



WASHINGTON, DC

STEPHEN E. CORAN
202.416.6744
SCORAN@LERMANCENTER.COM

August 22, 2014

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, ET Docket No. 13-49

Notice of Oral Ex Parte Presentation

Dear Ms. Dortch:

On August 20, 2014, Richard Harnish, Executive Director of the Wireless Internet Service Providers Association ("WISPA"), and undersigned counsel to WISPA, met with Brendan Carr, Legal Advisor to Commissioner Ajit Pai, to reiterate WISPA's request for grant of its June 2, 2014 petition for partial reconsideration ("Petition") of certain rules adopted in the above-referenced proceeding,¹ which rule change eliminated the ability of devices operating in the 5725-5850 MHz band to be certified under Section 15.247 of the Commission's Rules..

The WISPA representatives emphasized the main points of the Petition. We explained that the Commission appropriately preserved the ability of wireless Internet service providers ("WISPs) to continue to deploy unlimited gain antennas in this band without a corresponding reduction in power, but that the new restrictions on out-of-band emissions would have severe consequences for consumers and businesses that rely on the unique rules of Section 15.247 to provide fixed broadband and other services. In addition to residential and business broadband services, we pointed out that the 5725-5850 MHz band is used for public safety communications, utilities and small businesses. We also noted that the record reflected overwhelming support for WISPA's Petition and those petitions filed by Cambium Networks Ltd. ("Cambium") and JAB Wireless, Inc. ("JAB"), as demonstrated by the numerous letters and consumer comments.² We noted that only Cisco Systems, Inc. had objected to the Petition.

We stated that WISPs use the 5725-5850 MHz band for point-to-point links of up to 65 miles, a distance that cannot be achieved in other unlicensed bands. Mr. Harnish added that in many areas, using Section 15.247 devices is the only way to deliver service because fiber, microwave and other alternatives are not available or affordable. He stated that requiring the

¹ *Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band, first Report and Order*, ET Docket No. 13-49 (rel. Apr.1, 2014 ("Order")).

² As an example, the WISPA representatives provided Mr. Carr with a courtesy copy of the attached letter submitted in the record by Wave Wireless.



more restrictive out-of-band emission limits of Section 15.407 would have devastating consequences on WISPs and their customers, many of whom may lose service as existing equipment is replaced after the two-year grandfathering period.

The WISPA representatives explained that the Commission may not have appreciated that the equipment modifications necessitated by the more restrictive out-of-band emissions would result in such severe consequences. In reducing power and/or gain to keep the emissions within the more restrictive limits, WISPs and their customers would no longer be able to communicate with each other because the maximum link distance would be shorter than Section 15.247 equipment provides today. We pointed out that Cambium and JAB had collaborated on a technical exhibit that showed a loss of 65 percent of customers from a JAB base station. If manufacturers instead incorporated filtering equipment in the radios to meet the more restrictive out-of-band emission limits, the cost of a Cambium radio would more than double and the useable spectrum capacity would be significantly reduced, leading to a loss of half of the sectors on a tower. We stated that doubling the cost of the equipment and reducing its performance by 50 percent would not be a viable solution.

We also emphasized that there is no technical justification for restricting out-of-band emissions. The Section 15.407 requirements will not eliminate any interference to Terminal Doppler Weather Radar (“TDWR”) facilities from legally operating devices. We pointed out that TDWR devices operate at least 75 megahertz away from the lower edge of the 5725-5850 MHz band and that the *Order* already adopts enhanced software security requirements, improvements to device certification testing and upgrades to dynamic frequency selection, rule changes that WISPA supported and which are sufficient to eliminate interference to TDWR facilities. By adopting enhanced software security, yet allowing devices to operate under Section 15.247, the Commission can avoid an immeasurable economic impact on WISPs and all other industries that have come to depend on these devices for their daily communications needs.

The WISPA representatives stated that devices certified under Section 15.247 and devices certified under Section 15.407 had co-existed without harmful interference for many years. We added that devices certified under Section 15.247 were most often used for point-to-point operations for long-distance communications in rural areas, and that devices certified under Section 15.407 were most often used for low-power, indoor operations in urban areas, thereby substantially reducing the potential for harmful interference in the future. In addition, as WISPA noted in its Petition, the rule change would effectively obsolete more than 9,000 devices the Commission certified under Section 15.247. Accordingly, any benefits of harmonizing the rules across the entire 5 GHz band are far outweighed by the benefits inherent in preserving both sets of rules.

Rural, suburban and metropolitan Americans need the 5725-5850 MHz band to remain unencumbered by the more restrictive Section 15.407 out-of-band emission limits in order to continue to receive broadband services from dependable and affordable service providers.

LS

Marlene H. Dortch, Secretary
August 22, 2014
Page 3

Pursuant to Section 1.1206 of the Commission's Rules, this letter is being filed electronically via the Electronic Comment Filing System in the above-captioned proceeding.

Respectfully submitted,



Stephen E. Coran
*Counsel to the Wireless Internet Service
Providers Association*

cc: Brendan Carr

Enclosure



2130 Corning Ave. PO Box 921 Parsons, KS, 67357 620.423.9283

July 22, 2014
Marlene H. Dortch, Secretary
444 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band, ET Docket No. 13-49.
Comments in Support of Petition for Reconsideration of WISPA, Cambium, Mimosa Networks and JAB.

Dear Ms. Dortch,

Wave Wireless is filing these comments in support of the Petition for Reconsideration filed by Cambium Networks, Ltd. In the above referenced proceeding. Cambium's petition urges the FCC to retain the Section 15.247 GHz out-of-band emissions limit for 5725-5850 GHz band. In the first R&O, the FCC voted to replace this OOB limit with much more restrictive limits in Section 15.407. The proposed change would be detrimental to our subscribers, our company and to industry innovation as a whole.

Wave Wireless is an internet service provider operating in Southeast Kansas. Most of our subscribers have no other low latency broadband option. We rely heavily on the 5GHz spectrum for connecting towers together and distributing internet to customers. As WISPA, Cambium, Mimosa Networks and JAB have illustrated, the restrictive OOB limits in section 15.407 will make it impossible for us to continue to provide affordable, high performance broadband service in many of these areas, and will not improve efficient use of the 5GHz band. If Section 15.407 replaces the Section 15.247 rules, increased equipment costs, distance limitations and limited frequency availability will severely limit (and likely eliminate) wireless broadband in rural service areas.

Wave Wireless joins with the petitioners to encourage the FCC to retain Section 15.247 rules in lieu of the new Section 15.407.

Respectfully Submitted,

Galen Manners
President
Wave Wireless