



August 27, 2018

**VIA ELECTRONIC FILING**

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

Re: ***Accelerating Wireless Broadband Deployment by Removing Barriers to  
Infrastructure Investment***  
**WT Docket No. 17-79**  
**Ex Parte Communication**

Dear Ms. Dortch:

The Wireless Internet Service Providers Association (“WISPA”) respectfully requests that the Commission modernize the Over-the-Air Reception Devices (“OTARD”) rule to apply to all fixed wireless transmitters and receivers, so long as the equipment meets the existing size restrictions for customer-end equipment.<sup>1</sup> Extending OTARD to all fixed wireless equipment, while maintaining the existing size limits and exceptions for safety and historical purposes – regardless of whether it is used for reception, transmission, or both – would be consistent with the original intent of OTARD, will accelerate the deployment of competitive broadband services in markets across the country, and will empower consumers to help bring competitive wireless broadband to their communities by hosting hub sites.<sup>2</sup> We ask that the Commission act in the next Report and Order in this proceeding<sup>3</sup> to modernize OTARD by clarifying that the OTARD rule covers all fixed wireless equipment and, accordingly, deleting “customer” from the first sentence of Section 1.4000(a)(2).

**I. Background – Role of OTARD in Promoting Competition**

The OTARD rule, which has been in effect since 1996, “prohibits restrictions that impair a viewer's ability to install, maintain and use devices designed for over-the-air reception of video programming.”<sup>4</sup> The rule was designed to ensure that consumers have access to a broad range of video programming services, and to foster competition among providers.<sup>5</sup> In 2000, the

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<sup>1</sup> 47 C.F.R. § 1.4000. The rule limits the size of antennas to one meter or less in diameter or diagonal measurement. See 47 C.F.R. § 1.4000(a)(1)(ii)(B).

<sup>2</sup> See, e.g., Brent Skroup, *The FCC Can Increase 5G Deployment by Empowering Homeowners*, The Technology Liberation Front, July 26, 2018, available at <https://techliberation.com/2018/07/26/the-fcc-can-increase-5g-deployment-by-empowering-homeowners/>.

<sup>3</sup> *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Notice of Proposed Rulemaking and Notice of Inquiry, 32 FCC Rcd 3330 (2017) (“*Infrastructure NPRM and NOI*”).

<sup>4</sup> *Preemption of Local Zoning Regulation of Satellite Earth Stations*, Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking, 11 FCC Rcd 19276 (1996) (“*OTARD Order*”).

<sup>5</sup> See *id.*

Commission updated the rule to apply to customer-end antennas for fixed wireless services.<sup>6</sup> This reflected the Commission’s continuing efforts under the Telecommunications Act of 1996 (the “Telecom Act”) to “secure lower prices and higher quality services for American telecommunications consumers and encourage rapid deployment of new telecommunication technologies.”<sup>7</sup>

In extending OTARD to cover fixed wireless receivers, the Commission concluded that limits on the ability of customers to place antennas “impedes the development of advanced, competitive services.”<sup>8</sup> It held that the extension of the OTARD rules to antennas used for fixed wireless will promote the deployment of advanced telecommunications services,<sup>9</sup> and that “unreasonable restrictions on the placement of [customer premises] antennas almost by definition both effectively prohibit the provision of personal wireless services and disadvantage providers of fixed wireless services as compared to their wireline competitors, thus unreasonably discriminating among providers of functionally equivalent services.”<sup>10</sup> Finally, it concluded that Section 332 of the Telecom Act does not apply to consumer premise equipment (“CPE”) because they are not used to “provide” personal wireless services.<sup>11</sup>

As a result of this decision, fixed wireless providers generally have been able to site qualifying CPE without unreasonable restrictions by local governments or home owners’ associations. This improves the viability of fixed wireless as a competitive broadband, voice, and video alternative to incumbent wireline providers in markets across the country, consistent with the Commission’s intent. However, as fixed wireless network equipment and architecture has evolved over time, competition can be even further enhanced by extending OTARD to cover *all* fixed wireless transmitters and receivers, including base stations or “hub sites” that both receive signals and provide return transmissions.<sup>12</sup> This would further lower barriers to siting fixed wireless base stations closer to consumers’ homes, which is critical for modern fixed wireless networks.

## **II. Modernizing OTARD To Include All Fixed Wireless Transmitters And Receivers Aligns The Underlying Goals Of The Rule With Evolving Small Cell Technologies And Consumer Demand**

OTARD originally focused on CPE because at the time the Commission believed that carrier hubs sites did not require the same relief; specifically, the Commission concluded that

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<sup>6</sup> See *Promotion of Competitive Networks in Local Telecommunications Markets, et al.*, First Report and Order and Further Notice of Proposed Rulemaking in WT Docket No. 99217, Fifth Report and Order and Memorandum Opinion and Order in CC Docket No. 96-98, and Fourth Report and Order and Memorandum Opinion and Order in CC Docket No. 88-57, 15 FCC Rcd 22983 (2000).

<sup>7</sup> See *id.* at 23027-28, ¶¶ 97, 101; Telecommunications Act of 1996, Pub. L. No. 104-04, purpose statement, 110 Stat. 56, 56 (1996).

<sup>8</sup> *Id.* at 23027, ¶ 97.

<sup>9</sup> *Id.* at 23030, ¶ 103.

<sup>10</sup> *Id.* at 23034, ¶ 114.

<sup>11</sup> *Id.* at 23032-34, ¶¶ 109-115.

<sup>12</sup> The Commission did not define “hub” or “hub sites” for the purposes of OTARD. It did, however, refer to them as antennas “used to transmit signals to and/or receive signals from multiple customer locations.” *Id.* at 23028, ¶ 99.

extending OTARD to fixed wireless communications should exclude hub sites that transmit signals to multiple locations. The Commission appeared to rely on two arguments to support this conclusion. First, it stated that fixed wireless hubs were covered under Section 332 of the Telecom Act, which preserves state and local authority over wireless facility siting with limitations.<sup>13</sup> Second, it stated that the “inability of a carrier to place a hub site at a specific site will often not result in a denial of wireless service to customers in that area.”<sup>14</sup> Neither of these predicates necessarily hold true for modern fixed wireless networks.

Historically, fixed wireless systems relied on relatively large coverage areas that required fewer hub sites per customer. This was both an economic and technological decision. In early generation fixed wireless equipment, which was expensive relative to modern equipment, the deployment model was built primarily around maximizing the number of subscribers served per base station, without much consideration for capacity per user. Over time, as both the cost of technology fell and subscriber data consumption increased, fixed wireless providers began to reduce the size of the area covered per base station. This is particularly true in urban and suburban areas, where the higher population density requires more capacity – i.e., areas that require more hub sites located closer to customers.

Looking forward to new advances in fixed wireless technology that utilize millimeter wave spectrum, the areas covered by these base stations will shrink even more to overcome significant propagation losses in these higher bands. Millimeter wave network models frequently rely on radii that measure in the tens of meters. A common model for the 57-71 GHz band, for example, relies on siting both CPE and hub sites directly on customers’ homes, wherein some locations serve both as hub and customer reception sites.<sup>15</sup>

Because of these enhancements in technology and network design, fixed wireless providers have much less choice in where they can locate hub sites. It is no longer necessarily the case, as the Commission originally stated, that the inability to locate a hub location would result in the loss of service to that area. In fact, in deployments in bands above 5 GHz it may actually be the case that the inability to site a hub in a specific location would result in the inability to serve certain users.

Significantly, modern fixed wireless networks *may not* qualify for the same streamlined treatment as other wireless communications infrastructure under Section 332 of the Telecom Act. Section 332 preserves local zoning authority but also establishes statutory and regulatory streamlined siting review for “personal wireless service facilities.”<sup>16</sup> In turn, “personal wireless service facilities” means facilities for the provision of “personal wireless services,” defined as “commercial mobile services, unlicensed services, and common carrier wireless exchange access services.”<sup>17</sup> If a fixed wireless site is using unlicensed spectrum or does not provide a commercial wireless service, it will not qualify as personal wireless service facility because the

<sup>13</sup> *Id.* at 23032 ¶ 109.

<sup>14</sup> *Id.* at 23034 ¶ 114.

<sup>15</sup> See, e.g., Maravedis, *5G Fixed Wireless Gigabit Services Today: An Industry Overview*, available at <https://go.siklu.com/hubfs/Content/White%20Papers/Maravedis%20Industry%20Overview:%205G%20Fixed%20Wireless%20Gigabit%20Services%20Today.pdf?t=1508833127116>.

<sup>16</sup> 47 U.S.C. § 332(c)(7).

<sup>17</sup> *Id.* § 332(c)(7)(C).

definition of “unlicensed wireless service” requires the offering of “telecommunications service” – and many providers offer standalone broadband, without a voice service, that is not classified as “telecommunications service.” As a result, fixed wireless operators do not enjoy the same benefit of the streamlined siting review processes as their competitors. In the absence of Commission action to modernize OTARD, fixed wireless operators will continue to face significant hurdles to siting, perpetuating barriers to new investment and employment.<sup>18</sup>

Other additional developments further support modernizing OTARD. First, the size of fixed wireless equipment, especially in higher spectrum bands, has decreased over time. Because of this, many models of base stations across fixed wireless bands can meet the same size restrictions that apply to customer equipment – in fact, the “consumer” device and the “hub site” may be one and the same. As a result, the safety or environmental impact of base station equipment would be no more than it is with eligible customer equipment. And second, reflecting on part of the original intent of OTARD, consumers are increasingly viewing video content exclusively over fixed broadband connections. By 2022, it is projected that about 30 percent of households will be broadband only.<sup>19</sup> The technologies delivering video programming have evolved, and we ask that OTARD evolve with these technologies to better enable viewers to receive video content.

### **III. The *Infrastructure NPRM and NOI* Provides Adequate Notice to Modernize OTARD in a Subsequent Order**

The Commission adopted the *Infrastructure NPRM and NOI* with the broad intent of examining the “regulatory impediments to wireless network infrastructure investment and deployment, and how [it] may remove or reduce such impediments . . . in order to promote the rapid deployment of advanced wireless broadband service to all Americans.”<sup>20</sup> The Commission described this as an “urgent need.”<sup>21</sup>

In the *Infrastructure NPRM and NOI* the Commission specifically sought comment on ways in which the Commission’s existing rules have not been successful in addressing local siting review challenges. We believe that modernizing OTARD to reflect the current state of technology and need in the market place is entirely consistent with the Commission’s intent in this proceeding. Nevertheless, if the Commission believes that it should build a more significant record on this issue, we strongly urge the Commission to specifically propose to modernize the OTARD rule to cover all fixed wireless equipment that meets the current size limitation under the rule, regardless of whether it receives, transmits or both receives and transmits as a hub site, while maintaining the current protections for safety and historical concerns.

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<sup>18</sup> In the *Restoring Internet Freedom* order, the Commission clarified that Section 3232(c)(7) includes “infrastructure that will be deployed for the provision of personal wireless services . . . to be “facilities for the provision of personal wireless services and therefore subject to section 332(c)(7) as ‘personal wireless service facilities’ even where such facilities also may be used for broadband Internet access services.” *Restoring Internet Freedom*, Declaratory Ruling, Report and Order, and Order, 33 FCC Rcd 311, 426 ¶ 190 (2018). This clarification does not appear to solve the problem that leaves standalone broadband providers using unlicensed spectrum outside the scope of the statute.

<sup>19</sup> Karl Bode, *Study Predicts Huge Surge in Broadband Only Homes*, DSL Reports, Feb. 1, 2018; <http://www.dslreports.com/shownews/Study-Predicts-Huge-Surge-in-Broadband-Only-Homes-141166> .

<sup>20</sup> *Infrastructure NPRM and NOI* at 3331, ¶ 2.

<sup>21</sup> *Id.*



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#### **IV. Conclusion**

WISPA respectfully requests that the Commission continue its focused effort to reduce the barriers to all infrastructure siting by modernizing the OTARD rule to streamline fixed wireless facility siting of all types of equipment.

Pursuant to Section 1.1206 of the Commission's rules, a copy of this letter is being filed in ECFS and provided to the Commission participants. Please do not hesitate to contact the undersigned with any questions.

Respectfully submitted,

/s/ Claude Aiken

Claude Aiken  
President and CEO