

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

In the Matter of	)	
	)	
	)	
Amendment of Part 101 of the Commission’s Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licensees	)	WT Docket No. 10-153
	)	
	)	
Request for Interpretation of Section 101.141(a)(3) of the Commission’s Rules Filed by Alcatel-Lucent, Inc., <i>et al.</i>	)	WT Docket No. 09-106
	)	
	)	
Petition for Declaratory Ruling Filed by Wireless Strategies, Inc.	)	WT Docket No. 07-121
	)	
	)	
Request for Temporary Waiver of Section 101.141(a)(3) of the Commission’s Rules Filed by Fixed Wireless Communications Coalition	)	

**COMMENTS OF  
PCIA—THE WIRELESS INFRASTRUCTURE ASSOCIATION**

**I. INTRODUCTION**

PCIA—The Wireless Infrastructure Association (“PCIA”)<sup>1</sup> hereby submits these comments in the above captioned dockets regarding the removal of barriers to the use of spectrum for wireless backhaul. The Federal Communications Commission’s (“FCC” or “Commission”) Notice of Proposed Rulemaking and Notice of Inquiry (collectively “Notice”)<sup>2</sup>

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<sup>1</sup> PCIA members include the carriers, infrastructure providers and professional services firms that own and manage more than 125,000 antenna structures and other telecommunications facilities throughout the world.

<sup>2</sup> *In re* Amendment of Part 101 of the Commission’s Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast

on wireless backhaul are important steps toward meeting the goals of the National Broadband Plan and the ever-increasing demand for wireless services. Efficiency and flexibility in wireless backhaul are important, and microwave services can be a quickly deployable alternative to fiber and copper cables.

However, even with the proposed changes to Part 101 of the Commission's Rules,<sup>3</sup> significant barriers to deployment remain. Microwave services are unreasonably burdened by local regulatory policies, which range from outright bans on microwave antennas to unnecessary and burdensome local review of microwave attachments. The Commission has recognized that one of the significant barriers to wireless infrastructure deployment is "obtaining the necessary regulatory and zoning approvals from state and local authorities."<sup>4</sup> These barriers exist for all infrastructure deployments, including collocating microwave antennas on existing structures.

In sum, despite the best efforts of the Commission to facilitate improvements to wireless backhaul within the broader goals of the National Broadband Plan, wireless service and infrastructure providers continue to have to fight uphill battles – jurisdiction by jurisdiction – to meet consumers', businesses', and public safety users' demand for wireless services. In order to capitalize on the advances proposed in the *Notice*, the Commission should adopt rules to streamline the collocation review process and allow carriers to efficiently utilize existing infrastructure in the deployment of wireless services, including microwave wireless backhaul services. Similar rules have been adopted by the Commission regarding consumers' use of

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Auxiliary Service and Operational Fixed Microwave Licensees; Request for Interpretation of Section 101.141(a)(3) of the Commission's Rules Filed by Alcatel-Lucent, Inc., *et al.*; Petition for Declaratory Ruling Filed by Wireless Strategies, Inc.; Request for Temporary Waiver of Section 101.141(a)(3) of the Commission's Rules Filed by Fixed Wireless Communications Coalition, *Notice of Proposed Rulemaking* and *Notice of Inquiry*, FCC 10-146 (Rel. Aug. 5, 2010) ("*Notice*").

<sup>3</sup> *See id.* at ¶¶59-68.

<sup>4</sup> *In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, WT Docket No. 09-66, *Fourteenth Report*, FCC 10-81 ¶ 287 (rel. May 20, 2010).

antennas for fixed wireless services, and the problems and solutions to the barriers to service provider deployment of antennas closely mirror those previously addressed by the Commission

## **II. LOCAL REGULATION CONTINUES TO POSE SIGNIFICANT BARRIERS TO THE DEPLOYMENT OF WIRELESS SERVICES INCLUDING MICROWAVE BACKHAUL**

### **A. The Commission Should Adopt Rules that Facilitate the Deployment of Wireless Infrastructure**

By making use of existing infrastructure and smaller microwave antennas, wireless service providers can accelerate deployment of wireless services and backhaul capacity.<sup>5</sup> Smaller microwave antennas will encourage deployment by reducing cost and facilitating increased backhaul capacity that can keep pace with growing demand for wireless services by allowing for more microwave antennas to be attached to existing towers and other infrastructure. However, while the FCC and Congress urge the rapid buildout of wireless services, local regulations continue to be a significant barrier to the collocation of antennas on existing towers. In many instances, microwave antennas are either banned outright, limited severely by restrictions on form factor and total microwave antennas per tower, or must go through the same onerous and burdensome process to attain special use or conditional use permits (“SUP” and “CUP”) as other antenna collocations. For example, Maricopa County, Arizona has in place a regulation governing wireless facilities that allows only two microwave antennas per tower.<sup>6</sup>

Localities can also restrict the placement of microwave antennas by imposing limiting form and design requirements. Chandler, Arizona, for example, requires that “[a] streamline, flush-mounted antenna shall be used in all zoning districts except an industrial zone.”<sup>7</sup> This requirement eliminates from use most directional microwave antennas in almost all zones.

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<sup>5</sup> *Notice* at ¶3.

<sup>6</sup> MARICOPA COUNTY, ARIZ. ZONING ORDINANCES ch.12, art.1202.3 (Sept. 2010).

<sup>7</sup> CHANDLER, ARIZ. CODE OF ORDINANCES pt. vi, ch. 35, art. xxii, § 9 (Sept. 2010).

Some local regulations go so far as to completely deny the placement of microwave antennas. Such is the case in Prince Williams County, Virginia, where microwave antennas are banned from placement on utility distribution structures, light poles and other structures.<sup>8</sup> More commonly, localities subject any new antenna, including microwave antennas, to SUPs or CUPs. Duluth, Minnesota recently enacted an ordinance that prohibits anyone from “modify[ing] or prepar[ing] any site for the placement or use of [wireless antennas]... without having first obtained a special use permit.”<sup>9</sup> The ordinance goes on to define “modify” as:

the addition, removal or change of any of the physical and visually discernable components or aspects of a wireless facility, such as antennas, cabling, equipment shelters, landscaping, fencing, utility feeds, changing the color or materials of any visually discernable components, vehicular access, parking and/or an upgrade or changeout of equipment for better or more modern equipment.<sup>10</sup>

In such ordinances, any change to a tower puts it back through the entirety of the approval process, thereby subjecting the application to unnecessary and unreasonable review by local authorities who are empowered by the ordinance to second guess the technical need and business choice for the attachment. Commission action is needed to combat significant barriers to deployment imposed by ordinances such as these. In keeping with the *Notice’s* goal of “enabling more flexible and cost-effective microwaves services,” the Commission should examine its authority to streamline the collocation review process and take further action. Without change, local laws and ordinances stall the deployment process and slow consumers’ and public safety users’ access to wireless services, including wireless broadband. However, as argued below, the Commission has the authority to take action against such prohibitive laws.

**B. The Commission Should Enact Rules Consistent with Its Prohibitions on Restrictions Against Fixed Wireless Signal Antennas**

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<sup>8</sup> PRINCE WILLIAM COUNTY, VA. CODE OF ORDINANCES §32-240.13 (2009).

<sup>9</sup> DULUTH, MINN. LEGISLATIVE CODE art. 3, § 20-20.4 (E)(2)(a) (Nov. 2010).

<sup>10</sup> *Id.* at art. 6, §50-41 (194).

The Commission has addressed local barriers to the use of wireless antennas in other circumstances. In fact, the Commission has created rules that preempt localities from restricting the installation and use of antennas “used... to receive or transmit fixed wireless signals....”<sup>11</sup> The Over-the-Air Reception Device (“OTARD”) rule was adopted to protect individuals who have an ownership or leasehold interest in property where an antenna is located from governmental and nongovernmental restrictions “that unreasonably delay or prevent installation, maintenance or use; unreasonably increase the cost of installation, maintenance or use; or preclude reception of an acceptable quality signal.”<sup>12</sup>

As defined by FCC rules, fixed wireless signals are “any commercial non-broadcast communications signals transmitted via wireless technology to and/or from a fixed customer location.”<sup>13</sup> The Commission found that restrictions on OTARDs were counter to the Telecommunications Act of 1996 (“Communications Act”), which directs the FCC to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing, in a manner consistent with the public interest, convenience, and necessity . . . measures that promote competition in the local telecommunications market, and other regulating methods that remove barriers to infrastructure investment.”<sup>14</sup>

In the case at hand, microwave and other wireless antennas are similar to those addressed in the OTARD rules. The goals of the National Broadband Plan as well as the directives of the Communications Act are threatened by barriers imposed by local regulation. As demonstrated

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<sup>11</sup> 47 C.F.R. § 1.4000 (a)(1).

<sup>12</sup> Federal Communications Commission, FCC Fact Sheet on the Placement of Antennas, <http://www.fcc.gov/mb/facts/otard.html> (Dec. 2007) (internal numbering omitted).

<sup>13</sup> 47 C.F.R. §1.4000 (a)(2).

<sup>14</sup> Pub. L. No. 104-104, § 706(a), 110 Stat. 56, 153 (codified at 47 U.S.C. § 1302(a)).

by the OTARD rule, the Commission has the authority to create rules that will limit restrictions on the collocation of microwave and other wireless antennas. If the Commission does not act the goals of the *Notice* will be thwarted. PCIA urges the Commission to consider using this authority to ensure that the deployment of microwave antennas for wireless backhaul is not unduly burdened by myriad red tape imposed by localities.

### **III. CONCLUSION**

For the foregoing reasons, PCIA urges Commission to adopt rules to streamline the collocation review process for all antennas including microwaves, and allow wireless service providers to efficiently utilize existing infrastructure to deploy wireless services including wireless backhaul.

Respectfully submitted,

PCIA – THE WIRELESS  
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