

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 Improve) WT Docket No. 10-4
Wireless Coverage Through the Use of)
Signal Boosters)

To: The Commission

**COMMENTS
OF THE
ENTERPRISE WIRELESS ALLIANCE**

The Enterprise Wireless Alliance (“EWA” or “Alliance”), in accordance with Section 1.415 of the Federal Communications Commission (“FCC” or “Commission”) rules and regulations, respectfully submits its comments on the Commission’s proposal in the above-entitled proceeding to adopt further modifications of its rules regarding signal boosters.¹ EWA has supported the FCC’s previous rules changes in this area, including its recent decision in the Second Report and Order to remove the personal use restriction on Provider-Specific Consumer Signal Boosters. The initial rule changes in 2013² significantly expanded the availability of boosters to improve wireless coverage. In large part because of the FCC’s decision to adopt the Network Protection Standard (“NPS”) and a device registration system, both wireless operators and manufacturers have reported positive results. The rules are working as expected and are reported to have virtually eliminated interference problems.³ The Alliance urges the

¹ Amendment of Parts 1, 2, 22, 24, 27, 90, and 95 of the Commission’s Rules to Improve Wireless Coverage Through the Use of Signal Boosters, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, WT Docket No. 10-4, FR17131 (rel. Apr. 18, 2018) (“2nd FNPRM”).

² Amendment of Parts 1, 2, 22, 24, 27, 90, and 95 of the Commission’s Rules to Improve Wireless Coverage Through the Use of Signal Boosters, *Report and Order*, 28 FCC Rcd 1663 (2013) (“Report and Order”).

³ 2nd FNPRM at ¶ 8.

Commission to build on these successful efforts and expand this greater flexibility by extending it to Wideband Consumer Signal Boosters and to additional spectrum bands.

I INTRODUCTION

EWA is a national trade association representing business enterprises, wireless sales and service providers, hardware and software system vendors, and technology manufacturers. It has been an active participant in this proceeding because while certain members rely on Industrial Signal Boosters, others need Provider-Specific or Wideband Consumer Signal Boosters to address their coverage requirements. All Consumer Signal Boosters should be broadly available under rules that ensure they are designed properly and can be deployed on a non-interfering basis.

II THE FCC DOES NOT NEED TO RETAIN THE PERSONAL USE RESTRICTION ON WIDEBAND CONSUMER SIGNAL BOOSTERS.

As stated in the FNPRM, “the personal use restriction” on these devices “effectively prevents enterprise use of Wideband Consumer Signal Boosters, thereby denying a crucial tool for improving wireless services access to a range of entities – including businesses of all sizes, public safety entities (using commercial spectrum), educational institutions, and others.”⁴ UPS, as well as organizations such as the American Petroleum Institute and the Utilities Telecom Council, whose members are classified as Critical Infrastructure Industries by the FCC and provide essential services to the American public, have described the greater flexibility and cost savings that would result from the removal of the restriction. The National Public Safety Telecommunications Council explained that elimination of that restriction would benefit public safety users, particularly in rural areas where wireless signals are not always as robust as needed and in buildings where signal penetration can be a challenge.

⁴ 2nd FNPRM at ¶ 36.

The record confirms that there are clear benefits in eliminating the personal use restriction, and there is no evidence of countervailing negatives. The wireless carriers, whose systems theoretically would be impacted if allowing such devices involved a serious risk of interference, have not opposed the Commission's proposal to do so. This is a case where technical standards, the NPS, provide the necessary protection against network disruption. Experience has demonstrated that properly designed Consumer Signal Booster equipment is the best insurance against harmful interference. Additional user and usage restrictions are not necessary to address that aspect of booster operations.

EWA does agree that a registration process is needed to allow entities that are not subscribers to a carrier to operate under that carrier's blanket license. The approach proposed in the 2nd FNPRM seems, to the Alliance, to be a reasonable, minimally burdensome solution. It ensures that the registrant, for example a small business, obtains consent from all carrier networks in the range of the signal booster, registers the booster with those carriers and, critically, uses a Consumer Signal Booster that meets the NPS criteria with manufacturer-approved peripherals and does not deactivate any features designed to prevent harmful interference to carrier networks. This process will ensure that carriers know who has installed devices that might be retransmitting their signals and where, so that in the highly unlikely event that a problem should arise, it can be resolved quickly and without requiring the carrier to undertake the hunt that too frequently was needed before adoption of the NPS and registration rules.

III CONSUMER SIGNAL BOOSTERS SHOULD BE PERMITTED ON ALL COMMERCIAL WIRELESS SPECTRUM.

The Commission is correct in seeking to expand the availability of Provider-Specific and Wideband Consumer Signal Boosters to additional wireless services. The Commission is

engaged in multiple proceedings in which it has proposed or already has determined to make spectrum available for commercial wireless use in the 2.496-2.690 GHz, 3.5-3.7 GHz, 3.7-4.2 GHz, 4.9 GHz, 5.925-6.425 GHz, 6.425-7.125 GHz bands, and even in higher allocations. Having implemented the NPS and registration requirements, the rebuttable presumption should be that this flexibility can be imported to these bands and others, in addition to those where Consumer Signal Booster use already has been authorized,⁵ without conducting additional rulemakings for each allocation or, in most instances, designing allocation-specific rules to accommodate them.

In addressing this issue, the Commission questions whether the flexibility to use Consumer Signal Boosters should be limited to services that meet an embedded set of criteria. For example, it questions whether the band will be used to provide service to consumers or other non-licensee users. Will a meaningful number of licensees consent to Consumer Signal Booster operation? Are there in-band and/or adjacent band factors that could create the possibility of interference even with equipment that satisfies the NPS? Do the technical rules in the service need to establish noise, gain limits, or other band-specific limits to prevent boosters from causing harmful interference?

In EWA's opinion, the first two issues will be resolved in the marketplace. If service is being provided to non-licensee users with a need for extended coverage, and it appears a sufficient number of licensees would be content to allow Consumer Signal Boosters on their systems (subject to compliance with the NPS and the applicable registration process), equipment manufacturers will recognize a market opportunity and develop equipment to fill it. If those two factors do not emerge in a particular band, it is unlikely that equipment will be made available. As long as the rules permit Consumer Signal Booster use, no further FCC action will be required.

⁵ Report and Order at ¶¶ 36-40.

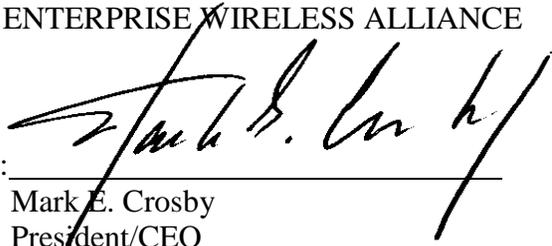
With regard to potential interference to and from such devices, a presumption that they will be permitted should trigger consideration of appropriate technical criteria in all ongoing and future allocation or band repurposing proceedings. The rules needed to manage the use of Consumer Signal Boosters should be evaluated in each band, just as the Commission addresses the other technical standards that permit utilization of spectrum on a “good neighbor” basis; that is, with appropriate levels of interference protection for adjacent operations. The Alliance is confident that integrating Consumer Signal Booster protection criteria into those analyses is well within the FCC’s and the industry’s technical capabilities.

IV CONCLUSION

For the reasons discussed above, EWA urges the Commission to adopt spectrum policies consistent with the TAC recommendations and with the Alliance’s comments contained herein.

Respectfully submitted,

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