

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

In the Matter of)	
)	
Amendment of the Commission’s Rules)	WT Docket No. 07-250
Governing Hearing Aid Compatible Mobile)	
Handsets)	
)	
Section 68.4(a) of the Commission’s Rules)	
Governing Hearing Aid Compatible)	WT Docket No. 01-309
Telephones)	
)	
Petition of American National Standards)	
Institute of Accredited Standards Committee)	
C63 (EMC) ANSI ASC C63 [®])	

COMMENTS OF SONY ERICSSON MOBILE COMMUNICATIONS

Sony Ericsson Mobile Communications (USA) Inc. (“SEMC”) submits these comments in response to the Federal Communications Commission’s (“Commission”) *Second Report and Order and Notice of Proposed Rulemaking* (“*Notice*”) released November 7, 2007, in the above-referenced dockets.¹

I. INTRODUCTION

The Commission’s actions in the *Notice* not only ensure that people with hearing loss enjoy access to the continually expanding benefits of wireless service, but also address the significant engineering feats that manufacturers and service providers must engage in to implement existing hearing aid compatibility (“HAC”) requirements. With some exceptions noted below, the proposed multifaceted rules effectively address the needs of service providers, manufacturers, and consumers with hearing loss.

¹ See *Second Report and Order and Notice of Proposed Rulemaking*, FCC 07-192, WT Docket Nos. 07-250 and 01-309 (rel. Nov. 7, 2007).

In the *Notice*, the Commission requested the reexamination of its existing hearing aid compatibility requirements to ensure that they will continue to be effective in an evolving marketplace of new technologies and services.² The Commission undertook this review in accordance with its commitment in the *2003 HAC Order* to initiate a new rulemaking proceeding to evaluate:

- (1) whether to increase [or] decrease the 2008 requirement to provide 50 percent of phone models that comply with a U3 rating;
- (2) whether to adopt [hearing aid compatibility] implementation benchmarks beyond 2008; and
- (3) whether to otherwise modify the [hearing aid compatibility] requirements.”³

In the *Notice*, the Commission addressed several issues related to the Commission’s HAC rules, including tentatively concluding to adopt the recommendations detailed in AISP.4-HAC’s Joint Consensus Plan⁴ (which provided additional details regarding a proposal to modify existing Commission HAC requirements) as well as other recommendations from the Wireless Telecommunications Bureau’s *Staff Report* issued on October 5, 2007.⁵

SEMC appreciates the Commission’s serious consideration of the provisions of the Joint Consensus Plan filed by ATIS AISP.4-HAC.⁶ As the Commission

² See *Notice* at ¶ 3.

³ See Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones, *Report and Order*, WT Docket No. 01-309, 18 FCC Rcd 16753, at 16782-83 ¶ 74 (*2003 HAC Order*).

⁴ See Supplemental Comments of ATIS in WT Docket No. 06-203 (filed June 25, 2007) (“Joint Consensus Plan”).

⁵ See *Notice* at ¶ 5 (“As recommended in the Staff Report, we tentatively conclude substantially to adopt the provisions of the Joint Consensus Plan . . .”).

⁶ See *id.* at ¶ 4.

acknowledges, the Joint Consensus Plan’s proposals “are based on an interconnected set of rule changes” that “were developed through significant investigation and negotiations by the working group and its members.”⁷ Due to the complex and interconnected nature of the HAC rules proposed under the Joint Consensus Plan, SEMC wishes to stress that the Joint Consensus Plan, as presented to the Commission, is a complete plan, and any changes to the Plan should be closely reviewed by the Commission prior to acceptance and adoption.

In the *Notice*, the Commission concluded that it would not change the current *de minimis* requirement for HAC. In addition, the Commission tentatively adopted the *Staff Report* and tentatively concluded that it would modify the handset deployment deadlines in Section 20.19 along the framework proposed in the Joint Consensus Plan, including (1) modifying the upcoming February 18, 2008, benchmark that requires that manufacturers and wireless service providers ensure that at least 50 percent of their handset models over each air interface meet a U3/M3 or better rating for radio frequency (RF) interference reduction and (2) imposing new benchmarks for deploying handsets that meet standards for providing inductive coupling capability.⁸

II. SUPPORT FOR REVISED SCHEDULE FOR HAC-COMPLIANT HANDSETS

SEMC wholly supports the revisions to the current HAC rules proposed in the Joint Consensus Plan, with particular emphasis on the adjusted model percentages and deployment timeline. Those proposed requirements are:

that by February 18, 2008, thirty-three percent of manufacturer’s non-*de minimis*

⁷ *Id.* at ¶¶ 4-5.

⁸ *Id.* at ¶ 32.

portfolio models offered to service providers in the United States are M3-or-better phones; and

manufacturers that offer to carriers four (4) or more handset models in an air interface to offer at a minimum two (2) models in that air interface with T3-or-better capabilities (under either the C63.19-2006 Standard or any superseding standard then in effect) or to offer the following, whichever is greater in a given year:

- At least twenty (20) percent of their handset offerings to service providers in that air interface with T3-or-better capabilities under the C63.19-2007 Standard by February 18, 2009;¹⁵
- At least twenty-five (25) percent of their handset offerings to service providers in that air interface with T3-or-better capabilities under the C63.19-2007 Standard by February 18, 2010; and
- At least thirty-three (33) percent of their handset offerings to service providers in that air interface with T3-or-better capabilities under the C63.19-2007 Standard by February 18, 2011.⁹

As stated in the *Notice*, the FCC intends to issue a *Report and Order* addressing the issues in the *Notice* in advance of February 18, 2008, which is the current deadline by which 50% of handsets must meet U3/M3 ratings for RF interference reduction.¹⁰

Recognizing the need for certainty and to provide appropriate notice of possible changes to the current February 18, 2008, deadline, the Commission stayed enforcement of that deadline until April 18, 2008. SEMC suggests that subsequent deployment dates in the Joint Consensus Plan also reflect the Commission's adjusted stayed enforcement date.

Should there be a delay in the adoption and release of new rules, an extension of this stay is appropriate.

III. SUPPORT FOR JOINT CONSENSUS PLAN

In addition to the revised HAC compliant handset percentages and deadlines, SEMC supports the phase-out of the 2006 version of the C63.19 technical standard and

⁹ Joint Consensus Plan at 8-9

¹⁰ *Notice* at ¶ 99.

the phasing in of the 2007 version,¹¹ revised reporting requirements,¹² and the 2010 re-review of the Commission's HAC rules.¹³

IV. MULTI-MODE AND MULTI-BAND HANDSETS

Today the ANSI C63.19 standard applies to five digital air interfaces (CDMA, TDMA, GSM, WCDMA and iDEN) which operate in frequencies between 800 MHz and 3 GHz. Specificity of both frequency bands and air interfaces are required to determine the limits for HAC compliance and to implement the defined testing methodologies for the standard. It is axiomatic that a particular handset can only meet HAC standards for those frequencies and air interfaces for which HAC parameters and testing methodologies actually exist.

The Commission suggested in the *Notice* that a multi-mode and multi-band handset cannot be counted as satisfying HAC compliance in *any* band or mode if the handset also operates in bands or modes for which HAC technical standards have not been established.¹⁴ SEMC is concerned about an approach to the HAC regulations that would count a device as non-compliant even if that device *is* compliant in bands and/or modes for which standards exists. Under this approach, an otherwise compliant device would essentially be kicked out of compliance, and counted against the manufacturer, because it also operates in an additional mode or frequency band for which HAC limits and test methodologies have not been defined. This approach raises very serious public policy questions about the Commission's support for the introduction of new

¹¹ See *id.* at ¶ 61.

¹² See *id.* at ¶ 67-71.

¹³ See *id.* at ¶ 86.

¹⁴ See *id.* at ¶¶ 81 and 84.

technologies. A rule determining that cutting edge devices cannot be counted as HAC-compliant could slow down the roll out of new technologies in the U.S. market.

In addition, this approach assumes there will always be interference to hearing aids, that such interference will always be caused by the new band or mode, and, further, that a compliance standard for every new mode or new frequency band is required, even before there is knowledge that a problem with that mode or frequency band may exist. SEMC acknowledges the concern that some users may experience some interference with these new bands or air interfaces, even though the device in question has been deemed HAC compliant. Such identification could theoretically set improper expectations for certain users, even though SEMC believes that the majority of hearing aid users, using the latest digital aids offered, will have minimal—if any—interference from the handset.

SEMC therefore suggests that a better approach is to base the requirements for compliance or non-compliance of devices on scientific investigation of potential interference issues. This would require, at a minimum, that there is a problem to be solved—something that could be known through the communication between hearing aid manufacturers and mobile equipment manufacturers, allowing each to consult and gather additional user experience feedback of interference issues for the latest digital aids and wireless technologies offered.

The wireless handset manufacturing industry has a demonstrated, continuing commitment to resolving hearing aid interference between wireless devices and digital hearing aids. A demonstration of industry's commitment is the ongoing work in standards bodies, including ANSI and TIA, addressing HAC. Both of these groups have continuing studies addressing potential interference.

The tentative conclusion of paragraphs 81 and 84 of the *Notice* should not penalize manufacturers for innovating and providing more capabilities to handsets quickly. A more balanced approach—one that does not restrict (*i.e.*, count as non-compliant) devices with new technologies simply because a HAC standard has not been addressed nor has an interference issue been identified—is needed.

For these reasons, SEMC recommends that the Commission maintain its current rules regarding multi-mode handsets. That is, if a handset operates in a variety of air interfaces or frequency bands, and meets HAC requirements as defined in C63.19 for all air interfaces and frequency bands for which requirements exist, then the model is deemed HAC compliant. If the model includes support for air interfaces and frequencies for which HAC requirements have not been approved and released, the model should still be deemed HAC compliant until an interference issue is demonstrated.

V. *DE MINIMIS* EXCEPTION

In the Second Report and Order accompanying the *Notice*, the Commission determined that the current *de minimis* exception for carriers and manufactures would stay in place.¹⁵ The Commission also clarified that the *de minimis* exception applies on a per-air-interface basis.¹⁶ As noted in the Joint Consensus Plan, “under this exception, new air interfaces entering the market have the opportunity to develop adequately prior to the imposition of any stringent HAC regulatory obligations.”¹⁷ This allows new testing regimes to adequately define HAC test limits for these new technologies if needed.

¹⁵ See *Notice* at ¶ 31.

¹⁶ 47 C.F.R. § 20.19(e). The Commission adopted such a clarification in its *Order on Reconsideration and Further Notice of Proposed Rulemaking*, FCC 05-122, 20 FCC Rcd 11221 (rel. June 21, 2005).

¹⁷ Joint Consensus Plan at 10.

“Similarly, this exception permits the phase-out of older air interfaces based on market considerations without diverting resources to air interfaces that soon will be discontinued.”¹⁸ SEMC believes that the current *de minimis* exception allows manufacturers to continue introducing new technologies prior to the implementation of HAC capability standards—if any is needed—in the new technologies.

VI. PRODUCT REFRESH REQUIREMENTS

The Commission seeks comment on whether the requirement for “equipment manufacturers to meet a product refresh requirement consistent with the Joint Consensus Plan should be modified in any way.”¹⁹ As noted in the Joint Consensus Plan, “people with hearing loss should have the benefits afforded the non-disabled community by having access to new, advanced devices.”²⁰ In the Joint Consensus Plan manufacturers “have agreed to offer a mix of new and existing models so people with hearing loss have access to the latest technology.”²¹ SEMC believes that the manufacturers’ product refresh requirement as recommended in the Joint Consensus Plan offers a regular and constant advancement of HAC devices and should be adopted without modifications.

VII. Wi-Fi AND OTHER NEW HANDSET FUNCTIONALITIES

As stated above, SEMC does not believe there is a need to solve a problem that has yet to be demonstrated even exists. SEMC cannot support the expansion of regulations for the sake of regulating. SEMC agrees that Wi-Fi and other new

¹⁸ *Id.*

¹⁹ *Notice* at ¶ 54.

²⁰ Joint Consensus Plan at 9.

²¹ *Id.*

functionalities might require additional study before more meaningful and definitive discussions can occur regarding HAC.

The *Notice* neglects the question of *whether* to apply HAC rules to devices incorporating new functionalities, instead asking *how* the Commission can apply its existing rules. Rather than arbitrarily expanding rules to cover new functionalities, SEMC suggests that a need for such an expansion must first be demonstrated. A more deliberative approach would be to determine if a problem might exist in a particular area, rather than saddling new technologies with potentially unnecessary regulation.

VIII. CONCLUSION

SEMC supports the adoption of the Joint Consensus Plan with the points of clarification detailed above. SEMC is proud of its history of support to people with hearing loss, and will continue to work with all stakeholders—wireless carriers, hearing aid manufacturers, and organizations representing people with hearing loss—to ensure that all of its customers enjoy access to innovative wireless services.

Respectfully submitted,

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