

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Reassessment of Federal Communication Commission Radiofrequency Exposure Limits and Policies)	ET Docket No. 13-84
)	
Proposed Changes in the Commission’s Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields)	ET Docket No. 03-137
)	

**REPLY COMMENTS OF PCIA – THE WIRELESS INFRASTRUCTURE
ASSOCIATION AND THE HETNET FORUM**

PCIA – The Wireless Infrastructure Association and The HetNet Forum (“PCIA”) respectfully submit these reply comments in response to the *Further Notice of Proposed Rulemaking* and *Notice of Inquiry* examining the Commission’s rules related to radiofrequency (“RF”) exposure.¹ PCIA agrees with commenters that the Commission should adopt smart, targeted modifications to modernize the RF rules – such as fine-tuning the proposed Maximum Permissible Exposure (“MPE”) exemption criteria, allowing sufficient time to modify appropriate new signage requirements, creating a mitigation safe harbor, and employing centralized training – that will facilitate broadband deployment while ensuring appropriate safeguards to protect the public. As the Commission moves forward, it should remain guided by scientific consensus, reject proposals that are not needed to protect the public and would hinder broadband deployment, and dedicate its efforts to creating a consumer-centric guide on RF and wireless infrastructure that foster understanding.

¹ Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies, ET Docket Nos. 13-84 & 03-137, *Further Notice of Proposed Rulemaking and Notice of Inquiry*, FCC 13-89 (rel. Mar. 29, 2013) (“*RF FNPRM/NOI*”).

I. COMMENTERS AGREE THAT TARGETED CHANGES TO THE FCC'S RF EXPOSURE RULES AND PROCEDURES ARE WARRANTED

From wireless representatives² to device manufacturers,³ commenters agree that the Commission's current rules on RF emissions should be modernized to advance the ubiquity and quality of wireless services for consumers, while maintaining prudent RF exposure safeguards. But the Commission should also not lose sight of the fact that the existing rules have enabled widespread wireless deployment while protecting the public. As Motorola explains, "the current system is working,"⁴ and PCIA agrees that "the safety standards reflected in [the existing RF emission] regulations continue to protect public health and safety."⁵ Accordingly, wholesale changes to the existing RF rules are not necessary.⁶ Instead, the FCC should make several targeted changes to its proposed and existing RF rules.

Adjust the Proposed MPE Exemption Criteria. The record demonstrates that the proposed MPE exemption criteria are "overly strict"⁷ and would lead to a "large number of routine environmental analyses that are not required now, without justification."⁸ As commenters observed, the proposed criteria would entail a "significant downside,"⁹ including "significantly

² E.g., Comments of Verizon and Verizon Wireless ("Verizon") at 2; Comments of CTIA – The Wireless Association® ("CTIA") at 3-10.

³ E.g., Motorola Solutions, Inc. ("Motorola") Comments at 2; Medtronic, Inc. Comments at 1-2.

⁴ Motorola Comments at 2.

⁵ CTIA Comments at 2.

⁶ CTIA Comments at 2; Motorola Comments at 2-3, 10; National Association of Broadcasters ("NAB") Comments at 2. The Commission itself has stated it "continue[s] to have confidence in the current exposure limits." *RF FNPRM/NOI*, ¶ 205. For example, PCIA agrees that there is no compelling reason to significantly change its rules on transient exposure. See Motorola Comments at 9; NAB Comments at 2-8.

⁷ Verizon Comments at 2.

⁸ The National Association for Amateur Radio ("ARRL") Comments at 16.

⁹ Fixed Wireless Communications Coalition Comments at 2.

increase[d] staff and financial burdens.”¹⁰ Accordingly, the Commission should adjust the proposed criteria to better account for: 1) transmitters that are mounted on wireless support structures where RF exposure can be safely readily controlled by limiting access, such as towers, utility structures, and water tanks; and 2) low power small cells.¹¹

In particular, the FCC should consider Verizon’s proposal to exempt single transmitters operating between 400 MHz and 3 GHz that are located on access-controlled structures if the ERP is $\geq 76R^2$.¹² As Verizon explains, this alternative exemption formula is supported by literature from leading scientific experts and standards, will not put workers or the public at any greater risk of exposure, and will retain the sought-after ease of application and technological neutrality – all while eliminating unnecessary deployment burdens on carriers and wireless attachers.¹³

Adopt Appropriate Signage Requirements with Ample Implementation Time. RF safety signs can, as one commenter observed, serve as an effective “last line of defense against hazards.”¹⁴ To ensure this capability continues, any modifications to the RF signage rules should provide “clear expectations” and a “consistent experience,”¹⁵ while allowing adequate implementation time to account for diverse real-world siting conditions across the country.

¹⁰ Blooston, Mordkofsky, Dickens, Duffy & Prendergast, LLP (“Blooston Private Users”) Comments at 2.

¹¹ PCIA Comments at 4-5; Verizon Comments at 6-7.

¹² Verizon Comments at 4.

¹³ Verizon Comments at 5-7.

¹⁴ RF Check, Inc. Comments at 5.

¹⁵ Verizon Comments at 15.

Specifically, the FCC should incorporate recommendations to avoid any requirement to place multiple signs at a transmitter location.¹⁶ As the *FNPRM* appropriately recognized, “[b]oth inadvertent over-exposure and unnecessary public concern” can result from unclear rules, and important warnings may go unheeded due to over-signage.¹⁷ Furthermore, over-signage can “add to the expense and difficulty” of compliance,¹⁸ frustrating licensees’ efforts to comply without improving exposure mitigation.

Parties also underscored the “significant time and resources”¹⁹ needed to carry out new signage requirements. One wireless provider, for instance, cited its “thousands of roof-top antenna locations” that would each require “multiple site visits”²⁰ and coordination with licensees and property owners. Given these complexities, the Commission “should give carriers ample time – a minimum of two years – to bring new and existing sites into compliance with any new requirements.”²¹

Adopt Safe Harbor Provisions. More broadly, the record contains support for creation of a mitigation safe harbor at transmitter sites that produce emissions over the general population limit. Licensees “cannot be present to monitor access at transmitter sites at all times,” which are often “located on roof-tops or other structures that [licensees] do not own.”²² A mitigation safe harbor, “reasonably tailored to actions that licensees can actually control,” would address concerns that the rules currently provide for “no action carriers can take ... to be certain that they

¹⁶ Verizon Comments at 14; PCIA Comments at 8-9.

¹⁷ *RF FNPRM/NOI*, ¶ 194.

¹⁸ Verizon Comments at 14.

¹⁹ Verizon Comments at 14.

²⁰ Verizon Comments at 14.

²¹ Verizon Comments at 14; *accord* PCIA Comments at 9.

²² Verizon Comments at 11.

are compliant.”²³ Through a safe harbor, the FCC can achieve the three-part goal of ensuring its rules further the agency’s environmental responsibilities, protect the public, and avoid unwarranted compliance burdens.²⁴

Create a Centralized Training Program. Recognizing that centralized training and RF information sources provide an administratively efficient and cost effective strategy, the record reflects support for “the use of a private sector, neutral third-party to collect and distribute RF safety information.”²⁵ This suggestion dovetails with PCIA’s recommendation that the FCC facilitate centralized training itself or through a trade group or association.²⁶ PCIA reiterates its willingness to assist the Commission in any such effort.

Clarify Terminology Used for Facilities that Do Not Require Routine RF Evaluation. Commenters agree that the FCC should adopt its proposal to use the term “exemption” to describe facilities that do not require routine RF evaluation.²⁷ This common sense modification would avoid confusion with the term “categorical exclusion” used under the National Environmental Policy Act²⁸ and promote greater clarity for licensees.

II. NON-SCIENCE-BASED PROPOSALS THAT WOULD FRUSTRATE NATIONAL DEPLOYMENT GOALS SHOULD BE REJECTED

As the record shows, by modernizing the RF exposure rules and enabling the provision of telecommunications services efficiently and safely, the FCC can take another critical step toward

²³ Verizon Comments at 11; *see also* PCIA Comments at 3.

²⁴ RF FNPRM/NOI, ¶¶ 1, 109.

²⁵ RF CHECK, Inc. Comments at 5.

²⁶ PCIA Comments at 9-10.

²⁷ Cohen, Dippell and Everist, P.C. Comments at 2.

²⁸ PCIA Comments at 3-4.

increasing wireless and broadband deployment.²⁹ However, certain proposals have not been shown to be necessary to protect the public and are not “guided by scientific consensus and grounded in scientific validity.”³⁰ These proposals would needlessly curtail wireless services, and the Commission should dismiss them accordingly.

Policymakers at the White House, on both sides of the aisle in Congress, and at the FCC all agree: the deployment of wireless broadband is a national priority. The Administration, for instance, has called for deploying “the next generation of high-speed wireless coverage to 98 percent of all Americans”³¹ and making available another 500 MHz of spectrum for mobile Internet service.³² Sen. John Thune (R-SD) has said that mobility drives the innovation economy,³³ while Rep. Henry Waxman (D-CA) noted high speed wireless broadband creates “new opportunities and consumer services in nearly every segment of our economy.”³⁴ And chairperson after chairperson at the FCC – regardless of party – has acknowledged the

²⁹ CTIA Comments at 3-10; GSM Association Comments at 3-4; Medtronic, Inc. Comments at 1-2; Mobile Manufacturers Forum Comments at 8-9; PCIA Comments at 14.

³⁰ CTIA Comments at 10; *see id.* at 2; GSM Association Comments at 3; Mobile Manufacturers Forum Comments at 5-6.

³¹ President Barack Obama, 2011 State of the Union Address (Jan. 25, 2011).

³² Unleashing the Wireless Broadband Revolution, 75 Fed. Reg. 38385, 38388 (Jul. 1, 2010). In addition, the White House Council of Economic Advisors concluded last year that “wireless broadband has the potential to transform many different areas of the American economy” and “give new capabilities to consumers, business, and the public sector.” Executive Office of the President, Council of Economic Advisors, “The Economic Benefits of New Spectrum for Wireless Broadband,” (Feb. 2012), *available at* http://www.whitehouse.gov/sites/default/files/cea_spectrum_report_2-21-2012.pdf.

³³ Sen. John Thune, Op-Ed, Old Regulations Inhibit New Technologies, The Hill (Jun. 18, 2013).

³⁴ Statement of Rep. Henry A. Waxman, Hearing on “Health Information Technologies: Harnessing Wireless Innovation,” (March 19, 2013), <http://democrats.energycommerce.house.gov/sites/default/files/documents/Statement-Waxman-CT-Health-Info-Wireless-Innovations-2013-3-19.pdf>.

importance of mobile broadband.³⁵ Indeed, the Commission has properly focused on *removing* – not constructing – barriers to wireless infrastructure deployment.³⁶

Reflecting this bipartisan consensus, the FCC should dismiss suggestions that would needlessly hinder the deployment of wireless broadband without advancing public safety. For instance, some commenters propose greater local control over RF transmitters and the establishment of “wireless free zones,”³⁷ while another sought the repeal of federal preemption over siting and antenna management.³⁸ Congress already gave thoughtful consideration to preemption issues in passing the Telecommunications Act of 1996,³⁹ and there is no basis in law or fact to revisit this effective regime.

Similarly, the Commission should reject proposals to require routine evaluation for all wireless facilities without exemption;⁴⁰ instruct localities to site antennas away from populated areas;⁴¹ discourage DAS/small cell deployments and mandate cell tower setbacks;⁴² and promote wired broadband over wireless.⁴³ As commenters note,⁴⁴ such proposals would only serve to delay or frustrate deployment of wireless broadband infrastructure throughout the country –

³⁵ Prepared Remarks of FCC Chairman Julius Genachowski, University of Pennsylvania – Wharton, “Winning the Global Bandwidth Race: Opportunities and Challenges for Mobile Broadband,” (Oct. 4, 2012); Remarks of Kevin J. Martin, Chairman, FCC, CTIA WIRELESS 2008®, Las Vegas, NV (Apr. 1, 2008), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-281259A1.pdf.

³⁶ *See, e.g.*, FCC, News Release, FCC Chairman Julius Genachowski Announces New Broadband Acceleration Initiative Actions; Clarifies Rules to Speed Wireless Infrastructure Deployment; Moves to Expedite Temporary Cell Towers (Jan. 25, 2013), http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0125/DOC-318589A1.pdf.

³⁷ EMF Safety Network (“EMF”) Comments at 10.

³⁸ Electromagnetic Safety Alliance, Inc. (“ESA”) Comments at 5.

³⁹ 47 U.S.C. § 332(c)(7).

⁴⁰ ESA Comments at 4.

⁴¹ EMR Policy Institute (“EMR”) Comments at 37.

⁴² EMF Comments at 10.

⁴³ EMF Comments at 9; EMR Comments at 37.

⁴⁴ *See* CTIA Comments at 3-10; Mobile Manufacturers Forum Comments at 8, 40-41, 55.

particularly in high demand areas – while contributing little toward consensus-driven, scientifically-verified safety improvements.⁴⁵

Other proposals are simply infeasible, such as requiring barriers in addition to signs and locked access to make a rooftop a controlled environment,⁴⁶ or mandating transmitters be shut down whenever cell tower workers are present.⁴⁷ The former ignores the well-documented fact that licensees simply do not have complete control over siting facilities,⁴⁸ while the latter would cause needless and potentially dangerous disruptions to consumers’ ability to access wireless services. Finally, there is no basis to require the installation of sensors for localities to monitor rooftops for compliance purposes.⁴⁹ Not only would this create a significant cost burden on industry that would divert funds away from deployment, it would also represent an unfunded burden on municipalities forced to create a “local government compliance officer.”⁵⁰

III. A FCC-DRAFTED, CONSUMER-CENTRIC GUIDE TO RF EXPOSURE AND INFRASTRUCTURE WILL BENEFIT THE PUBLIC INTEREST

PCIA reiterates its call for the FCC to update its guidance to the public by creating a consumer-centric wireless facilities RF exposure guide.⁵¹ In addition to a clear explanation of RF and the Commission’s rules governing RF exposure, the guide should emphasize not only that the FCC has exclusive jurisdiction over RF emissions from wireless infrastructure, but also that fixed wireless transmitters generally pose no danger to human health and that the Commission’s

⁴⁵ In particular, the Commission has emphasized the importance of DAS and small cells to its wireless broadband policy goals. Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies et al., *Notice of Proposed Rulemaking*, WT Docket No. 13-238, ¶ 2 (Sept. 26, 2013).

⁴⁶ EMR Comments at 10.

⁴⁷ EMF Comments at 10.

⁴⁸ PCIA Comments at 7; Verizon Comments at 11.

⁴⁹ EMR Comments at 9-10.

⁵⁰ See EMR Comments at 10.

⁵¹ PCIA Comments at 10-13.

guidelines incorporate wide margins of safety.⁵² Such a guide will combat misinformation and ameliorate concerns that negatively impact the deployment of wireless broadband infrastructure.

IV. CONCLUSION

Thoughtful and scientifically-vigorous comments submitted in the record support a smart, targeted modernization of the current RF emission rules. PCIA urges the Commission to adopt the consensus-driven, science-based reforms proposed above and in PCIA's comments, which will increase broadband deployment while maintaining appropriate RF exposure safeguards.

Respectfully submitted,

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⁵² *Id.*