

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

In the Office of Engineering and	)	
Technology Technological Advisory	)	
Council (TAC) inquiry into	)	ET Docket No. 17-215
	)	
Reforming Technical Regulations	)	

**ANSI ASC C63 Ex PARTE COMMENTS**

American National Standards Institute Accredited Standards Committee C63<sup>®</sup> (“ASC C63”) hereby submits these *ex parte* comments in the above-captioned proceeding.<sup>1</sup> ASC C63 wishes to address several issues that have been raised by other commenters relating to ANSI measurement standards for electronic devices that are maintained by ASC C63 and referenced in the Commission’s rules.

**Introduction**

For several decades, ASC C63 has served as an industry authority on EMC measurement standards for manufacturers who seek to market their products in the United States. ASC C63 has close to 30 members, which include electronics manufacturers, testing laboratories, industry trade associations, government agencies (including the FCC and FDA), lab accreditation bodies and industry consultants. ASC C63 members contribute their time and expertise to the development of consensus industry standards to ensure technical product compliance. ASC C63’s unique expertise has been recognized by the Commission as far back as 1988 when MP-4, the first FCC

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<sup>1</sup> Office of Engineering and Technology Technological Advisory Council (TAC) inquiry into Reforming Technical Regulations, ET Docket No. 17-215, *Public Notice* (rel. August, 30, 2017), DA 17-800 (“PN”).

measurement standard adopted for digital device emissions, was updated and cross-referenced in the rules to ANSI C63.4-1988. Since then, the Commission has adopted various other ANSI measurement standards for products that it regulates and has endeavored to keep its rules current by referencing the latest versions of such standards. *See e.g.* 47 C.F.R. §15.31(a).

### **The FCC Should be Forward-Looking and Risk Based in its Regulations**

ASC C63 firmly believes that when it comes to EMC standards, the goal of the Commission should be to maintain its equipment regulations and measurement standards with an eye toward the future. This means adopting a risk based approach that is both flexible and responsive to new or unforeseen developments in electronics technology. To effectively serve the product industries that it regulates, the Commission must be able to exercise some level of control over the standards making process. Delegating this important function to international standards bodies, as some commenters in this proceeding have suggested, will serve only to undermine the Commission's authority and cede control of standards making to foreign entities whose regulatory interests might not be fully aligned with the U.S.

The challenges faced by product developers who seek to homologate their products for international markets are both technical and procedural. International markets can share identical technical specifications but if the equipment approval processes are significantly different, product introductions may be forced to proceed down separate and duplicative tracks with added costs and inherent delays. Standards are a means of reducing or removing barriers to market entry but only if the technical specifications and approval processes are fully harmonized. Harmonization, however, requires a commonality of interests among nations and their

representatives within the standards development community – something that too often is difficult to achieve at international levels due to geographic, political and other valid concerns. Thus, individual countries may sometimes choose to “go it alone” on standards development which is what has happened, to a certain extent, in the area of digital device emissions and measurement procedures where the U.S. has followed FCC rules and ANSI standards while most foreign countries follow CISPR standards and their required usage. By using ANSI standards, the Commission has maintained flexibility and control over fast-moving developments involving product standards and their measurement procedures.

### **While Important, Harmonization is Not Always the Priority**

When it makes technical sense, ANSI and CISPR work to harmonize their standards. At this moment in time, however, ANSI and CISPR standards for most electronic products are similar but not identical, mainly because those participating in CISPR work disproportionately represent European Union interests which are often times different than those in the U.S. and Canada.

When circumstances change in the U.S. and the Commission needs to address something unforeseen, the process is much easier and quicker when done through ANSI rather than CISPR. ASC C63, for example, is focused on the U.S. market and thus, is equipped to react quickly to needed changes in measurement standards and procedures for new products coming to market.

The time it takes to change or modify a technical standard is a real concern. The process required under CISPR procedures, which are governed by International Electrotechnical Commission (“IEC”) rules, is far slower than the process used by ANSI. Furthermore, international standards tend not to be focused on special needs of individual markets and, in any

event, would not be focused on the particular needs of the U.S. market. Hearing aid compatibility (HAC) standards are a good example. The Commission determined that hearing aid compatibility for many types of receivers needed to be addressed in the mid-1990s and ASC C63 responded to that need, developing ANSI C63.19 which has been adopted by the Commission. Ironically, the EU has viewed HAC issues differently and now, after 20 years, is finally starting to come around to the Commission's point of view. Had the Commission waited for international standards organizations to act on HAC standards, the U.S. market and hearing-impaired consumers would have suffered compatibility issues unnecessarily for an additional 20 years.

ASC C63 sees a similar scenario taking place in the area of digital device emission measurement standards. Less than a half dozen ASC C63 members participate in the working group that maintains CISPR 32, the international standard that is analogous to ANSI C63.4. These participation numbers alone show the importance placed by U.S. interests on developing measurement standards at the national level through ANSI, rather than at the international level through CISPR.

### **National Technical Standards are Mutually Supportive**

National technical standards are mutually supportive. ANSI 63.4, C63.10, C63.17, C62.19 and C63.26, all Commission-mandated or referenced in the rules, work together harmoniously to meet the needs of the American public. ASC C63 manages and maintains these standards with the support of the Commission to ensure that they are responsive to U.S. market needs. A number of projects have recently been initiated in ASC C63 to respond to Commission needs for

new measurements standards – projects that would likely get no traction at the international level and, in the case of CISPR, might fall outside of its authorized scope. These projects include, for example, EMC and radio compatibility test procedures set forth in C63.29 for general illumination lighting products; in C63.30 for several different types of wireless power transfer (WPT) products; and in C63.31 for traditional ISM equipment such as industrial and dielectric heaters, food tempering equipment, microwave ovens and medical diathermy equipment.

ASC C63 believes that if the Commission were to start picking off pieces of mutually supportive standards, it would weaken the whole. It is better to let ASC C63 manage its body of standards and work directly with CISPR on the details of harmonization. This has been the approach taken with ASC C63 and CISPR for some time, albeit with mixed results. For example, CISPR 32 requires emission measurements from various ports of the equipment under test, yet these ports do not require testing by the Commission and hence, are not included in ANSI C63.4. This makes CISPR compliance for many type of products more expensive and time consuming than ANSI compliance though there is no evidence of any corresponding benefit. Further, CISPR 32 only requires emission measurements up to 6 GHz whereas Commission rules and ANSI C63.4 require testing up to 40 GHz to protect devices and services in these higher bands. A Commission policy that allows either of these standards to be used for EMC measurements will necessarily produce different results because the standards cover different frequency ranges and thus, offer different spectrum protections. In addition, the measurement procedures themselves differ in that CISPR 32 does not require the receiving antenna to be raised between 1 and 4 meters if the beam width of the receive antenna includes the vertical height of the equipment under test. (*See figure 16 in CISPR 16-2-3, 2016*). ANSI C63.4, on the other hand, requires the

receiving antenna to scan over the full 1 to 4 meter range when determining the highest emissions. In all likelihood, these mast height differences in the two standards will produce different measured emissions and possibly different levels of protection. Finally, when considering measurements above 1 GHz, ANSI C63.4 requires “aiming” the receive antenna towards the source of emissions emanating from the product being tested, whereas CISPR 32 is less rigorous by not requiring such aiming to find the maximum emissions.

### **The Commission Should Keep its Current System for Standards Development**

For the reasons provided, ACS C63 submits that the Commission should maintain its current standards regime through the work of ANSI and other domestic standards organizations. If the Commission were to become dependent on CISPR or other international organizations it would not be able to be responsive quickly and effectively to the changing needs, priorities and concerns of U.S. consumers and spectrum users. ACS C63 believes that it would also seriously weaken or destroy the Commission’s close working relationship with domestic standards groups.

We thank the Commission for this opportunity to share our comments in this proceeding.

Respectfully submitted,

**American National Standards Institute  
Accredited Standards Committee C63®**

/s/ Mr. Daniel Hoolihan

Chairman,  
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December 5, 2017

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