

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
Revision of Part 15 of the Commission’s)
Rules to Permit Unlicensed National) ET Docket No. 13-49
Information Infrastructure (U-NII) Devices in)
the 5 GHz Band)

REPLY COMMENTS OF THE UTILITIES TELECOM COUNCIL

Pursuant to Section 1.429 of the Commission’s Rules, the Utilities Telecom Council (“UTC”) hereby files its reply comments in support of the Petitions for Reconsideration of the Commission’s decision to adopt more stringent out-of-band emission (OOBE) limits for operations in the 5.8 GHz band.¹ While the record overwhelmingly supports the Petitions for Reconsideration,² only one comment opposes reconsideration of the Commission’s decision to apply the more stringent OOBE limits in the 5.8 GHz band under Section 15.407 of the Rules.³ UTC submits that the Commission should reconsider its decision, because the stricter OOBE limits are not necessary to protect Terminal Doppler Weather Radar (TDWR) systems and moreover, these OOBE limits would dramatically impair the performance and increase the cost

¹ In the Matter of 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. April 1, 2014) (“First R&O”). See also Petition for Partial Reconsideration of the Wireless Internet Service Providers Association, ET Docket No. 13-49 (June 2, 2014) (“WISPA Petition”); Petition for Reconsideration of Cambium Networks, Ltd, ET Docket No. 13-49 (June 2, 2014) (“Cambium Petition”); Mimosa Networks, Inc. Petition for Partial Reconsideration, ET Docket No. 13-49 (June 2, 2014) (“Mimosa Petition”); and Petition for Partial Reconsideration of the JAB Wireless, Inc., ET Docket No. 13-49 (June 2, 2014) (“JAB Petition”)(collectively “Petitions for Reconsideration”).

² Comments of FirstStep Internet, LLC; Comments of Fixed Wireless Communications Coalition; Comments of Freewave Technologies, Inc.; Comments of Motorola Solutions, Inc.; Comments of Richard Harnish, Jr., Executive Director of WISPA (“Comments of WISPA”); and Comments of the Utilities Telecom Council in WT Docket No. 13-49 (filed Aug. 14, 2014). See also numerous comments filed by individuals and wireless Internet service providers (WISPs) who all support the Petitions for Reconsideration.

³ Comments of CISCO Systems, Inc. in WT Docket 13-49 (filed Aug. 14, 2014).

deploying of fixed point-to-point and point-to-multipoint systems in the 5.8 GHz band.

UTC echoes the comments on the record that support the Petitions for Reconsideration. In short, the OOBE limits agrees that the out-of-band emission limits will require licensees to reduce output power, which in turn will impair the performance of point-to-point and point-to-multipoint operations in the band, including those by utilities and other critical infrastructure industries (CII). This is undisputed by comments on the record and is clearly supported by the Report by Cambium, as well as the comments that were filed in support of the Petitions for Reconsideration. In addition, the more stringent out-of-band emission limits are not necessary to prevent interference to TDWR systems, contrary to the comments filed by Cisco. As numerous comments in support of the Petitions for Reconsideration show, the cause of the interference problem to TDWR systems was equipment that was illegally modified and that the 5.8 GHz systems are separated by at least 75 MHz of spectrum as well as substantial geographic distance, such that OOBE from systems legally operating in the 5.8 GHz band do not represent an interference threat to TDWR systems.

The lone opposition filed by Cisco is misplaced. In summary, Cisco argues that the WISP community should accept responsibility for causing interference to TDWRs, including accepting the OOBE limits of 15.407 as a token expression, which Cisco hopes would engender the support from incumbent licensees towards unlicensed use of the UNII bands, as well as other bands in the future.⁴ Moreover, Cisco argues that the Commission has provided a sufficient transition period that should mitigate the impact on equipment manufacturers.⁵ The fundamental premise and flaw of Cisco's comments is that OOBE had anything to do with causing the

⁴ Comments of CISCO at 3-4.

⁵ *Id.* at 5-6.

interference to TDWR systems. Moreover, the comments completely ignore the potential impact that the stricter OOB limits would have on licensees in the 5.8 GHz band, as well as on equipment manufacturers that produce equipment for high power operations in rural areas.

As UTC explained in its comments, licensees – including many utilities – that operate point-to-point and point-to-multipoint systems in the band would be significantly and negatively affected by the adoption of stricter OOB limits under Section 15.407 of the Commission’s Rules.⁶ These concerns are echoed by other comments on the record. Specifically, WISPA comments that the stricter OOB limits would reduce link distance range approximately 94 percent.⁷ In addition, TechAmerica points out that even though there is a transition period and existing systems are grandfathered, “[t]he record demonstrates that it ultimately may be too expensive for equipment manufacturers to make new devices to operate in the 5725-5850 band once the OOB limit goes into effect... [t]he net result [being] that in two years, manufacturers will likely stop making equipment to operate in the band altogether,” and that “once the grandfathered equipment is no longer functional, there won’t be any new equipment to replace it, [licensees] will not be able to purchase new equipment for the band to improve their capacity or expand their coverage area...”⁸

Motorola agrees that the range would be decreased, and moreover, it states that as a technical matter “there is no countervailing public interest benefit to requiring U-NII-3 technology to comply with the stricter OOB limits,” because “[t]here was no evidence in the record of harmful interference to TDWR or any other systems caused by rules-compliant

⁶ Comments of UTC at 5-8.

⁷ Comments of WISPA at 5-9 (stating that “[u]nder Section 15.247 Rules, link distances of 10 miles were easily achievable,” but that “[u]nder Section 15.407 rules, the estimated range decreases to 2.5 miles.”)

⁸ Comments of TechAmerica, Inc. in WT Docket No. 13-49 at 2 (filed Aug. 14, 2014).

operations pursuant to the OOB limits of Section 15.247.”⁹ Instead of protecting against interference to TDWRs, the Commission appeared to be primarily interested in harmonizing the OOB limits across the U-NII-3 and U-NII-2 bands, “a justification that does not stand up to the significant hardship that will be faced by 5 GHz band equipment manufacturers, WISPs, and the many rural consumers that rely upon their services.”¹⁰ As WISPA observes, the Commission has adopted enhanced security rules which should prevent the illegal modification of equipment that was the actual cause of interference to TDWRs and that these new enhanced security rules should be given the chance to succeed before adopting stricter OOB limits.¹¹

Last but not least, there are overriding public policy interests at stake, which would justify reconsideration of the stricter OOB limits. As UTC explained in its initial comments, smart grid and utility operational reliability would be jeopardized if the systems that utilities have deployed in the 5.8 GHz band were threatened by the imposition of the OOB limits of Section 15.407 of the Commission’s Rules. These comments are echoed by WISPs and their customers who similarly contend that rural broadband access – another national public policy objective in addition to smart grid and critical infrastructure reliability – would be threatened if operators had to reduce power or implement filters to comply with the OOB limits.¹² UTC support these comments and urges the Commission to consider the overriding national public policy interests at stake, as well as the millions of dollars in investments that have been poured into the 5.8 GHz band, which would be threatened if Section 15.407 applied to equipment and

⁹ Comments of Motorola at 3-4.

¹⁰ *Id.*

¹¹ Comments of WISPA at 13.

¹² *Id.* at 6-13 (describing the economic impact to WISPs, communities, manufacturers, commercial clients; and schools and government.) *See also* Comments of TechAmerica at 2 (stating, “[w]hatever benefits the Commission believes they are gaining from this change are vastly outweighed by the fact that millions of Americans could potentially lose the only broadband access they have.”)

operations in the band.

For all of these reasons, UTC respectfully requests that the Commission reconsider its decision and continue to allow equipment and systems to operate in compliance with the OOB limits of Section 15.247 of the Commission's Rules. Specifically, the Commission should reconsider its decision because it did not adequately account for the impact that the new rules would have on systems and equipment in the U-NII 3 band. Moreover, the tighter out-of-band emission limits are not necessary to protect TVDR systems, and there is no evidence on the record that out-of-band emission limits caused any interference to TVDR systems. Instead, the Commission's new rules that protect against illegal modification of equipment will protect TVDR systems from interference. Finally, the new rule would threaten not only WISPs but utilities, which need to use the 5.8 GHz band to support the safe, reliable and efficient delivery of essential electric, gas and water services to the public at large. For all of these reasons, UTC supports the Petitions for Reconsideration, and submits that it would be contrary to the public interest for the Commission to apply the tighter out-of-band emission limits of Section 15.407 in the U-NII 3 Band.

Respectfully submitted,

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