

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

In the Matter of

Amendment of the Commission's Rules
Governing Hearing Aid-Compatible Mobile
Handsets

WT Docket No. 07-250

Section 68.4(a) of the Commission's Rules
Governing Hearing Aid Compatible
Telephones

WT Docket No. 01-309

Petition of American National Standards
Institute Accredited Standards Committee
C63 (EMC) ANSI ASC C63™

REPLY COMMENTS OF THE VOICE ON THE NET COALITION

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I. INTRODUCTION AND SUMMARY

The Voice on the Net ("VON") Coalition strongly supports the Commission's efforts to ensure that all consumers have access to a full range of communications choices. As leading communications innovators, VON Coalition members are committed to making their services, applications, and equipment accessible to all, including those with hearing impairments. Moreover, as communications pioneers, VON Coalition members believe that enabling innovators to innovate maximizes potential technological benefits to all consumers, including those with hearing impairments. For that reason, VON agrees with the Hearing Loss Association of America (HLAA) and Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI) that new hearing aid

compatibility (HAC) rules for emerging technologies should not be put into place any earlier than 2010.¹

As detailed below, there is no basis for immediate HAC regulation of emerging technologies. In the first instance, the Commission should not assume that HAC requirements are necessary to ensure the accessibility of new technology, which may not pose the same interference challenges as CMRS equipment. Instead, the Commission should consider future regulation only if and when a clear need arises. As required by the statute, the Commission cannot impose new HAC rules without carefully balancing the costs and benefits of additional regulation. Similarly, new requirements should be imposed only after development of appropriate technical standards. If the Commission considers adopting new rules, VON cautions the Commission to limit any HAC requirements for emerging technologies to specialized equipment that is specifically designed to provide wireless CMRS service, and to avoid regulating laptops, PCs and other devices of general applicability. Moreover, HAC requirements should not extend to standalone software applications. Finally VON encourages the Commission to take a number of additional steps to encourage the continued development of innovative voice communications technology.

II. THE COMMISSION SHOULD NOT PREMATURELY IMPOSE HAC REQUIREMENTS ON EMERGING TECHNOLOGIES.

A. VON Coalition Members Currently Offer HAC and HAC-Friendly Applications, Services, and Equipment.

Members of the VON Coalition already provide consumers with HAC and HAC-friendly communications choices. HAC requirements are necessarily equipment focused.

¹ Comments of the Hearing Loss Association of America and Telecommunications for the Deaf and Hard of Hearing at 6, WT Docket No. 07-250 (“Comments of HLAA/TDI”).

Communications software does not emit RF or otherwise interfere with hearing aid performance. Instead, hearing aid compatibility depends on the hardware, equipment and network, and not on applications used with hardware, equipment, and networks.

Accordingly, HAC requirements should continue to address hardware and network compatibility, and should not extend to standalone software applications. Moreover, the sheer flexibility of many emerging communications applications and services means that they can be used with traditional telephone equipment – equipment that is already covered by HAC requirements. Many interconnected VoIP services, for example, provide their users with analog terminal adaptors, or ATAs, into which users can plug their existing telephones. As a result, a wide range of innovative IP voice services are already available to those using hearing aids.

Providers of specialized IP voice equipment have recognized the importance of ensuring their equipment meets HAC standards, as demonstrated by existing offerings:

- All of Cisco's wired IP phones satisfy the Commission's hearing aid compatibility requirements.²
- Philips, GE, and Linksys offer Skype-certified hearing aid compatible devices.³
- Providers including Alcatel, Ericsson, Avaya and Aastra offer one or more hearing aid compatible IP phones.

As these real-world examples illustrate, the market and existing requirements are working to ensure that consumers with hearing disabilities that seek to benefit from IP communications can choose from a wide array of HAC phones and devices. Moreover,

² Hearing Aid Compatibility for Cisco Wired IP Phones, http://cisco.com/application/pdf/en/us/guest/products/ps379/c1037/cdcont_0900aecd8025f09b.pdf (last visited Jan. 4, 2008).

³ Stephen Pinches, Which Skype Phones are Hearing Aid Compatible?, Jan. 30, 2007, http://share.skype.com/sites/skypegear/2007/01/which_skype_phones_are_hearing.html.

because consumers are increasingly interested in converged communications choices, and because phones that offer wireline PSTN capability are covered by existing HAC requirements, manufacturers will continue to have strong incentives to offer HAC IP phones and devices.

The flexibility and freedom to innovate offered by IP communications are themselves valuable tools for members of the disabled community. IP services can offer the ability to combine text, voice, and video in a single communications stream, enabling a person with disability to rely on and combine multiple modes of communication. Users of these services are themselves innovating – Skype users have devised a “super-powered hearing aid” using Skype, and have also created a Skypetelex capability.⁴ Further, IP voice applications can be used with a wide range of equipment – including laptops and desktop computers and their wide range of speaker, headsets, and similar accessories – enabling users to customize their equipment to meet communications preferences or needs.

B. The Commission Should Not Extend HAC Requirements to Emerging Technologies in Advance of Technical Standards and Without Undertaking the Statutorily Required Consideration of Costs and Benefits.

In light of the existing choices in the market and the benefits driven by the flexibility and openness of IP voice solutions, it would be premature for the Commission to apply HAC requirements to emerging services such as Wi-Fi and VoIP. As an initial matter, the record before the Commission is inadequate to ensure the Commission can fully weigh the “costs and benefits” of new rules, as expressly required by the statute,⁵

⁴ *Id.*

⁵ 47 U.S.C. § 610(e).

before its self-imposed February 18, 2008 deadline. And the record provides no reason for the Commission to act in advance of the 2010 date suggested by HLAA/TDI.⁶

Even then, however, it is not clear that existing HAC rules should be extended to emerging technologies. The Commission should not presume that new technologies will pose interference concerns, and regulate reflexively on that assumption. As the Telecommunications Industry Association (TIA) notes, “there is no evidence showing that consumers with hearing loss would not be able to use new technologies, such as Wi-Fi.”⁷ In fact, there are reasons to believe that these technologies may not pose the same interference concerns as CMRS. TIA points out, for example, that many Wi-Fi devices, such as PC data cards, may not be used in close proximity to hearing aids.⁸ Similarly, Wi-Fi devices typically operate at lower power levels, reducing the risk of interference.⁹ As these examples demonstrate, it is simply too early to determine what regulatory intervention, if any, is necessary to address the HAC of emerging technologies.

The HAC statute makes it clear that the Commission may not impose new regulatory requirements on emerging technologies without carefully balancing the costs and benefits of those requirements. As detailed in the statute, the Commission must “specifically consider the costs and benefits” of any rules implementing the HAC statute, and new rules may “not discourage or impair the development of improved

⁶ Comments of HLAA/TDI at 6.

⁷ Comments of the Telecommunications Industry Association at 8, WT Docket No. 07-250 and WT Docket No. 01-309 (filed December 21, 2007) (“TIA Comments”); *see also* Comments of Research in Motion Limited at 20-21, WT Docket No. 07-250 and WT Docket No. 01-309 (filed December 21, 2007) (“RIM Comments”); Comments of Nokia Inc. at 7, WT Docket No. 07-250 and WT Docket No. 01-309 (filed December 21, 2007) (“Nokia Comments”) (“The imposition of HAC requirements on all emerging technologies . . . is a solution in search of a problem.”); Comments of Sony Ericsson Mobile Communications at 8, WT Docket No. 07-250 and WT Docket No. 01-309 (filed December 21, 2007) (“Sony Ericsson Comments”) (“[Sony Ericsson] does not believe there is a need to solve a problem that has yet to be demonstrated even exists.”).

⁸ TIA Comments at 7.

⁹ *Id.*

technology.”¹⁰ In light of the dearth of evidence that Wi-Fi and other emerging technologies limit the accessibility of telephone service, the undisputed ability of new technology to provide improved communications capabilities for all, and the risk that premature regulation will impose unnecessary costs and chill innovation, the record before the Commission cannot support immediate HAC regulation of emerging technologies. Moving forward, the Commission must act cautiously as it considers new regulatory requirements, remaining mindful of the statutory command that the development of improved technology not be discouraged or impaired.

The Commission is right to wonder how it might apply HAC requirements to emerging technologies before technical standards are established.¹¹ As the Commission has repeatedly recognized, “the existence of an established technical standard [is] a statutory requirement for imposing hearing aid compatibility.”¹² For this reason alone, the Commission cannot act to adopt new requirements applicable to emerging technologies until established technical standards are in place.¹³ As a practical matter, enabling the standards-setting process to go forward before adopting new requirements will ensure that industry is able to deliver reliable solutions to the hard of hearing in an orderly and efficient manner. There is no reason to believe that the standards-setting process will not proceed expeditiously, as ANSI ASC C63 indicates that “the proposed

¹⁰ 47 U.S.C. § 610(e).

¹¹ *Amendment of the Commission’s Rules Governing Hearing Aid-Compatible Mobile Handsets*, Second Report and Order and Notice of Proposed Rulemaking, 2077 LEXIS 8821 at ¶ 92 (“*HAC Order & NPRM*”).

¹² *See, e.g., Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, 22 FCC Rcd 8064, 8119 (¶ 145) (2007); *Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones*, 18 FCC Rcd 16753, 16769 (¶ 39) (2003); *Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones*, 16 FCC Rcd 20558, 20564 (¶ 16) (2001); *see also* 47 U.S.C. § 610(b)(1)(B).

¹³ *See also* RIM Comments at 16-17.

revision of the ANSI ASC C63® HAC standard will [include] the development of limits and procedures for new frequency bands and technologies.”¹⁴

Finally, the Commission’s discussion of emerging technologies in its NPRM focuses only on wireless technologies,¹⁵ and the HAC statute directs the Commission to adopt regulations ensure the accessibility of “telephone service.”¹⁶ The Commission cannot and should not adopt requirements that go beyond the scope of the HAC statute.

III. ANY HAC REQUIREMENTS FOR EMERGING TECHNOLOGIES SHOULD APPLY ONLY TO DEVICES SPECIALLY DESIGNED AND NEEDED TO EFFECTIVELY USE A TELEPHONE SERVICE

As discussed above,¹⁷ hearing aid interference is a concern raised by hardware devices, not software or services, and devices must therefore remain the focus of any HAC requirements. The statute expressly recognizes this fact, and imposes requirements only on “telephones.”¹⁸ Further, as the Commission considers whether to extend HAC requirements to new technologies, it must continue to capture only “telephones” and not general multi-function devices – such as PCs, laptops, or PDAs – that are designed to run a wide range of applications, or to devices (such as gaming consoles or portable music players) that are also incidentally capable of being used with voice communication applications or services.¹⁹

¹⁴ Comments from American National Standards Institute Accredited Standards Committee C63® (EMC) ANSI ASC C63® at 3, WT Docket No. 01-309 (filed Dec. 21, 2007).

¹⁵ See, e.g., *HAC Order & NPRM* at ¶ 89 (“We seek comment on whether our hearing aid compatibility rules should be modified to address new technologies being used and offered by manufacturers and providers in their wireless handsets and networks.”); *id.* at ¶ 91 (“[W]e seek comment generally on the application of hearing aid compatibility rules to VoIP applications provided over wireless technologies.”); *id.* at ¶ 92 (“We ask commenters to address . . . current and anticipated future use of VoIP applications over wireless networks.”).

¹⁶ 47 U.S.C. § 610(a).

¹⁷ See *supra* pp. 2-3.

¹⁸ 47 U.S.C. Sec. 610(b)(1).

¹⁹ This is not to suggest that PDAs that are CMRS handsets are not covered by HAC requirements to the extent that they are CMRS handsets.

In a similar context, the Commission recently extended its disability access requirements to interconnected VoIP services and equipment used with such services.²⁰ However, in applying Section 255 obligations to such equipment, the Commission limited coverage of its rules “to any equipment or CPE *specially designed* to provide interconnected VoIP service and that is needed to effectively use an interconnected VoIP service.”²¹ If the Commission should extend its rules here – and it should not, for the reasons detailed above – similar limits would be appropriate. Thus, only equipment that is “specially designed” and “needed to effectively use” a telephone service covered by the HAC statute should be addressed by any extension of HAC rules.

Any broader approach runs the risk of capturing an extraordinary range of devices capable of being used with an extraordinary range of applications and services. Rules that cover all Wi-Fi devices capable of voice communications, for example, could sweep in laptop computers, and all speaker and microphone accessories. The burden of regulation on this group of devices – many of which may *never* be used for any voice communications – would far outweigh the benefits, in contravention of the statute.²² Requiring compliance from such a wide array of potentially interoperable devices would also be impractical, as devices such as laptops and their accessories can be configured in innumerable ways, giving rise to a near-infinite set of compliance challenges. At worst, new requirements could create unnecessary limits on the freedom consumers currently enjoy to choose and combine computing devices as they see fit. In any event, imposing

²⁰ The Commission has not extended any regulation to VoIP services or equipment other than interconnected VoIP service and interconnected VoIP equipment. Because non-interconnected VoIP is not a substitute for traditional wireless or wireline telephone service, it would be particularly inappropriate for the Commission to extend its HAC requirements to non-interconnected VoIP equipment or services.

²¹ *Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996*, 22 FCC Rcd 11275, 11286 (¶ 20) (emphasis added) (“*VoIP Disability Access Order*”).

²² 47 U.S.C. § 610(e).

such overbroad regulation would not only fall outside the Commission’s express authority under the HAC statute but also could not be justified as “reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities.”²³

IV. THE COMMISSION SHOULD TAKE ADDITIONAL STEPS TO FOSTER CONTINUED INNOVATION.

A. Open Platform Networks.

In its Notice, the Commission asks whether it should adopt rules to address HAC “in the context of open platform networks.”²⁴ The Commission’s own inquiry acknowledges the substantial uncertainty about the effect of open platform requirements on accessibility; in the Commission’s own words, open platforms “may fundamentally alter the paradigm within which the hearing aid compatibility rules apply.”²⁵ As with the emerging technologies discussed above,²⁶ this uncertainty strongly counsels against immediate regulation of open platform networks. The Commission simply should not regulate unless and until there is evidence of a concrete need for Commission action. Further, VON agrees with the many commenters who have called for the Commission to delay any action with respect to open platform networks until after the conclusion of Auction 73.²⁷

B. Multi-Mode Handsets.

In its *NPRM*, the Commission tentatively concludes that “multi-mode phones should not be counted as compatible in any mode if they operate over air interfaces for

²³ *United States v. Southwestern Cable Co.*, 392 U.S. 157, 177-78 (1968).

²⁴ *HAC Order & NPRM* at ¶ 95.

²⁵ *Id.*

²⁶ *See supra* Part II.

²⁷ Comments of Motorola at 10-12, WT Docket No. 07-250 and WT Docket No. 01-309 (filed December 21, 2007) (“Motorola Comments”); Nokia Comments at 7 n.14; TIA Comments at 12; RIM Comments at 22.

which technical standards have not been established.”²⁸ The VON Coalition joins the commenters who object to this approach as placing unnecessary constraints on innovation. As RIM explains, “such a rule would . . . create a significant disincentive to the introduction of new technologies to market, automatically rendering them HAC non-compliant.”²⁹ The Commission should avoid this outcome by permitting phones to be HAC compliant where they conform with available technical standards.

C. De Minimis Exception.

The Commission should retain its *de minimis* exception to the HAC rules. This exception “is critical to the industry’s ability to promote the innovation of new technologies.”³⁰ As explained in the Joint Consensus Plan, the exception ensures that new technologies “entering the market have the opportunity to develop adequately prior to the imposition of any stringent HAC regulatory obligations,” while permitting manufacturers to avoid “diverting unnecessary resources” to soon-to-be discontinued technologies. TIA correctly notes that the “*de minimis* exception is important for all manufacturers, regardless of size, to enable them to expeditiously bring innovative products to market and determine whether consumer demand warrants a more expansive deployment of the new technology that may trigger HAC requirements later on.”³¹

V. CONCLUSION

VON urges the Commission not to assume that regulation is necessary to ensure the accessibility of emerging technology, and to extend its HAC requirements to new technologies only to address concrete obstacles to accessibility. At minimum, the

²⁸ *HAC Order & NPRM* at ¶ 84.

²⁹ RIM Comments at 16; *see also* Motorola Comments at 8.

³⁰ T-Mobile Comments at 10.

³¹ TIA Comments at 10.

Commission should not act before the 2010 date suggested by HLAA and TDI.

Premature and overbroad regulation could harm the interests of all consumers, including the hearing impaired, by chilling innovation and development of new products. In any event, premature regulation is not permitted by the HAC statute, which requires a careful weighing of costs and benefits, directs the Commission not to impair the development of improved technology, and permits regulation only after technical standards are established. If and when the Commission does consider additional regulation, it should be careful not to apply new rules to devices of general applicability such as laptops, PCs, and PDAs. By taking a careful approach that addresses compatibility problems as they arise, the Commission can ensure that consumers continue to benefit from the power of innovation to improve communications for all.

Respectfully submitted,



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