Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Access to Telecommunications Equipment and Services by Persons with Disabilities
CG Docket No. 12-32

Petition for Rulemaking Filed by the Telecommunications Industry Association Regarding Hearing Aid Compatibility Volume Control Requirements
CG Docket No. 13-46

Amendment of the Commission’s Rules Governing Hearing Aid-Compatible Mobile Handsets
WT Docket No. 07-250

Comment Sought on 2010 Review of Hearing Aid Compatibility Regulations
WT Docket No. 10-254

REPLY COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

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The Telecommunications Industry Association (“TIA”)\(^1\) hereby submits these reply comments in response to the Federal Communications Commission’s (“Commission”) Notice of Proposed Rulemaking in the above-captioned proceeding.\(^2\) TIA highlights the strong support in the record for the proposal to amend the Part 68 rules to incorporate the 2012 ANSI Wireline Volume Control Standard, ANSI/TIA-4965-2012.\(^3\) Therefore, we concentrate our reply comments on other aspects of the Commission’s proposed rules. Specifically, we restate the value and sufficiency of current operating procedures for ANSI-accredited standards development organizations (“SDOs”) to enable consideration of consumer input as well as participation from their representatives. In addition, we elaborate on our concerns about the redundancy of the proposed volume control standard for wireless handsets.

I. ANSI-DEFINED OPERATING PROCESSES FOR SDOS CURRENTLY PROVE TO BE AN EFFECTIVE MECHANISM FOR PUBLIC PARTICIPATION BY ALL STAKEHOLDERS, AS SUPPORTED BY THE RECORD.

TIA reiterates that current SDO operating procedures in combination with the consultation requirements from the CVAA serve as an appropriate and effective mechanism for ensuring there is engagement with consumers at the various stages of the handset design process. As both an SDO and policy advocacy organization, TIA, is especially implicated by the impact

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\(^1\) TIA is the leading trade association for the information and communications technology (“ICT”) industry, representing companies that manufacture or supply the products and services used in global communications across all technology platforms. TIA represents its members on the full range of policy issues affecting the ICT industry and forges consensus on industry standards. Among their numerous lines of business, TIA member companies design, produce, and deploy a wide variety of devices with the goal of making technology accessible to all Americans. TIA’s standards committees, which operate under an American National Standards Institute-accredited process, create consensus-based voluntary standards for numerous facets of the ICT industry.


\(^3\) See e.g., Comments of ANSI ASC C63 SC8, CG Docket No. 13-46 (filed Feb. 25, 2016) at 3; Comments of Hearing Loss Association of America et al., CG Docket No. 13-46 (filed Feb. 26, 2016) at 2; Comments of The Hearing Industries Association (HIA), CG Docket No. 13-46 (filed Feb. 26, 2016) at 3; and Comments of Wireless RERC, CG Docket No. 13-46 (filed Feb. 26, 2016) at 3.
of the Commission’s proposal for additional requirements around consumer consultation in order to rely on newly developed wireline or wireless hearing aid compatibility (“HAC”) standards. While we are supportive of the idea of a streamlined process that would enable manufacturers to rely on updated versions of the HAC standards without a full rulemaking process, we are concerned about elements of the additional requirements the Commission proposes to tie to the streamlined process.

TIA believes the adoption of rules defining a new consumer consultation process for SDOs is unnecessary. Indeed, in the *NPRM*, the Commission acknowledged that the ANSI process meets its specified criteria of openness to all stakeholders and opportunity for comment and appeal before final standards are approved. This point is further supported by the majority of commenters\(^4\) that highlight ANSI processes and discuss the ways consumers have participated in HAC standards development, to date. The proposed rules would also create a set of requirements around how SDOs should operate that are specific to only the hearing aid compatibility standards arena, setting a troubling precedent.

Furthermore, TIA is concerned that the proposed rules would remove flexibility from the standards development and broader consumer engagement process. TIA agrees with ASC C63 that “rigid, formal, mandatory requirements” are less effective.\(^5\) Under the *CVAA*\(^6\), manufacturers are required to ensure they consult with consumers and report on those activities and as a result of the flexible approach for meeting these obligations there have been positive

\(^4\) See ANSI ASC C63 Comments at 4-6; HIA Comments at 10-11; TIA Comments at 12-15;

\(^5\) ANSI ASC C63 Comments at 7.

results with increased device accessibility.\(^7\) Therefore, TIA recommends the Commission not pursue requirements on this issue as the current SDO process already provides a mechanism for meeting the goal of consumer participation without prescribing specific operating criteria. Additionally, we reiterate to the Commission the need for flexibility when implementing the CVAA’s requirements, consistent with Congress’ intent.

II. **A VOLUME CONTROL REQUIREMENT FOR WIRELESS HANDSETS IS UNNECESSARY AND WOULD CREATE ADDITIONAL BURDENS FOR MANUFACTURERS WITHOUT ADDING CONSUMER BENEFIT.**

TIA strongly reiterates that the adoption of a requirement for a volume control standard for wireless handsets will be duplicative of existing features without providing enhanced consumer experience. Currently, all models of wireless handsets provide adjustable gain through built-in volume control mechanisms. Thus, TIA and its members have questions about the purpose and value of the Commission’s proposed volume control requirement and we are concerned that this effort is based in an incomplete understanding of the use cases and design parameters at play in the wireless compared to the wireline handset ecosystems.

TIA particularly has concerns with some of the statements made by commenters that seem to reflect a misunderstanding of the current wireless handset marketplace and existing standards that manufacturers must design to that are associated with the concept of volume control. TIA is not aware of data reflecting consumer concerns that specifically cite volume control as the primary source of concern for users that may feel a wireless handset is not adequately serving their needs. Indeed, the Wireless RERC’s comments show that the majority of respondents to their survey had at least an “about average” experience with their volume

\(^7\) Cf. Comments of Telecommunications Industry Association, CG Docket No. 10-213 (filed July 15, 2014) (noting the importance of a flexible approach in meeting the intent of CVAA requirements).
control with 50% of respondents indicating they were “satisfied” or “very satisfied.” Likewise, only a quarter of respondents identified volume control assistive technologies as something they used to improve their wireless phone experience.

Furthermore, we disagree with some of the assertions made in HIA’s comments about the existing 3GPP and ETSI standards. It is a somewhat misleading to state that these standards do not require LTE narrowband handsets to have a specific level of volume control. Based on technical comparison of the relevant sections of the 3GPP TS 26-131 standard between the narrowband and wideband handset requirements, it is clear that the only difference is that the lower limit at the maximum level of the volume control is not specifically defined for narrowband handsets. A comparison of the relevant sections of 3GPP TS.26.131 is outlined below.

**Section 5.2.2 of TS.26.131 (narrowband)**
*The nominal values of SLR/RLR to the POI shall be:*
  
  $SLR = 8 \pm 3 \text{ dB;}$
  
  $RLR = 2 \pm 3 \text{ dB.}$

Where a user-controlled receiving volume control is provided, the RLR shall meet the nominal value for at least one setting of the control. When the control is set to maximum, the RLR shall not be $\leq$ (equal or louder than) -13 dB. With the volume control set to the minimum position the RLR shall not be $\geq$ (equal or quieter than) 18 dB. Compliance shall be checked by the relevant tests described in TS 26.132.

**Section 6.2.2/7.2.2/8.2.2 of TS 26.131: (wideband)**
*The nominal values of SLR/RLR to the POI shall be:*
  
  $SLR = 8 \pm 3 \text{ dB;}$
  
  $RLR = 2 \pm 3 \text{ dB.}$

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8 See Wireless RERC Comments at 5.

9 See id. at 4.

10 See HIA comments at 5.
Where a user-controlled receiving volume control is provided, the RLR shall meet the nominal value for at least one setting of the control. When the control is set to maximum, the RLR shall not be ≤ (equal or louder than) -13 dB and shall not be ≥ (equal or quieter than) -3 dB. With the volume control set to the minimum position the RLR shall not be ≥ (equal or quieter than) 18 dB. Compliance shall be checked by the relevant tests described in TS 26.132.

In addition, HIA’s statement implying that the 3GPP volume control specifications are only applicable for “manufacturers that wish to meet the standards” is erroneous and misrepresentative of the facts. Manufacturers are required to adhere to these standards in order to meet certification obligations and technical specifications to use their devices on wireless carrier networks globally. HIA also states “[t]aking into account leakage due to loosely-coupled handsets, the lower end of this 81 to 91 dB SPL calculated range will not be sufficient for persons with hearing loss to communicate well.” It is unclear what assumptions are inherent in this statement but, 3GPP TS 26.132, section 7.2.2.2 (receive loudness rating for narrowband) clearly indicates that no leakage correction shall be applied, which implies that the terminal shall meet the requirement and pass the test even when leakage is taken into account.

Overall, there are a number of claims made about the relevant standards that indicate a misunderstanding about portions of the 3GPP and other volume-related requirements for wireless devices and how manufacturers comply. We believe the best mechanism for correcting this information gap would be to engage with the standards body and the participating stakeholders. TIA and its members note that the standards process is open to all interested participants and we encourage HIA and other interested stakeholders to assign a liaison to engage the 3GPP SA4 Working Group that would be able to address any concerns and questions that they feel should be considered.

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11 See id. at 5.
III. CONCLUSION

In conclusion, TIA urges the Commission not to adopt additional rules and standards that could limit flexibility and create additional burdens for standards development organizations and wireless handset manufacturers without yielding improved accessibility and user experiences for consumers and their representatives. TIA and its members stand ready to work with the Commission to ensure consumers with hearing loss continue to have a positive experience with their devices.

Respectfully submitted,

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