

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

In the Matter of)	
)	
Reassessment of Federal Communications 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 WI-FI ALLIANCE

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Wi-Fi Alliance hereby submits its reply comments in the above-referenced proceedings regarding the FCC’s implementation of the National Environmental Policy Act (“NEPA”) through rules governing exposure to radio transmitter radiofrequency (“RF”) emissions.^{1/}

I. INTRODUCTION AND SUMMARY

In its comments, Wi-Fi Alliance encouraged the Commission to adopt exposure limits based on the harmonized International Commission on Non-Ionizing Radiation Protection (“ICNIRP”) guidelines and Institute of Electrical and Electronics Engineers (“IEEE”) standards.^{2/} It also urged the Commission to adopt measurement techniques developed by the International Electrotechnical Commission (“IEC”), which would eliminate unnecessary

^{1/} See *Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies; Proposed Changes in the Commission’s Rules Regarding Human Exposure to Radiofrequency*, First Report and Order, Further Notice of Proposed Rulemaking and Notice of Inquiry, 28 FCC Rcd 8618 (2013) (“*NOF*”).

^{2/} See Comments of Wi-Fi Alliance, ET Docket Nos. 13-84, 03-137, at 4-7 (filed Sept. 3, 2013) (“*Wi-Fi Alliance Comments*”).

duplicative procedures, ensure public health, and promote global harmonization.^{3/} Further, Wi-Fi Alliance argued that the Commission should modify its proposal for a Specific Absorption Rate (“SAR”)-based exemption from RF evaluation for single RF sources.^{4/} Finally, Wi-Fi Alliance encouraged the Commission to update the consumer information available on its website so as to provide more information about the health effects of RF exposure.^{5/}

The vast majority of commenters agreed that it is an appropriate time to reexamine the FCC’s RF exposure regulations,^{6/} and most commenters favored standards and measurement techniques based on international practices.^{7/} The record also supports creating SAR-based exemptions using international standards.^{8/} Finally, there was support from commenting parties that the Commission should retain a flexible approach to updating technical specifications and test procedures – in particular, through the Knowledge Data Base (“KDB”) process^{9/} – and that

^{3/} See Wi-Fi Alliance Comments at 7-8.

^{4/} See Wi-Fi Alliance Comments at 2-3.

^{5/} See Wi-Fi Alliance Comments at 8-9.

^{6/} See, e.g., Comments of the Consumer Electronics Association, ET Docket Nos. 13-84, 03-137, at 5-6 (filed Sept. 3, 2013) (“CEA Comments”); Comments of the International Committee on Electromagnetic Safety (ICES) of the Institute of Electrical and Electronics Engineers, Inc. (IEEE), ET Docket Nos. 13-84, 03-137, at 1-2 (filed Sept. 3, 2013) (“IEEE Comments”); Comments of Nokia Corporation, ET Docket Nos. 13-84, 03-137, at 3-5 (filed Sept. 3, 2013) (“Nokia Comments”); Comments of Pong Research Corporation, ET Docket Nos. 13-84, 03-137, at 4-6 (filed Sept. 3, 2013) (“Pong Research Corporation Comments”); Comments of the Telecommunications Industry Association, ET Docket Nos. 13-84, 03-137, at 3 (filed Sept. 3, 2013) (“TIA Comments”); Comments of Verizon and Verizon Wireless, ET Docket Nos. 13-84, 03-137, at 1 (filed Sept. 3, 2013) (“Verizon Comments”).

^{7/} See, e.g., CEA Comments at 5-6; Comments of CTIA – The Wireless Association, ET Docket Nos. 13-84, 03-137, at 29-34 (filed Sept. 3, 2013) (“CTIA Comments”); IEEE Comments at 1-2, 9; Comments of the Mobile Manufacturers Forum, ET Docket Nos. 13-84, 03-137, at 15-17 (filed Sept. 3, 2013) (“Mobile Manufacturers Forum Comments”); Comments of Motorola Solutions, Inc., ET Docket Nos. 13-84, 03-137, at 10-13 (filed Sept. 3, 2013) (“Motorola Solutions Comments”); Nokia Comments at 8-9; TIA Comments at 3-6.

^{8/} See, e.g., IEEE Comments at 2, 9; Comments of Medtronic, Inc., ET Docket Nos. 13-84, 03-137, at 2-4 (filed Sept. 3, 2013) (“Medtronic Comments”); Motorola Solutions Comments at 4-7.

^{9/} See, e.g., CEA Comments at 10; CTIA Comments at 52-55; Comments of the Foundation for Research on Information Technologies in Society, ET Docket Nos. 13-84, 03-137, at 4-5 (filed Sept. 3, 2013) (“IT’IS Comments”); Motorola Solutions Comments at 7-8; Nokia Comments at 6.

the Commission’s website should provide links to responsible scientific data.^{10/} Wi-Fi Alliance therefore urges the Commission to move forward with its plan to update its RF exposure regulations and test procedures and to take other actions designed to broaden the public’s knowledge regarding RF exposure.

II. THE FCC SHOULD REEXAMINE ITS RF EXPOSURE REGULATIONS

In its initial comments, Wi-Fi Alliance pointed out that the FCC’s existing regulations were adopted in 1996 based in part on standards set in 1992 and 1986 by the American National Standards Institute (“ANSI”), IEEE, and the National Council on Radiation Protection and Measurements (“NCRP”). Other commenting parties also recognized that, contrary to the assertions of the National Association of Broadcasters, the RF landscape has dramatically changed since the Commission last evaluated its RF exposure regulations.^{11/} For example, CTIA pointed out that there are many more RF devices in use today than when the Commission adopted its present RF exposure regulations.^{12/} Likewise, in the course of the last two decades, the science behind RF exposure evaluation has been refined. Specifically, since the Commission last evaluated its exposure guidelines, the IEEE C95.1 standard has been updated to align its localized exposure limits with the ICNIRP guidelines.^{13/} As a result, IEEE noted that today there

^{10/} See, e.g., CEA Comments at 7-8; Nokia Comments at 16-17; TIA Comments at 13-20.

^{11/} See Wi-Fi Alliance Comments at 5; CTIA Comments at 6-10; Pong Research Corporation Comments at 4-5; see also *NOI* ¶¶ 211-213. In contrast, the National Association of Broadcasters stated that “very little has changed with regard to RF emissions in the broadcast services since the Commission’s last major examination of RF exposure issues in the 1990s.” See Comments of the National Association of Broadcasters, ET Docket Nos. 13-84, 03-137, at 2 (filed Sept. 3, 2013) (“NAB Comments”). Wi-Fi Alliance and others disagreed with this assertion.

^{12/} See CTIA Comments at 6-10 (noting that the total number of mobile wireless connections now exceeds the total population and that mobile data traffic continues to increase dramatically, and asking the Commission to consider “whether the current standards strike a balance that will continue to promote growth and innovation in the decades to come”).

^{13/} See Wi-Fi Alliance Comments at 6; IEEE Comments at 3-4; CEA Comments at 5-6; see also *NOI* ¶ 213.

are no international standards or guidelines that support the partial-body exposure basic restriction of 1.6 W/kg averaged over 1 gram of tissue adopted by the FCC in 1996.^{14/}

Nearly all commenters therefore agreed with Wi-Fi Alliance that it is time for the Commission to reexamine its RF exposure regulations.^{15/} As Nokia pointed out, “there is no basis for continued use of the outdated standard,” particularly because the majority of the world’s scientists and regulatory bodies favor the current science as expressed in the IEEE/ICNIRP limits.^{16/} CEA agreed that the Commission should reassess its RF exposure regulations, stating that “adoption of the new global standards is well supported by the latest science, and maintenance of RF limits based on outdated research does not provide better protection.”^{17/}

III. INTERNATIONAL EXPOSURE AND MEASUREMENT STANDARDS SHOULD BE HARMONIZED

Wi-Fi Alliance encouraged the FCC to modify its current RF regulations based on international exposure and measurement standards.^{18/} In particular, it stated that the Commission should adopt the IEEE C95.1-2005 exposure standard – which has been updated to align its localized exposure limits with the ICNIRP guideline of 2W/kg over 10gm averaging mass for the general public and 10W/kg over 10gm for occupational exposure.^{19/} Regarding measurement techniques, Wi-Fi Alliance urged adoption of the IEC 62209-2 standard in place of the test

^{14/} See IEEE Comments at 4.

^{15/} See, e.g., CEA Comments at 5-6; IEEE Comments at 1-2; Nokia Comments at 3-5; Pong Research Corporation Comments at 4-6; TIA Comments at 3; Verizon Comments at 1.

^{16/} See Nokia Comments at 8-9.

^{17/} See CEA Comments at 6.

^{18/} See Wi-Fi Alliance Comments at 4-8.

^{19/} See Wi-Fi Alliance Comments at 6-7; see also INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, IEEE STANDARD FOR SAFETY LEVELS WITH RESPECT TO HUMAN EXPOSURE TO RADIO FREQUENCY ELECTROMAGNETIC FIELDS, 3 KHZ TO 300 GHZ, IEEE C95.1-2005 (2006).

specified in the Office of Engineering and Technology (“OET”)’s Bulletin 65, Supplement C for Wi-Fi devices used near the body.^{20/}

A. The Commission Should Adopt Harmonized RF Exposure Regulations Based on the IEEE C95.1-2005 Standard.

i. The IEEE/ICNIRP Limits are Widely Accepted.

Commenting parties agreed with Wi-Fi Alliance that the Commission should take advantage of the work performed by IEEE in developing more up-to-date RF exposure regulations.^{21/} Commenters noted that the IEEE exposure standard is consistent with the most widely accepted RF exposure limit that exists – the ICNIRP guidelines – and is grounded in the scientific consensus of both international and federal health and safety agencies.^{22/} As several commenters stated, 115 countries and territories have adopted the ICNIRP guidelines which, as noted above, are aligned with IEEE’s standards.^{23/} Moreover, the World Health Organization has specifically endorsed the IEEE/ICNIRP limits and has called on other nations to adopt it as well.^{24/}

^{20/} See Wi-Fi Alliance Comments at 7-8; *see also* INTERNATIONAL ELECTROTECHNICAL COMMISSION, HUMAN EXPOSURE TO RADIO FREQUENCY FIELDS FROM HAND-HELD AND BODY-MOUNTED WIRELESS COMMUNICATION DEVICES – HUMAN MODELS, INSTRUMENTATION, AND PROCEDURES – PART 2: PROCEDURE TO DETERMINE THE SPECIFIC ABSORPTION RATE (SAR) FOR WIRELESS COMMUNICATION DEVICES USED IN CLOSE PROXIMITY TO THE HUMAN BODY (FREQUENCY RANGE OF 30 MHz TO 6 GHz), IEC 62209-2 (2010); OFFICE OF ENGINEERING AND TECH., FEDERAL COMMUNICATIONS COMMISSION, EVALUATING COMPLIANCE WITH FCC GUIDELINES FOR HUMAN EXPOSURE TO RADIOFREQUENCY ELECTROMAGNETIC FIELDS: ADDITIONAL INFORMATION FOR EVALUATING COMPLIANCE OF MOBILE AND PORTABLE DEVICES WITH FCC LIMITS FOR HUMAN EXPOSURE TO RADIOFREQUENCY EMISSIONS, OET BULLETIN 65 SUPPLEMENT C (2001).

^{21/} See, e.g., CEA Comments at 5-6; CTIA Comments at 29-34; IEEE Comments at 1-2; Mobile Manufacturers Forum Comments at 15-17; Motorola Solutions Comments at 10-13; Nokia Comments at 8-9; TIA Comments at 3-6.

^{22/} See CTIA Comments at 10.

^{23/} See, e.g., CTIA Comments at 30; IEEE Comments at 7; Mobile Manufacturers Forum Comments at 5; Nokia Comments at 9.

^{24/} See, e.g., CEA Comments at 5; IEEE Comments at 6-7; Nokia Comments at 8; TIA Comments at 4. As TIA pointed out, other worldwide health and safety organizations have also adopted the ICNIRP standard, including: the UK Independent Advisory Group on Non-Ionizing Radiation; the Health Council

In addition, commenters pointed out that various federal agencies – including the FCC, Food and Drug Administration (“FDA”), Occupational Safety and Health Administration (“OSHA”), and National Institute for Occupational Safety and Health (“NIOSH”) – participated in the development of the updated C95.1 standard that the Commission proposes to adopt in this proceeding.^{25/} Thus, while the FCC has solicited comment from other federal agencies, and Wi-Fi Alliance welcomes their input, the Commission should recognize that the IEEE/ICNIRP limits it proposes to adopt already incorporate guidance from many federal agencies. The Commission should, therefore, give deference to these international standards absent more specific guidance from those entities, including the FDA.

Not only have global health and regulatory organizations supported the current IEEE/ICNIRP limits developed with input from federal agencies, but the Commission itself has recognized the validity of the guidelines adopted by these bodies and should properly do so again here.^{26/} As CTIA pointed out, the Commission has always looked to the weight of scientific evidence as expressed in the work of standard-setting bodies like the IEEE.^{27/} Indeed, the Commission has on various occasions – including in this proceeding – recognized that IEEE is an internationally and domestically accepted expert standards body.^{28/} Thus, as Motorola

of the Netherlands; the Swedish Counsel for Working Life and Social Research; the Norwegian Institute for Public Health; the Latin American Experts Committee on High Frequency Electromagnetic Fields and Human Health; and the European Commission Scientific Committee on Emerging and Newly Identified Health Risks. *See* TIA Comments at 4-5.

^{25/} *See* CTIA Comments at 3, 11; Motorola Solutions Comments at 11. *See also* IEEE Comments at 2, n.8 (stating that representative agencies participating in the Federal RF Intragency Working Group to develop the IEEE C95.1-2005 standard included the FCC, FDA, NIOSH and OSHA).

^{26/} *See* IEEE Comments at 3; Wi-Fi Alliance Comments at 6.

^{27/} *See* CTIA Comments at 14.

^{28/} *See* Mobile Manufacturers Forum Comments at 11 (citing *NOI* ¶ 38); *see also* Wi-Fi Alliance Comments at 6, n.21.

Solutions stated, “updating the rules to reference the new standard would be a logical modernization and continuation of the Commission’s heretofore successful RF policies.”^{29/}

The Commission’s reliance on the work of IEEE in the past and its reliance on IEEE’s current work is appropriate. IEEE’s International Committee on Electromagnetic Safety (“ICES”) is an open group, using a consensus process, with no agenda other than producing science-based standards. As IEEE itself pointed out, ICES – the committee that developed the latest IEEE C95.1 standard – had a wide range of participation by 125 experts from 25 countries in engineering, biology, medicine, measurements, and safety programs, and consisted of members of the government, military, academia, industry, and general public.^{30/} The standards the Commission contemplates adopting were thus developed by mainstream scientists, reflect input from a variety of stakeholders, and are backed by accepted scientific literature. Adoption of the most recent IEEE C95.1 standard would therefore appropriately recognize IEEE’s preeminent technical expertise in this field.

Finally, harmonization of the Commission’s RF exposure limits would be consistent with Congressional and executive branch policies favoring reliance on standards developed through voluntary, consensus-building organizations.^{31/} As CTIA stated, applying this type of voluntary consensus standard “can increase productivity and efficiency in Government and industry, expand opportunities for international trade, conserve resources, improve health and safety, and protect the environment.”^{32/}

^{29/} See Motorola Solutions Comments at 11.

^{30/} See IEEE Comments at 2.

^{31/} See CEA Comments at 6; Mobile Manufacturers Forum Comments at 34-38; TIA Comments at 7.

^{32/} See CTIA Comments at 32 (citing United States Office of Management and Budget, *Circular A-119 Revised* § 6(e) (Feb. 10, 1998), available at http://www.whitehouse.gov/omb/circulars_a119).

In short, as Nokia remarked, “it is evident that the overwhelming view of the scientific community, national experts and the international health agency actively overseeing this field, is that the current science supports the harmonized . . . standard rather than the older standard still followed by the FCC.”^{33/}

ii. A Globally Harmonized Exposure Limit Would Result in Benefits to Consumers and Manufacturers.

Wi-Fi Alliance recognizes and supports the comments of the Mobile Manufacturers Forum, TIA, Motorola Solutions, and others, which highlighted the significant public benefits that may be achieved through globalization of the RF exposure limits. For instance, Mobile Manufacturers Forum commented that internationally harmonized standards provide a higher level of protection for everyone, as well as coverage and quality of service benefits for consumers living in rural and regional areas.^{34/} In addition, TIA stated that globally harmonizing limits would promote a “build once, test once, sell everywhere” effect that would remove unnecessary trade barriers, improve time-to-market, and reduce costs to consumers.^{35/} CTIA likewise pointed to a variety of economic and consumer benefits stemming from harmonization of domestic and foreign limits, including that it tends to decrease the cost of goods, decrease the burden of complying with agency regulation, encourage long-term growth for U.S. enterprises, and promote efficiency and economic competition.^{36/} Finally, as several commenters pointed out, adoption of consistent standards increases public confidence in RF safety limits.^{37/}

^{33/} See Nokia Comments at 9.

^{34/} See Mobile Manufacturers Forum Comments at 18-26, 38-41.

^{35/} See TIA Comments at 6-7.

^{36/} See CTIA Comments at 31-32.

^{37/} See IEEE Comments at 6; Mobile Manufacturers Forum Comments at 5; TIA Comments at 7.

Harmonization would also benefit manufacturers. Specifically, as Motorola Solutions noted, “international harmonization of regulatory regimes would allow device manufacturers to take advantage of new economics of scale and shortened product development cycles for equipment that can be marketed globally” and, further, manufacturers’ compliance burdens would be reduced.^{38/} In turn, consumers would benefit from “lower prices on devices and increased availability of a diverse range of products.”^{39/}

iii. Arguments Against Adoption of the IEEE/ICNIRP Standard Are Unsupported.

Although most commenters agreed that the Commission should harmonize its RF exposure limits with internationally accepted standards, some commenters argued that the FCC should not follow the IEEE standard and ICNIRP guidelines.

Some commenting parties mischaracterized the Commission’s proposal as a “reduction” in protection from RF exposure.^{40/} As Wi-Fi Alliance stated in its comments, modification of the existing RF exposure limits is not a matter of “strengthening” or “weakening” the current guidelines, but is instead designed to adopt limits that reflect the best, most current scientific knowledge available and harmonize the United States’ standards with those adopted around the world.^{41/} The IEEE C95.1-2005 standard harmonizes with the biologically-based ICNIRP guidelines. Thus, by adopting the updated IEEE standard, the Commission would only be

^{38/} See Motorola Solutions Comments at 13.

^{39/} See Motorola Solutions Comments at 13.

^{40/} See, e.g., Comments of Environmental Working Group, ET Docket Nos. 13-84, 03-137 at 3 (filed Sept. 3, 2013); Pong Research Corporation Comments at 35.

^{41/} See Wi-Fi Alliance Comments at 6-7; see also NOI ¶ 207 (seeking comment on whether the FCC’s present exposure limits “should be more restrictive, less restrictive, or remain the same”).

modernizing its exposure standard rather than “strengthening” or “weakening” its previous guidelines.^{42/}

Finally, adoption of a general standard for RF exposure does not preclude the FCC’s adoption of measurement standards that complement the exposure standard. For example, IEEE recently developed IEEE 1528, a procedure which covers RF exposure testing of the head.^{43/} The Commission should make it clear that it may adopt other measurement standards that may complement the exposure standard when they become available in the future.^{44/}

B. The Commission Should Adopt Harmonized Measurement Standard IEC 62209-2.

In addition to harmonized exposure limits, Wi-Fi Alliance also encouraged the Commission to adopt harmonized measurement standards based on the IEC 62209-2 test for Wi-Fi devices used near the body.^{45/} It stated that using the single IEC test – instead of both it and the FCC’s test outlined in OET Bulletin 65, Supplement C – would eliminate unnecessary duplicative procedures while still ensuring public health and safety.^{46/} Other parties agreed.^{47/} For example, the Mobile Manufacturers Forum recognized that testing requirements are currently doubled for products shipped to both the U.S. and abroad since the FCC’s approach must be followed for U.S. products while products destined for the rest of the world are testing according

^{42/} See Motorola Solutions Comments at 11.

^{43/} INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, IEEE RECOMMENDED PRACTICE FOR DETERMINING THE PEAK SPATIAL-AVERAGE SPECIFIC ABSORPTION RATE (SAR) IN THE HUMAN HEAD FROM WIRELESS COMMUNICATIONS DEVICES: MEASUREMENT TECHNIQUES, IEEE 1528-2013 (2013).

^{44/} See Wi-Fi Alliance Comments at 5, n.15; see also IT’IS Comments at 5.

^{45/} See Wi-Fi Alliance Comments at 7-8.

^{46/} See Wi-Fi Alliance Comments at 7-8. Because the testing procedures are not included in its rules, the Commission may make this minor change either within, or outside the scope of, this rulemaking proceeding.

^{47/} See, e.g., IEEE Comments at 2, 9; Mobile Manufacturers Forum Comments at 12.

to IEC 62209-2.^{48/} IEEE likewise argued that adoption of IEC 62209-2 on SAR measurements for near-body devices would eliminate unnecessary double testing of products in two different tissue stimulants without substantively affecting protections to public health and safety.^{49/}

IV. THE COMMISSION SHOULD MODIFY THE SINGLE TRANSMITTER SAR-BASED EXEMPTIONS

Wi-Fi Alliance encouraged the Commission to modify its proposal for SAR-based exemptions from RF evaluation for single RF sources and instead use the low-power exclusion contained in IEC 62479, which has been adopted internationally.^{50/} Many parties agreed with Wi-Fi Alliance that the current 1 mW exclusion is unnecessarily conservative and that the Commission should adopt the IEC 62479 standard instead.^{51/} As IEEE stated, the 1 mW exclusion is not practical for use with modern devices, whereas adoption of the provisions of IEC 62479 “will eliminate many instances of unnecessary, costly, and time-consuming compliance tests.”^{52/} Likewise, Medtronic urged the Commission to consider whether the proposed 1 mW threshold is overly conservative and, to the extent that the record supports a higher exemption threshold, adopt final rules which ensure compliance with relevant exposure limits without sacrificing flexibility or stifling innovation through burdensome and unnecessary environmental evaluation requirements.^{53/} In addition, as Motorola Solutions noted, the same benefits that would be produced by global harmonization of RF exposure standards could be attained from harmonization of SAR-based exemptions.^{54/} Specifically, adopting international measurement

^{48/} See Mobile Manufacturers Forum Comments at 12.

^{49/} See IEEE Comments at 2, 9.

^{50/} See Wi-Fi Alliance Comments at 3.

^{51/} See, e.g., IEEE Comments at 9; Medtronic Comments at 4; Motorola Solutions Comments at 4.

^{52/} IEEE Comments at 9.

^{53/} See Medtronic Comments at 4.

^{54/} See Motorola Solutions Comments at 4-7.

standards will allow the Commission to leverage collaborative study by the foremost experts in these areas from around the world, create efficiencies for the Commission and industry, and ensure the public is protected consistent with the most up-to-date scientific knowledge.^{55/}

V. THE COMMISSION SHOULD CONTINUE TO USE THE KDB PROCESS TO UPDATE ITS TESTING PROCEDURES

In its initial comments, Wi-Fi Alliance observed that the FCC’s KDB guidance process gives the Commission the flexibility necessary to implement changes to its policies when warranted, and Wi-Fi Alliance encouraged the Commission to retain this flexibility by including the allowable exposure limits in a KDB release.^{56/} Including the allowable exclusion limits in a KDB publication will preserve the flexibility of responding to changes in science and technology without the need to initiate a time consuming and lengthy rulemaking proceeding.^{57/} Other commenters agreed.^{58/} As CTIA observed, the “plasticity of the KDB publications” affords the Commission the means to keep pace with technological changes and develop alternative testing and compliance protocols in a rapidly evolving area that is most effectively guided by good engineering practice rather than specific regulations.^{59/} Further, by constantly updating OET guidance based on the most up-to-date information, “the Commission best serves Congress’s direction to protect the public while ensuring that regulatory burdens do not stifle innovation and growth.”^{60/} Likewise, CEA noted that the KDB process presents the Commission with an opportunity to fine-tune its testing procedures without the need for a cumbersome notice and

^{55/} See Motorola Solutions Comments at 7.

^{56/} See Wi-Fi Alliance Comments at 4.

^{57/} See Wi-Fi Alliance Comments at 4.

^{58/} See, e.g., CEA Comments at 10; CTIA Comments at 52-55; IT’IS Comments at 4-5; Motorola Solutions Comments at 7-8; Nokia Comments at 6.

^{59/} See CTIA Comments at 55.

^{60/} See CTIA Comments at 55.

comment rulemaking proceeding.^{61/} By maintaining the KDB as a source of guidance, CEA observed that the Commission can provide a mechanism to address the need for endorsement and approval of non-standard technologies while promoting innovation and benefitting consumers.^{62/}

Additionally, like others, Wi-Fi Alliance agrees that even when KDB releases are used in non-rulemaking matters, OET should provide notice that it has drafted KDB guidance and seek public comment.^{63/} As Motorola Solutions pointed out, the KDB process – while being faster than rulemaking – “has neither the same consensus procedures of a standard-setting body nor the checks and safeguards of the rulemaking process.”^{64/} Therefore, the Commission should engage affected stakeholders in the development of KDB revisions and solicit their input, bearing in mind that matters that generate meaningful, substantive comments may be appropriate for rulemaking proceedings.

VI. THE FCC SHOULD MAKE ADDITIONAL INFORMATION AVAILABLE TO THE PUBLIC

Wi-Fi Alliance’s comments asserted that the Commission should update its website to provide more consumer information regarding the health effects of RF exposure,^{65/} and others agreed.^{66/} The Commission should therefore work with other affected agencies – including the FDA, National Institute of Health, and National Cancer Institute – to ensure a consistent level of information across all agencies.^{67/} Further, Wi-Fi Alliance agrees with those parties that stated

^{61/} See CEA Comments at 10.

^{62/} See CEA Comments at 10-11.

^{63/} See Motorola Solutions Comments at 7-8; Nokia Comments at 6.

^{64/} See Motorola Solutions Comments at 8.

^{65/} See Wi-Fi Alliance Comments at 8-9.

^{66/} See, e.g., CEA Comments at 7-8.

^{67/} See CTIA Comments at 37.

that the Commission’s website should provide links to responsible scientific data.^{68/} As CEA stated, the Commission should continue its educational efforts and work to ensure that consumer information concerning RF emissions is meaningful, but should avoid requiring disclosure of information that is likely to cause unnecessary consumer confusion.^{69/} Additionally, TIA urged the Commission to be cautious about promoting the use of consumer information for reducing RF exposure, stating that consumers often respond by believing there is a credible safety concern or else the issue would not have be raised.^{70/} Therefore, while the Commission should continue to educate the public about RF safety and credible exposure concerns, “careful consideration of the need for, and significance of, both the content of consumer information and the manner of its delivery to the public must be carefully evaluated.”^{71/}

VII. CONCLUSION

Because most commenting parties agreed that the Commission’s present RF regulations are no longer appropriate, the FCC should modify its regulations based on the most up-to-date research. By revising its rules to harmonize the RF exposure and measurement standards with international guidelines, the Commission will create benefits for consumers and manufacturers. In addition, the FCC should continue to use the KDB process and to expand the information available to the public via its website, both of which will ensure that the public and the industry receive transparent, consistent and reliable information regarding RF safety.

^{68/} See, e.g., CEA Comments at 7-8; Nokia Comments at 16-17; TIA Comments at 13-20.

^{69/} See CEA Comments at 7-8; see also Nokia Comments at 16-17.

^{70/} See TIA Comments at 14.

^{71/} See TIA Comments at 14.

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