

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION**

**Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Parts 1, 2, 22, 24, 27, 90	)	
and 95 of the Commission's Rules to	)	WT Docket No. 10-4
Improve Wireless Coverage Through	)	
the Use of Signal Boosters	)	
	)	

To: The Commission

**COMMENTS OF UNITED PARCEL SERVICE, INC.**

Pursuant to Sections 1.415 and 1.419 of the Federal Communications Commission ("FCC" or "Commission") Rules,<sup>1</sup> and in response to the Commission's March 3, 2017, Public Notice,<sup>2</sup> United Parcel Service, Inc. ("UPS") hereby submits its Comments relative to the Petition for Further Rulemaking filed by Wilson Electronics, LLC ("Wilson") in WT Docket No. 10-4<sup>3</sup> ("Wilson Petition"). For the reasons set forth below, UPS supports Wilson's proposed amendments to §§ 20.21(a) and 20.21(g) of

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<sup>1</sup> 47 CFR §§ 1.415, 1.419.

<sup>2</sup> See DA-17220, WT Docket No. 10-4.

<sup>3</sup> Wilson Electronics, LLC, Petition for Further Rulemaking, WT Docket No. 10-4 (filed Dec. 21, 2016).

the Commission's Rules, thus eliminating the "personal use" restrictions on the sale and operation of both wideband and provider-specific Consumer Signal Boosters.<sup>4</sup>

## I. INTRODUCTION

UPS is a global leader in logistics, offering a broad range of solutions including the transportation of packages and freight; the facilitation of international trade, and the deployment of advanced technology to manage more efficiently the world of business. Headquartered in Atlanta, UPS has more than 434,000 employees and serves more than 220 countries and territories worldwide.

UPS carries about six percent of the U.S. gross domestic product and about two percent of global GDP in its trucks and planes to every corner of the globe, every day. This rapid, efficient, and reliable air cargo and express service is a critical element of the international infrastructure of commerce, and the nation's economic strength.

To provide this level of service, UPS operates from more than 7300 distinct retail and operations facilities. UPS relies on commercial wireless services throughout these facilities, in support of both routine business communications and mission-critical applications.

## II. THE COMMISSION SHOULD ALLOW ENTERPRISES TO CHOOSE APPROVED SIGNAL BOOSTER TECHNOLOGY APPROPRIATE TO BUSINESS REQUIREMENTS

Permitting commercial enterprises like UPS to use approved Consumer Signal Boosters in the course of their business would provide both needed flexibility and

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<sup>4</sup> See *Wilson Petition* at 1.

cost savings in addressing the unique radio-frequency propagation requirements they may have at various facilities. UPS's operations provide a perfect example. In many larger buildings, UPS has made significant investments in deploying industrial signal boosters, distributed antenna systems and other infrastructure to improve commercial mobile radio service from multiple providers. Many UPS operations buildings are dense with conveyor systems or warehouse shelving filled with product, thus larger scale industrial signal boosters and other infrastructure may be necessary to meet business requirements. However, for some smaller facilities, or even smaller areas within larger buildings, smaller Consumer Signal Boosters can address coverage issues without entailing significant additional expense. In these environments, industrial signal boosters represent an inefficient and expensive investment to cover a small area.

In these scenarios, UPS's use of Consumer Signal Boosters would be very similar at the radio frequency ("RF") level to an individual using a Consumer Signal Booster for the same purpose. There is no reasonable justification for prohibiting an enterprise from using a Consumer Signal Booster in a use case that is very similar to the permitted use of a Consumer Signal Booster by an individual. If enterprises like UPS could deploy Consumer Signal Boosters in these smaller facilities, it would be far more efficient and less expensive to improve coverage. In short, allowing businesses to make their own internal decisions regarding deployment of approved signal boosters based on cost and performance in light of business requirements would be a sensible regulatory approach.

III. ELIMINATION OF THE PERSONAL-USE RESTRICTION WILL REDUCE, NOT INCREASE, THE RISK OF HARMFUL INTERFERENCE TO WIRELESS NETWORKS

The record has shown that use of Network Protection Standard (“NPS”) compliant signal boosters has successfully avoided harmful interference. In fact, as recently noted by a commenter in WT Docket No. 10-4, it is industrial signal boosters that pose a greater risk of interference:

“[T]he fact remains that higher-powered industrial boosters will inherently have a greater potential for interference. For example, over the last nine months in T-Mobile’s New York Region, 24% of all interference cases were attributed to boosters, with a majority being industrial boosters.<sup>5</sup>

This is intuitively true to anyone practiced in the art of RF systems design, because industrial signal boosters require significant tuning and adjusting (and risk of mis-tuning/adjusting), while NPS-compliant Consumer Signal Boosters are plug-and-play, and self-correcting. Thus, if the Commission's goal is to reduce interference, it should encourage (not prevent) the use of Consumer Signal Boosters over industrial signal boosters in enterprise environments wherever possible.

SUMMARY

Permitting enterprise users to use Consumer Signal Boosters in their commercial operations would provide much needed flexibility and costs savings to companies needing to address coverage issues and would likely decrease (and certainly not increase) radio interference issues when compared to requiring use

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<sup>5</sup> See *Reply Comments of SureCall*, Docket No. 10-4, at 2 (Apr. 12, 2016).

