rights

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<sup>15</sup> See *Smarter and More Efficient: How America’s Wireless Industry Maximizes Its Spectrum*, CTIA (forthcoming July 2019).

<sup>16</sup> See *CTIA 2019 Annual Survey Highlights*, CTIA, at 6-7 (June 2019), <https://api.ctia.org/wp-content/uploads/2019/06/2019-Annual-Survey-Highlights-FINAL.pdf> (highlighting that the wireless industry has made more than \$253 billion in capital investments since the launch of 4G in 2010 and has contributed more than \$116 billion to the U.S. Treasury through investment in spectrum licenses since the first spectrum auction in 1994).

could deter licensees from investing in resources to purchase and deploy spectrum, which could have the effect of limiting the deployment of spectrum in unserved and underserved areas and reducing the pool of spectrum that may be used in secondary market transactions.

Second, use-it-or-share-it mechanisms disregard the technical complexities of deploying commercial wireless equipment and services. While carriers have every incentive to move quickly to deploy new and innovative services, the testing of equipment and services before commercial launch typically involves a multi-year process. Requiring carriers to account for the fact that they may be forced to share their spectrum at some point during their license term would upend this process and threaten the deployment of next-generation services.<sup>17</sup> For example, forcing licensees to share could require stringent power or geographic limitations that would inhibit 5G deployments. It could also introduce equipment incompatibility issues for spectrum bands that are used internationally for 5G because other countries are focused on providing exclusive-use spectrum access for wireless services.<sup>18</sup>

Third, use-it-or-share-it regimes ignore the difficulty in ensuring that users vacate spectrum when necessary. Carriers need certainty with respect to when, where, and how much spectrum they can use.<sup>19</sup> The uncertainty surrounding if a band will be cleared when needed, whether for the initial launch of services or for expanding services, makes it difficult for carriers

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<sup>17</sup> See CTIA Bidirectional Sharing Comments at 5-6.

<sup>18</sup> See, e.g., David Abecassis *et al.*, *Mid-Band Spectrum Geographical Licensing Approaches*, ANALYSYS MASON, at 1 (July 2018), <https://api.ctia.org/wp-content/uploads/2018/07/Analysys-Mason-mid-band-5G-spectrum-paper-7-03-18.pdf> (noting that the U.S. sharing approach in the 3.5 GHz band “differs from all our benchmark countries, which have developed plans for exclusive assignment to mobile”).

<sup>19</sup> See, e.g., Letter from Stacey Black, AT&T Services, Inc., to Marlene H. Dortch, FCC, GN Docket No. 14-177 (filed Apr. 4, 2019); Letter from Steve. B. Sharkey and John Hunter, T-Mobile USA, Inc., to Marlene H. Dortch, FCC, GN Docket No. 14-177 (filed Apr. 5, 2019); Letter from Patrick Welsh, Verizon, to Marlene H. Dortch, FCC, GN Docket No. 14-177 (filed Apr. 4, 2019).

to engage in spectrum planning and deployment. While the Dynamic Spectrum Alliance (“DSA”) suggests that use-it-or-share-it rules will be coupled with “the assurance that users will not interfere with licensees and will in fact vacate the spectrum as needed once the licensee commences service,” DSA also acknowledges that this assurance is “conceptual[.]” at best.<sup>20</sup> There is no guarantee that users will vacate licensees’ spectrum when asked. And removing a user from spectrum after it has overstayed its welcome is much more difficult than preventing that user from accessing spectrum in the first instance.

**C. Use-it-or-Share-it Rules That Include the Deployment of Automated Databases are Untested and Would Take Substantial Time to Develop.**

DSA and others suggest that “[t]he Commission should employ automated databases—similar to the soon-to-be-deployed Spectrum Access System (SAS) in the 3.5 GHz Citizens Broadband Radio Service (CBRS) band—that can be used to identify usable spectrum, maintain detailed network information, and coordinate between different users and priority rights.”<sup>21</sup> The Commission, however, should reject these proposals.

At this time, there has been no real-world deployment of a successful system with dynamic spectrum usage and sharing.<sup>22</sup> While the CBRS mechanism (using a SAS) may hold promise—and the wireless industry looks forward to its use for initial commercial deployments—the underlying software and equipment surrounding that approach is still nascent and unproven. Even if SAS-type approaches turn out to be viable, the Commission should not consider such methods as the default approach for the sharing of spectrum. As explained above,

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<sup>20</sup> DSA Comments at 7.

<sup>21</sup> *Id.* at 4; *see also* Google Comments at 10-14; OTI and PK Comments at 10-13; Comments of Federated Wireless, Inc., WT Docket No. 19-38, at 2-7 (filed June 3, 2019).

<sup>22</sup> *See* CTIA Bidirectional Sharing Comments at 6.



the Commission should focus on exclusive-use licenses to promote the efficient use of spectrum and secondary market transactions.

#### **IV. CONCLUSION.**

CTIA applauds the Commission's efforts to further increase access to spectrum by small and rural carriers through its partitioning, disaggregation, and spectrum leasing rules. To achieve this goal, CTIA urges the Commission to permit (but not require) licensees to reaggregate their previously partitioned or disaggregated spectrum licenses and to prioritize exclusive-use licensing mechanisms over use-it-or-share-it licensing regimes. Doing so would not only encourage secondary market transactions, but would also promote the efficient use of spectrum to the benefit of carriers of all sizes.

Respectfully submitted,

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