

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, DC 20554

In the Matter of )  
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Draft KDB 285076 D01 HAC Guidance v05 )  
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**COMMENTS OF  
THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

The Telecommunications Industry Association (“TIA”)<sup>1</sup> welcomes the opportunity to comment on the above-captioned draft Office of Engineering and Technology Laboratory Knowledge Database (“KDB”) publication (“Draft KDB”).

As the coversheet to the Draft KDB indicates, it is a proposed update of pre-existing KDB guidance on hearing aid compatibility (“HAC”) compliance and testing issues to implement the FCC’s Fourth Report and Order (FCC 15-155) in WT Docket Nos. 15-285 and 07-250.<sup>2</sup> Among other things, the *2015 Order* expanded the scope of the HAC testing requirements as of January 1, 2018 to include for the first time certain VoIP software applications that facilitate voice communications.

In the *2015 Order*, the FCC explained that when it initially promulgated the HAC rules, applications that enable voice communications through third-party software did not exist.

Today, however, mobile voice communications can be enabled in a variety of ways, including:

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<sup>1</sup> 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.

<sup>2</sup> Improvements to Benchmarks and Related Requirements Governing Hearing Aid-Compatible Mobile Handsets; Amendment of the Commission’s Rules Governing Hearing Aid-Compatible Mobile Handsets, *Fourth Report and Order and Notice of Proposed Rulemaking*, 30 FCC Rcd. 13845 (2015) (“*2015 Order*”).

applications pre-installed by the manufacturer, its operating system software partner, or a service provider; applications downloaded by the end user from the manufacturer's store; or applications that the end user obtains from an independent source.<sup>3</sup> The FCC stated that certifying a handset for hearing aid compatibility requires testing software-based voice functions to the extent that "such software applications are installed by the manufacturer or service provider, or at their direction, for use by a consumer over a given air interface."<sup>4</sup> The FCC expressly declined to require HAC certification for voice applications added by consumers after they purchase a device.<sup>5</sup>

As an initial matter, TIA notes that traditionally, manufacturers – rather than service providers – certify wireless handsets for, among other things, HAC compliance. Indeed, as observed by the draft KDB:

Manufacturers of wireless handsets that are seeking certification of a handset as hearing aid compatible under Section 20.19 must submit *as part of the equipment certification application process*, test report(s) demonstrating HAC compliance in accordance with ANSI C63.19-2007 or ANSI C63.19-2011.<sup>6</sup>

With the addition of requirements on post-manufacturing VoIP software applications, the HAC testing and exhibit submissions processes are not as clean cut, especially, if the service provider is not working under the authorization of the manufacturer under Section 2.909(a) of the FCC's rules.

Specifically, TIA addresses three new sentences at the bottom of page 12 and the top of page 13 of the Draft KDB, which includes new guidance on the VoIP software voice application issue:

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<sup>3</sup> *Id.* at ¶ 42.

<sup>4</sup> *Id.* at ¶ 44.

<sup>5</sup> *Id.*

<sup>6</sup> Draft KDB at 2 (emphasis added, footnotes omitted).

[1] Manufacturers must test all voice applications and services installed within the handset to be counted as HAC rated. [2] This includes applications installed by a manufacturer at the direction of a service provider. [3] If a service provider requires specific applications which support voice calling and which have not been tested by the manufacturer, such applications must be tested to demonstrate compliance in order for the handset to be counted for meeting their obligation.

In addition, TIA notes that Footnote 5 of the Draft KDB carries over the language from the current KDB guidance, namely “The handset ... reported [in Form 655] must be validated by the supporting test report exhibits ... in the Equipment Authorization System (EAS).” Combined, the Draft KDB, raises several sets of questions:

- What is intended in the third sentence by saying a service provider “requires specific applications which support voice calling”? Does it mean that the service provider required the manufacturer to add the application to a handset model, even if subscribers are not required to use it?
- The guidance should expressly exclude from the meanings of “all voice applications” and “specific applications which support voice calling” video and other communications applications that are not ordinarily used with a device placed next to the ear.<sup>7</sup> This understanding of intended use for VoIP apps and services is consistent with the scope set forth in the Introduction of the Draft KDB, which appropriately limits test requirements to “handsets designed to be held to the ear.” To require HAC testing for a VoIP app or service that is not designed to be held to the ear would be as inconsistent as requiring HAC testing on an iPad with a 12.9-inch display. Intended use conditions apply to apps and services on a device as much as the device hardware itself.
- The third sentence suggests that the service provider may be required to conduct additional HAC testing independent of the manufacturer, but it does not specify how the HAC testing is to be conducted if the service provider is not working under the authorization of the manufacturer under Section 2.909(a) of the FCC’s rules.

In addition, Footnote 1 provides clarification for devices that are excluded from HAC testing requirements, but does not completely reflect the range of devices excluded from these

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<sup>7</sup> For example, applications such as Google Hangouts, Apple Facetime, and Skype are primarily intended for video communication, in which the device is not held to the user’s ear during use. These applications may also have an audio-only capability as an ancillary feature.

requirements, and could therefore create some confusion. OET should clarify this point by updating the footnote to read:

Section 20.19 currently excludes testing for air interfaces operating over licensed Public Safety, Private Mobile Radio Systems (PMRS), Commercial Mobile Radio Systems (CMRS) that are not “covered CMRS” as defined in Section 52.21(d), and non-terrestrial Mobile Satellite Service (MSS) networks. The term PMRS includes private networks that are designed and deployed to meet a business's specific communications needs. Such systems may include, for example, internal networks to support the operations of “power and petroleum companies, airlines, railroad, trucking and other transportation concerns, [and] manufacturing facilities.” FCC 15-155, ¶ 40, n111.

To the extent the Draft KDB is revised to clarify these issues, it should also provide guidance on the FCC’s intent in footnote 138 of the *2015 Order*, which states: “We note that, under Section 20.19(g) of the Commission’s rules, if a manufacturer or service provider changes the voice operations on a previously certified handset by installing additional software or through any other means, then in order to continue offering the handset as hearing aid-compatible, it must ensure that the relevant air interface remains hearing aid-compatible using worst-case results, and if not, must change the ratings and assign the handset a new model number.” The updated KDB should provide guidance on how footnote 138 is consistent with Section 20.19(g), which currently relates only to “physical changes” to a handset made by a manufacturer (service providers are not referenced in the current rule)<sup>8</sup> and what it means to “change the voice operations on a previously certified handset.”

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<sup>8</sup> Section 20.19(g) states: “Where a manufacturer has made physical changes to a handset that result in a change in the hearing aid compatibility rating under paragraph (b)(1) or (b)(2) of this section, the altered handset must be given a model designation distinct from that of the handset prior to its alteration.”

TIA looks forward to engaging with Commission staff on these important HAC issues.

Respectfully submitted,

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