

associated with digital CMRS networks that “offer real-time, two-way switched voice or data service that is interconnected with the public switched network and utilize an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls.”¹⁵³ In the *Notice*, the Commission sought comment on whether it should extend some or a portion of the hearing aid compatibility requirements under Section 20.19 to wireless handsets that may fall outside the definition of CMRS and the criteria in Section 20.19(a), such as handsets that operate on unlicensed Wi-Fi networks that do not employ “an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs.”¹⁵⁴ The Commission also sought comment on how its current hearing aid compatibility requirements apply to Mobile Satellite Services (MSS) providers that offer CMRS and whether any revisions to the hearing aid compatibility rules are appropriate respecting such providers.¹⁵⁵

75. Generally, wireless handset manufacturers and service providers argue against adopting hearing aid compatibility requirements for emerging technologies, such as Voice over Internet Protocol (VoIP) provided over Wi-Fi networks, while those technologies are in a nascent state of development. Instead, they suggest that the Commission consider adopting a rule during its anticipated 2010 review of the hearing aid compatibility rules.¹⁵⁶ Similarly, ANSI ASC C63 suggests that the appropriate place for working out issues of hearing aid compatibility with respect to new and emerging technologies is in the collaborative process of ANSI ASC C63.¹⁵⁷ On the other hand, HIA argues that the Commission should attend early on to the framing and adoption of hearing aid compatibility requirements for new technologies and new frequency bands, which will allow equipment designers and manufacturers to understand their obligations and to plan accordingly.¹⁵⁸ In addition, HLAA and TDI contend that the hearing aid compatibility rules should apply to all emerging technologies so that affected consumers will not be left without access to these new technologies and networks. They also suggest that companies should have procedures in place to automatically include hearing aid compatibility in new designs and emerging technologies. They further state that the Wi-Fi and VoIP industries should be given notice now that the Commission will be prepared to issue a rule on emerging technologies at the 2010 review.¹⁵⁹

76. With respect to MSS issues raised in the *Notice*, AT&T contends that terrestrial-capable MSS handsets with an ancillary terrestrial component should be subject to hearing aid compatibility requirements and deadlines in order to fulfill the Commission’s statutory obligations and achieve competitive parity.¹⁶⁰ SIA, by contrast, urges the Commission not to apply hearing aid compatibility requirements to MSS providers at this time,¹⁶¹ or, if the Commission were to impose requirements, at a minimum, (1) to provide manufacturers and providers sufficient time to study how any new obligations could be implemented in the context of each MSS system’s technology, (2) to grandfather handsets

¹⁵³ 47 C.F.R. § 20.19(a).

¹⁵⁴ See *Notice*, 22 FCC Rcd at 19702-03 ¶ 89.

¹⁵⁵ *Id.* at 19700 ¶ 79.

¹⁵⁶ See, e.g., AT&T Comments at 7; RIM Comments at 21; TIA Comments at ii, 7; Apple Reply Comments at 9-10; Nokia Reply Comments at 6-7; RIM Reply Comments at 6; VON Coalition Reply Comments at 4-7.

¹⁵⁷ See ANSI ASC C63 Reply Comments at 3.

¹⁵⁸ See HIA Comments at 2.

¹⁵⁹ See HLAA/TDI Comments at 8.

¹⁶⁰ AT&T Reply Comments at 10-11.

¹⁶¹ SIA Comments at 3-6.

already in existence or under development, and (3) to apply a *de minimis* exception to all MSS providers. Specifically, SIA requests that MSS providers be given three years after they launch service or after the effective date of new rules to come into compliance with hearing aid compatibility requirements.¹⁶²

77. Discussion. In the Policy Statement above, we conclude that our wireless hearing aid compatibility rules must provide people who use hearing aids and cochlear implants with continuing access to the most advanced and innovative communications technologies as they develop, while at the same time maximizing the conditions for innovation and investment.¹⁶³ Consistent with this principle, we propose that our hearing aid compatibility requirements should apply to all customer equipment used to provide wireless voice communications over any type of network among members of the public or a substantial portion of the public via a built-in speaker where the equipment is typically held to the ear, so long as meeting hearing aid compatibility standards is technologically feasible and would not increase costs to an extent that would preclude successful marketing.

78. Statutory Scope. First, we propose to find that the scope of the Hearing Aid Compatibility Act broadly encompasses devices used to provide voice communications. The Hearing Aid Compatibility Act directs the Commission to establish regulations to ensure reasonable access by persons with hearing loss to “telephone service.”¹⁶⁴ To achieve this end, the Act directs that we require “telephones” to meet hearing aid compatibility standards. The Act provides exemptions for, among other things, “telephones used with public mobile services” and “telephones used with private radio services,”¹⁶⁵ but stipulates, as discussed above, that the Commission should periodically review these exemptions and revoke or limit them if necessary to reflect developments over time in technology and usage patterns.¹⁶⁶ The Commission modified the exemption for wireless phones in 2003.¹⁶⁷

79. Neither the Hearing Aid Compatibility Act nor the broader Communications Act defines the terms “telephone” or “telephone service.” In view of the other provisions in the Act, however, we propose to interpret the term “telephone,” as used in Section 710, to encompass anything that is commonly understood to be a telephone or to provide telephone service, as that understanding may evolve over time, regardless of regulatory classifications evoked elsewhere in the Communications Act.¹⁶⁸ We seek comment on this proposed finding and whether such a reading best fulfills the Congressional intent that “all persons should have available the best telephone service which is technologically and economically feasible.”¹⁶⁹ Moreover, we seek comment on whether an evolving definition of “telephone,” for purposes of the Hearing Aid Compatibility Act, is consistent with the directive that the Commission revoke or limit the exemptions for public mobile services and private radio services over

¹⁶² *Id.* at 2, 6-7.

¹⁶³ *See supra*, Section III.

¹⁶⁴ 47 U.S.C. § 610(a).

¹⁶⁵ 47 U.S.C. § 610(b).

¹⁶⁶ 47 U.S.C. § 610(b)(2)(C). *See 2003 Hearing Aid Compatibility Order*, 18 FCC Rcd at 16765 ¶ 27 (noting that Congress initially exempted wireless phones because it then viewed them as complements, not substitutes, for wireline telephones), *citing* H.R. Rep. No. 100-674, at 8 (1988) (*House Report*).

¹⁶⁷ *See 2003 Hearing Aid Compatibility Order*, 18 FCC Rcd 16753.

¹⁶⁸ Congress enacted the Hearing Aid Compatibility Act in 1988 to provide access to telephone service for individuals with hearing loss. In adopting the Act, the House of Representatives Report stated that “the inability to use all telephones imposes social and economic costs on not only the hearing impaired, but the whole nation.” *See House Report* at 7.

¹⁶⁹ 47 U.S.C. § 610, Note 1.

time to reflect developments in technology and usage patterns.¹⁷⁰

80. Through the Act, Congress charged the Commission with the responsibility of establishing regulations as necessary to ensure access to telephone service by persons with hearing loss.¹⁷¹ As cell phone use became integrated into everyday American life, the Commission lifted the prior exemption for digital wireless telephones and subjected them to hearing aid compatibility requirements under its rules.¹⁷² We propose to find that to carry out Congress's mandate to ensure access to telephone service by persons with hearing loss, it would serve the public interest to interpret the definition of telephone to include wireless handsets that are used for voice communications among members of the public or a substantial portion of the public, regardless of whether the services provisioned through the handset may fall beyond the currently covered category of CMRS. We seek comment on this proposed finding.

81. In addition, we propose to find that this broad interpretation of the definition of telephone should include multi-use devices that can function as traditional telephones typically used by being held to the ear, but which may have other capabilities and serve additional purposes. While we recognize that rendering the telephone feature of such a device hearing aid-compatible may require adjustments to other features over which we might otherwise not have jurisdiction, we propose to find that under these circumstances, we nevertheless would have authority to require adjustments to both telephone features and other aspects of the device in order to render the device hearing aid-compatible. Under the Hearing Aid Compatibility Act, the Commission is specifically directed to establish such regulations as are necessary to ensure access to telephone service by persons with hearing loss. To the extent achievement of this goal may require imposing hearing aid compatibility requirements on multi-use devices with telephonic capabilities, as described above, we propose to find that we have jurisdiction to require hearing aid compatibility for such devices, and we seek comment on this proposed finding.

82. *Scope of Proposed Rule.* Our proposal herein to extend the scope of the hearing aid compatibility rules is limited to wireless handsets that afford an opportunity to communicate by voice with members of the public or with users of a network that is open to the public or a substantial portion of the public.¹⁷³ Thus, in a manner broadly consistent with the distinction drawn in the Hearing Aid Compatibility Act between "public mobile services" and "private radio services," we propose not to extend the rules to certain non-interconnected systems that are used solely for internal communications, such as public safety or dispatch networks.¹⁷⁴ While we recognize that there may be important interests in

¹⁷⁰ 47 U.S.C. § 610(b)(2)(C). We note in particular that "telephones" includes devices used to provide private radio services, thereby indicating that the term is not limited to devices providing services that are solely interconnected services. "Private radio services" is defined as "private land mobile radio services and other communications services characterized by the Commission in its rules as private radio services." 47 U.S.C. § 610(b)(4)(C). In 1994, Congress amended Section 332 of the Communications Act, replacing the public mobile service and private radio service categories with CMRS and private mobile [radio] service (PMRS). *See 2003 Hearing Aid Compatibility Order*, 18 FCC Rcd at 16764-65 ¶ 26. PMRS includes certain dispatch, monitoring, and other services that are not interconnected. *See* 47 C.F.R. § 20.3.

¹⁷¹ *See* 47 U.S.C. § 610(a).

¹⁷² *2003 Hearing Aid Compatibility Order*, 18 FCC Rcd 16753.

¹⁷³ Our proposal is limited to wireless handsets consistent with the scope of ANSI Standard C63.19. Thus, cordless telephones, including those commonly used in wireless PBXs, that are covered under Electronics Industries Association Recommended Standard RS-504 would remain subject to Section 68.4 of the Commission's rules and would not be affected by this proposal.

¹⁷⁴ We note that the statutory definitions of "public mobile services" and "private radio services" refer to regulatory distinctions that are no longer reflected in the Act and our rules, and that do not cover many services introduced (continued....)

affording access to these systems to employees who use hearing aids, we tentatively conclude that given the very different circumstances of the market for these handsets, and in the absence of an existing universe of handsets meeting hearing aid compatibility standards, the burdens on manufacturers and system operators of satisfying hearing aid compatibility requirements would outweigh the public benefits. We seek comment on this analysis, and in particular on whether the four criteria for revoking or limiting the wireless exemption are satisfied for any such internal systems.

83. At the same time, our proposal would include all otherwise covered handsets that are used for voice communication with members of the public or a substantial portion of the public, including those that may not be interconnected with the public switched telephone network but can access another network that is open to members of the public. To the extent a handset otherwise used for internal communications can also be used for voice communications with members of the public outside the internal network, it would also be covered under our proposal.¹⁷⁵ In addition, our proposal would cover handsets used for MSS that otherwise fall within the scope of the rule. In addressing the four criteria set forth below, commenters should consider whether the circumstances surrounding these or any other classes of handset should cause such handsets to be excluded from the rule.

84. *Statutory Criteria.* Under the Hearing Aid Compatibility Act, we are to revoke or limit the wireless exemption if four criteria are satisfied: (1) such revocation or limitation is in the public interest; (2) continuation of the exemption without such revocation or limitation would have an adverse effect on individuals with hearing loss; (3) compliance with the requirements adopted is technologically feasible for the telephones to which the exemption applies; and (4) compliance with the requirements adopted would not increase costs to such an extent that the telephones to which the exemption applies could not be successfully marketed.¹⁷⁶ We seek comment on whether these criteria are met with respect to handsets used for voice communications with members of the public or a substantial portion of the public.

85. *Adverse Effect on People with Hearing Loss.* We propose to find that failure to extend hearing aid compatibility requirements broadly to handsets used for voice communications with members of the public or a substantial portion of the public would have an adverse effect on people with hearing loss. In the *2003 Hearing Aid Compatibility Order*, we determined that continuing to exempt handsets providing certain CMRS from hearing aid compatibility requirements would have an adverse effect on individuals with hearing loss because the lack of hearing aid-compatible digital phones rendered them unable to take advantage of features of these phones that were becoming increasingly central to American life.¹⁷⁷ We propose to find that this is now true broadly for the range of handsets used to provide wireless voice communications, including those operating over new and developing technologies. If these new handsets are not made hearing aid-compatible, consumers with hearing loss would be largely denied the opportunity to use advanced functionalities and services that are rapidly becoming commonplace in our society. Given the rapid pace of technological innovation and the development of new modes of wireless voice communication, we are concerned about the consequences of waiting until a particular technology

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since 1988. Moreover, the Act clearly grants us authority to revoke or modify the exemption for both public mobile services and private radio services. Nonetheless, while we do not rely on the public/private distinction to draw the line between those devices that we propose to cover under the hearing aid compatibility requirements and those we do not, we find the existence of the statutory distinction to be instructive.

¹⁷⁵ See *supra*, para. 66 (extending hearing aid compatibility rules to handsets that a business distributes to its employees primarily for internal communications but that can also be used for external voice communications within the scope of Section 20.19(a)).

¹⁷⁶ 47 U.S.C. § 610(b)(2)(C).

¹⁷⁷ *2003 Hearing Aid Compatibility Order*, 18 FCC Rcd at 16766-68 ¶¶ 30-34.

is in widespread use before beginning a proceeding to determine that lack of access to that technology adversely affects individuals with hearing loss. Rather, we suggest that it is the inability to access innovative technologies *as they develop* that has an adverse effect. We therefore propose, in order to encourage manufacturers to consider hearing aid compatibility at the earliest stages of the product design process, to establish a broad scope for hearing aid compatibility obligations that is not dependent on particular forms of network technology. We propose to find that this broad scope is necessary to fulfill the goal of the Hearing Aid Compatibility Act that people who use hearing aids and cochlear implants have access to the fullest feasible extent to all means of voice communication. We seek comment on this analysis.

86. *Public Interest.* We also propose to find that expanding the scope of our hearing aid compatibility requirements as described would serve the public interest. In 2003, we found that modifying the wireless hearing aid compatibility exemption promoted the public interest because, among other reasons, it enabled people with hearing loss to enjoy the public safety and other benefits of digital wireless phones and it enabled all consumers to communicate more easily with those who have hearing loss.¹⁷⁸ The Hearing Aid Compatibility Act makes clear that consumers with hearing loss should be afforded equal access to communications networks to the fullest extent feasible.¹⁷⁹ To ensure the public interest is served in such fashion, our stated policy is to encourage manufacturers to consider hearing aid compatibility at the earliest stages of the product design process. Commenters should address our proposed finding that further modification of the exemption to reach handsets using new technologies is in the public interest today.

87. In addition, we are unconvinced to date by arguments that applying hearing aid compatibility requirements to MSS would not confer significant public benefits.¹⁸⁰ To the contrary, even if MSS has relatively few consumer users, both users who subscribe as individuals and those who are provided access to MSS by their employers would benefit from the option to obtain hearing aid-compatible telephones.¹⁸¹ Furthermore, the usage of MSS may increase. Indeed, due to its ubiquitous coverage and its resistance to disruption from terrestrial disasters, in some situations MSS has important advantages over terrestrial wireless service.¹⁸² Therefore, we propose to find that failure to apply hearing aid compatibility requirements to MSS handsets would adversely affect individuals with hearing loss, and that it would serve the public interest to ensure that individuals with hearing loss have access to hearing aid-compatible MSS handsets.¹⁸³ We seek comment on this analysis.

88. *Technological Feasibility.* In the 2003 *Hearing Aid Compatibility Order*, we found that meeting hearing aid compatibility standards was technologically feasible for the telephones covered by

¹⁷⁸ *Id.* at 16768-69 ¶¶ 35-37.

¹⁷⁹ 47 U.S.C. § 610 note.

¹⁸⁰ See SIA Comments at 3-6.

¹⁸¹ As discussed above, we are applying our hearing aid compatibility rules to include otherwise covered handsets that are provided by an employer for internal communications if they also have the capability to be used for voice communications outside the internal network. See *supra*, para. 66.

¹⁸² Federal Communications Commission, *Connecting America: The National Broadband Plan*, at 87 (2010); see also SkyTerra Communications, Inc., Transferor and Harbinger Capital Partners Funds, Transferee, Applications for Consent to Transfer of Control of SkyTerra Subsidiary, LLC, *Memorandum Opinion and Order and Declaratory Ruling*, 24 FCC Rcd 3059, 3077 ¶ 30 (IB 2010).

¹⁸³ We further note that there is no record evidence that achieving hearing aid compatibility for MSS handsets is technologically infeasible or would impose costs that would preclude marketability.

that order in large part because several handsets were already on the market that met those standards.¹⁸⁴ To the extent that handsets are currently on the market or are planned for introduction that fall within the rule coverage that we propose today, but that are not covered by the existing rule, we seek comment on whether they would meet the existing ANSI standard (or a similar performance standard, for frequency bands and air interfaces that are not addressed by the existing standard). Moreover, because the hearing aid compatibility standards are already being met for handsets that operate on a variety of 2G and 3G air interfaces over two well separated frequency bands, we consider it likely, in the absence of evidence to the contrary, that the same standards could also be met for handsets used for similar services that are not within the class of currently covered CMRS. While we recognize that technological feasibility cannot be predicted with certainty for future handsets, we note that the Hearing Aid Compatibility Act expressly provides for waivers for new telephones or telephones associated with a new technology or service in cases of technological infeasibility.¹⁸⁵ Therefore, absent evidence that meeting hearing aid compatibility standards is not technologically feasible for any class of handsets or service, we anticipate that compliance will be technologically feasible. Commenters arguing that compliance is not technologically feasible should provide specific engineering evidence related to a defined class of handsets.

89. We seek comment on how our hearing aid compatibility rules should address circumstances where voice capability may be enabled on a handset by a party other than the manufacturer, particularly where adding the new voice capability may affect operating parameters of the handset such as the frequency range, modulation type, maximum output power, or other parameters specified in the Commission's rules. Our rules for equipment authorization hold the grantee to be the responsible party to ensure continued compliance of the handset and require the grantee to inform the Commission if these parameters change.¹⁸⁶ We seek comment on the proper procedures for a manufacturer to test the hearing aid compatibility of voice functions that are not initially installed into the phone but may be enabled, for example, by the installation of a software program that affects the circumstances under which the transmitter operates.¹⁸⁷ We seek comment on whether there are other ways to ascertain and regulate the hearing aid compatibility of such functions, for example, at the time the service provider or applications store enables that software. We also seek comment on the appropriate regulatory treatment if the hearing aid compatibility of these functions cannot be tested; in particular, whether a handset that meets hearing aid compatibility standards for all voice operations built into the phone but can also accommodate software-added voice operations that cannot be tested may be counted as hearing aid-compatible.¹⁸⁸ Commenters should consider handsets that can provide additional voice capabilities to those already available in the off-the-shelf handset via the installation of software, as well as handsets whose only, or initial, voice capability is not incorporated off the shelf but is instead available through commercial sources. In addressing these issues, commenters should consider how voice services may be offered over new technologies such as WiMax and LTE interfaces and who may manage these

¹⁸⁴ 2003 *Hearing Aid Compatibility Order*, 18 FCC Rcd at 16771, 16774 ¶¶ 44, 49. We also discussed the availability of technology that could be incorporated into phones to enable them to meet the standards. *Id.* at 16772-74, ¶¶ 45-48.

¹⁸⁵ 47 U.S.C. § 610(b)(3).

¹⁸⁶ See 47 C.F.R. §§ 2.909, 2.932, 2.1043.

¹⁸⁷ We note that unless a phone is approved as a Software Defined Radio (SDR) under Section 2.944(b) of our rules, third party software cannot modify "the circumstances under which the transmitter operates in accordance with Commission rules." 47 C.F.R. § 2.944(b).

¹⁸⁸ As an interim measure, such handsets may be considered hearing aid-compatible but must be labeled as not having been tested for all operations. See *supra*, Section IV A 3.

capabilities.

90. *Marketability.* We previously found that the costs of compliance would not preclude successful marketing for phones covered under the current rules because some phones meeting the standard for acoustic coupling compliance were already being marketed, the modifications needed to achieve inductive coupling capability did not appear unduly costly, and increased demand was anticipated to drive down production costs.¹⁸⁹ Based on the number of hearing aid-compatible models that are already being successfully marketed across multiple air interfaces and frequency bands, we anticipate, in the absence of convincing evidence to the contrary, that other telephones offering similar capabilities and meeting the same or comparable compliance standards could also be successfully marketed. We seek comment, supported by evidence, on whether this is so, and whether there is any class of handsets for which the cost of achieving compliance would preclude successful marketing. Again, we note the availability of waivers in the event future new telephones or telephones used with new technologies could not be successfully marketed due to hearing aid compatibility compliance costs.¹⁹⁰

91. Absent convincing evidence of technological infeasibility or costs that preclude marketability, we intend to apply to all handsets that will be covered under our broadened rule, after an appropriate transition period,¹⁹¹ the same hearing aid compatibility requirements that apply to currently covered handsets. We seek comment on whether, for reasons of technological infeasibility or prohibitive costs, these numerical benchmarks or other rule provisions cannot be applied to any class of handsets. Again, we seek specific evidence as to why particular requirements cannot be met and what alternative requirements would be feasible and appropriate.

92. *Transition Period.* Ever since the Commission adopted the first wireless hearing aid compatibility rules in 2003, we have consistently recognized that it takes time for handsets with new specifications to be designed, produced, and brought to market, and accordingly we have afforded meaningful transition periods before new hearing aid-compatible handset deployment benchmarks and other requirements have become effective.¹⁹² For example, the initial benchmarks for acoustic coupling compatibility became effective only two years after the *2003 Hearing Aid Compatibility Order*.¹⁹³ For inductive coupling capability, we afforded three years in recognition that greater design changes might be necessary to meet the standard.¹⁹⁴ Similarly, our limited delegation of authority to WTB and OET to adopt new technical standards provides that any new obligations imposed as a result of such standards cannot become effective on manufacturers and Tier I carriers less than one year after release of the adopting order, and on other service providers less than 15 months after release.¹⁹⁵ In the Second Report and Order above, we provide that newly launched models must meet hearing aid compatibility standards for new frequency bands and air interfaces in order to be counted as hearing aid-compatible beginning 12

¹⁸⁹ *2003 Hearing Aid Compatibility Order*, 18 FCC Rcd at 16775 ¶¶ 51-52.

¹⁹⁰ 47 U.S.C. § 610(b)(3).

¹⁹¹ *See infra*, paras. 92-93.

¹⁹² We note that our rules only require, on a going-forward basis, that manufacturers and service providers offer minimum numbers of hearing aid-compatible models. So long as these benchmarks are met, we do not limit, and do not propose to limit, the sale of any handset that does not meet hearing aid compatibility standards.

¹⁹³ *See 2003 Hearing Aid Compatibility Order*, 18 FCC Rcd at 16780 ¶ 65. We note that the benchmarks set forth numeric obligations that do not necessarily require existing models to be retrofitted or discontinued.

¹⁹⁴ *Id.* at 16781 ¶ 71.

¹⁹⁵ 47 C.F.R. § 20.19(k)(1).

months after the standard is adopted by the Commission,¹⁹⁶ and we provide various two-year transition periods for manufacturers and service providers that will be newly excluded from the *de minimis* rule.¹⁹⁷

93. We seek comment on the appropriate transition period for applying hearing aid compatibility benchmarks and other requirements to lines of handsets that are outside the subset of CMRS that is currently covered by Section 20.19(a). Would a two-year transition be appropriate, consistent with the lead time the Commission afforded to comply with the original requirements for acoustic coupling compatibility? Would a shorter period, such as one year, be reasonable given that manufacturers are already meeting hearing aid compatibility requirements for currently covered classes of handsets, and many of the engineering solutions reached for those handsets may be transferrable to others? Is it likely that many handsets will already meet hearing aid compatibility standards either as already marketed or as currently planned, and therefore all that will be required is testing of existing handsets rather than introduction of new products? On the other hand, are there special design difficulties that may render a longer transition period necessary for some classes of handsets? For example, are there any special characteristics of satellite transmission that may require particular transition rules for MSS?¹⁹⁸ In consideration of the time needed for phones to progress from the production line to service providers' offerings, should the transition period be longer for service providers than for manufacturers, and should it be longer for smaller service providers than for Tier I carriers?¹⁹⁹ Parties are invited to comment on these and any other transition issues, either for all newly covered handsets or some subset of those handsets.

B. In-Store Testing Requirement for Independent Retailers

94. Background. Section 20.19(c) and (d) of the Commission's rules requires that wireless service providers make their hearing aid-compatible handset models available for consumer testing in each retail store that they own or operate.²⁰⁰ This testing requirement does not apply to non-service providers, such as individuals, independent retailers, importers, or manufacturers. In the *2007 Second Report and Order*, the Commission found that the record at that time did not support a change to the in-store testing requirement, but it sought further comment on this issue in the *Notice* in light of "changes to the marketplace and regulatory environment since 2005."²⁰¹

95. Discussion. We seek further, more targeted comment on whether the in-store testing requirement should be extended to some or all retail outlets other than those owned or operated by service providers. Given the growth of new channels of distribution, extension of the in-store testing requirement would help to ensure that consumers have the information they need to choose a handset that will operate correctly with their hearing aid or cochlear implant. We seek comment as to whether, if we do extend the in-store testing requirement to some retail stores other than those owned or operated by service providers, we should extend it to all entities that sell handsets to consumers through physical locations²⁰² or whether

¹⁹⁶ See *supra*, para. 33.

¹⁹⁷ See *supra*, paras 49-50.

¹⁹⁸ We note that SIA has suggested a three-year transition period before hearing aid compatibility requirements are applied to handsets that are used to provide MSS. SIA Comments at 7.

¹⁹⁹ See *First Report and Order*, 23 FCC Rcd at 3424 ¶ 46 (affording service providers other than Tier I carriers an additional three months to meet deployment benchmarks in recognition of delays they encounter obtaining new model handsets from manufacturers and vendors).

²⁰⁰ 47 C.F.R. § 20.19(c), (d).

²⁰¹ *2007 Second Report and Order*, 22 FCC Rcd at 19681 ¶ 27; *Notice*, 22 FCC Rcd at 19705-06 ¶ 97.

²⁰² We recognize that it is infeasible to require an opportunity for testing in advance of purchase for online sales.

some of these retailers should be excluded from the requirement based on their general customer service practices, the types or numbers of handsets that they sell, their size, or other considerations.

96. In addition to allowing consumers to test handsets, we seek comment on whether we should require independent retailers to allow a customer with hearing loss to return a handset without penalty, either instead of or in addition to an in-store testing requirement. We note that the Commission previously encouraged wireless service providers to provide a 30 day trial period or otherwise be flexible on their return policies for consumers seeking access to compliant phones.²⁰³ We reiterate that a flexible return policy could help consumers with hearing loss by providing them with additional time and opportunity to ensure that their handset is compatible with their hearing aid.

97. We also seek comment on the Commission's authority to extend the in-store testing requirement beyond service providers. First, we seek comment on interpreting Sections 1 and 2 of the Communications Act,²⁰⁴ coupled with that Act's Section 3 definition of "radio communications,"²⁰⁵ to cover retail operations that have become enmeshed in the provision of wireless service.²⁰⁶ We seek comment on whether a retailer engaged in the sale of wireless handsets is subject to our general jurisdictional grant because it is engaged in providing "services," including the sale of "instrumentalities, facilities, [and] apparatus . . . incidental to . . . transmission."

98. Further, the Act authorizes the Commission to "make reasonable regulations . . . governing the interference potential of handsets which in their operation are capable of emitting radio frequency energy . . . in sufficient degree to cause harmful interference to radio communications . . ."²⁰⁷ The Act further provides that "[n]o person shall . . . sell, offer for sale, . . . , or use devices, which fail to comply with regulations promulgated pursuant to this section."²⁰⁸ We seek comment on whether expanding in-store testing requirements to help consumers operate equipment in a manner that does not cause interference to their hearing aids would fall within our jurisdiction under these provisions. In addition, the language of the Hearing Aid Compatibility Act itself is expansive, and it clearly envisions that the Commission should exercise its mandate broadly by "establish[ing] such regulations as are necessary" to ensure access to telephone service by persons with hearing loss.²⁰⁹ We seek comment on whether this language provides a basis for exercising our jurisdiction over additional parties so that we may continue to fulfill the mandate of the Hearing Aid Compatibility Act.

C. GSM Operations at 1900 MHz

99. In the Second Report and Order above, we amend our rules so that a manufacturer or

²⁰³ See *2003 Hearing Aid Compatibility Order*, 18 FCC Rcd at 16788 ¶ 93; *2005 Reconsideration Order and Further Notice*, 20 FCC Rcd at 11240 ¶ 40.

²⁰⁴ 47 U.S.C. §§ 151, 152(a).

²⁰⁵ 47 U.S.C. § 153(33). Section 3(33) defines "communications by radio" as including not only "transmission" of content, but also "all instrumentalities, facilities, apparatus, and services . . . incidental to such transmission."

²⁰⁶ We note that, in the past, the Commission has found that its authority to impose hearing aid compatibility requirements extended to entities beyond service providers and manufacturers. See *Access to Telecommunications Equipment by the Hearing Impaired and Other Disabled Persons*, 49 Fed. Reg. 1352, 1357-58 ¶¶ 31-36 (Jan. 11, 1984).

²⁰⁷ 47 U.S.C. § 302a(a).

²⁰⁸ 47 U.S.C. § 302a(b).

²⁰⁹ 47 U.S.C. § 610(a); see also *House Report* at 7 (stating that "the inability to use all telephones imposes social and economic costs on not only the hearing impaired, but the whole nation").

service provider that offers one or two handset models over the GSM air interface, which would not have to offer any hearing aid-compatible GSM models but for its size, may meet its hearing aid compatibility deployment obligation by offering one handset that allows consumers to reduce the maximum transmit power only for operations over the GSM air interface in the 1900 MHz band by up to 2.5 decibels and that meets the criteria for an M3 rating after such power reduction.²¹⁰ We here seek comment on whether we should treat such handsets as hearing aid-compatible for all purposes.

100. Section 20.19(b) of our rules provides that a newly certified handset is hearing aid-compatible if it meets the standard set forth in the 2007 revision of ANSI Standard C63.19,²¹¹ and that standard states that the handset must be tested using its maximum rated RF output power.²¹² As discussed above, the requirement to test for hearing aid compatibility at full power serves the important goal of ensuring that people with hearing loss have equal access to all of the service quality and performance that a given wireless phone provides.²¹³ At the same time, meeting the RF interference reduction standard for phones operating over the GSM air interface in the 1900 MHz band poses significant technical challenges, particularly for phones with certain desirable form factors.²¹⁴ Moreover, as a legacy 2G network, GSM is in the process of being supplanted by newer and more powerful technologies.²¹⁵ Under these circumstances, we seek comment on whether it is in the public interest to relax the requirement to test handsets for hearing aid compatibility at full power in order to facilitate the near-term availability of desirable handsets to consumers. We welcome data on the effects that a 2.5 dB reduction in maximum power output will have on coverage, as well as any other effects on consumers with or without hearing loss. In addition, we ask commenters to address how the proposed revision of ANSI Standard C63.19, which would make it approximately 2.2 dB easier for a GSM phone to achieve an M3 rating,²¹⁶ should affect our analysis. Does the expected revision, by making it likely that many handsets will no longer need to reduce their power to meet the M3 criteria, ameliorate any negative effects of a rule change by rendering it less likely that companies will use that rule change beyond the near term? Or does the imminent prospect of a standards change that may largely eliminate the apparent problem counsel against further adjustments to our rules to address that problem?

101. We propose to find that if we were to extend the ability to meet hearing aid compatibility standards by allowing the user to reduce the maximum power for GSM operations in the 1900 MHz band, we would do so subject to the same conditions that we have imposed in the context of the *de minimis* rule. Thus, the handset would have to operate at full power when calling 911, and the manufacturer or service provider would have to disclose that activation of a special mode is required to meet the hearing aid compatibility standard and must explain how to activate the special mode and the possibility of a loss of coverage in the device manual or product insert.²¹⁷ We seek comment on these and any other possible conditions.

²¹⁰ See *supra*, paras. 51-56.

²¹¹ 47 C.F.R. § 20.19(b), (b)(1)(ii).

²¹² See IEEE American National Standard Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids, ANSI C63.19-2007; see also *OET Guidance*.

²¹³ See, e.g., *Cingular Waiver Order*, 20 FCC Rcd at 15113 ¶ 10.

²¹⁴ See *supra*, para. 52.

²¹⁵ See *July 9, 2010 Apple Letter* at 3.

²¹⁶ See *July 2010 ANSI Report* at 5.

²¹⁷ See *supra*, para. 56.

VI. PROCEDURAL MATTERS

A. Final Regulatory Flexibility Analysis

102. As required by the Regulatory Flexibility Act of 1980 (“RFA”),²¹⁸ the Commission has prepared a Final Regulatory Flexibility Analysis (“FRFA”) relating to this Second Report and Order. The FRFA is set forth in Appendix D.

B. Final Paperwork Reduction Act Analysis

103. The Second Report and Order contains modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the modified information collection requirements contained in this proceeding. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we sought specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

104. In this present document, we have assessed the effects of extending to all handsets that incorporate new frequency bands and air interfaces for which hearing aid compatibility technical standards do not yet exist the same counting and disclosure rules that currently apply to handsets with Wi-Fi capability, as well as the disclosure requirements associated with modifying the hearing aid compatibility technical standards for manufacturers and service providers that offer one or two handsets operating over the legacy 2G GSM air interface in the 1900 MHz band. We find that these disclosure requirements are necessary to ensure that consumers are adequately informed of the underlying measures that, taken as a whole, will increase the availability of innovative handsets and reduce the burden of complying with the hearing aid compatibility requirements for entities including small businesses.

C. Initial Regulatory Flexibility Analysis

105. As required by the Regulatory Flexibility Act, *see* 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this document. The IRFA is set forth in Appendix E. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this Further Notice of Proposed Rule Making as set forth in Section VI.F.2. below and have a separate and distinct heading designating them as responses to the IRFA.

D. Initial Paperwork Reduction Act Analysis

106. The Further Notice does not contain proposed information collection(s) subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. Therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4).

E. Congressional Review Act

107. The Commission will include a copy of this Report and Order and Further Notice of Proposed Rulemaking in a report to be sent to Congress and the Government Accountability Office

²¹⁸ *See* 5 U.S.C. § 604. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (“SBREFA”), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 (“CWAAA”).

pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

F. Other Procedural Matters

1. *Ex Parte* Presentations

108. The rulemaking shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.²¹⁹ Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented generally is required.²²⁰ Other requirements pertaining to oral and written presentations are set forth in Section 1.1206(b) of the Commission’s rules.²²¹

2. Comment Filing Procedures

109. Pursuant to Sections 1.415 and 1.419 of the Commission’s rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. All filings related to this Second Report and Order and Further Notice of Proposed Rulemaking should refer to WT Docket No. 07-250. Comments may be filed using: (1) the Commission’s Electronic Comment Filing System (ECFS), (2) the Federal Government’s eRulemaking Portal, or (3) by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/> or the Federal eRulemaking Portal: <http://www.regulations.gov>. Filers should follow the instructions provided on the website for submitting comments.
 - ECFS filers must transmit one electronic copy of the comments for WT Docket No. 07-250. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov, and include the following words in the body of the message, “get form.” A sample form and directions will be sent in response.
- **Paper Filers:** Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission’s Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th St., S.W., Washington, DC 20554.
 - All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

²¹⁹ 47 C.F.R. §§ 1.200 *et seq.*

²²⁰ *See* 47 C.F.R. § 1.1206(b)(2).

²²¹ 47 C.F.R. § 1.1206(b).

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

110. People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

111. For further information regarding the Further Notice of Proposed Rule Making, contact John Borkowski, Wireless Telecommunications Bureau, (202) 418-0626, e-mail John.Borkowski@fcc.gov.

112. Parties should send a copy of their filings to John Borkowski, Federal Communications Commission, Room 6404, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to John.Borkowski@fcc.gov. Parties shall also serve one copy with the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI), Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554, (202) 488-5300, or via e-mail to fcc@bcpiweb.com.

113. Documents in WT Docket No. 07-250 will be available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th Street S.W., Room CY-A257, Washington, D.C. 20554. The documents may also be purchased from BCPI, telephone (202) 488-5300, facsimile (202) 488-5563, TTY (202) 488-5562, e-mail fcc@bcpiweb.com.

VII. ORDERING CLAUSES

114. IT IS ORDERED that, pursuant to the authority of Sections 4(i), 303(r), and 710 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and 610, this Second Report and Order IS HEREBY ADOPTED.

115. IT IS FURTHER ORDERED that Part 20 of the Commission's Rules, 47 C.F.R. Part 20, IS AMENDED as specified in Appendix B, effective 30 days after publication of the Order in the *Federal Register*, except for the amendments to Section 20.19(f), which contain an information collection that is subject to OMB approval.²²²

116. IT IS FURTHER ORDERED that the information collection contained in this Second Report and Order WILL BECOME EFFECTIVE following approval by the Office of Management and Budget. The Commission will publish a document at a later date establishing the effective date.

117. IT IS FURTHER ORDERED that, pursuant to the authority of sections 4(i), 303(r), and 710 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and 610, this Further Notice of Proposed Rulemaking IS HEREBY ADOPTED.

118. IT IS FURTHER ORDERED that pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on this Further Notice of Proposed Rulemaking on or before 45 days after publication of the Further Notice of Proposed Rulemaking in the *Federal Register* and reply comments on or before 75 days after publication in the *Federal Register*.

119. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau,

²²² See 5 U.S.C. § 553(d)(3) (“[t]he required publication or service of a substantive rule shall be made not less than 30 days before its effective date, except . . . as otherwise provided by the agency for good cause found and published with the rule”); see also 47 C.F.R. §§ 1.103(a), 1.427(b).

Reference Information Center, SHALL SEND a copy of the Policy Statement and Second Report and Order and Further Notice of Proposed Rulemaking, including the Final Regulatory Flexibility Analysis and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Marlene H. Dortch
Secretary

APPENDIX A**List of Commenters****Comments**

Alliance for Telecommunications Industry Solutions (ATIS)
American National Standards Institute Accredited Standards Committee C63® (ANSI ASC C63®)
AT&T, Inc. (AT&T)
Chinook Wireless
Consumer Electronics Retailers Coalition (CERC)
Gallaudet University Technology Access program and Rehabilitation Engineering Research Center on
Telecommunications Access (RERC-TA)
Hearing Industries Association (HIA)
Hearing Loss Association of America and Telecommunications for the Deaf and Hard of Hearing, Inc.
(HLAA /TDI)
MetroPCS Communications, Inc. (MetroPCS)
Motorola, Inc. (Motorola)
Nokia Inc. (Nokia)
Radioshack Corporation (Radioshack)
Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC)
Research in Motion Limited (RIM)
Rural Cellular Association (RCA)
The Satellite Industry Association (SIA)
Sony Ericsson Mobile Communications (Sony Ericsson)
T-Mobile USA, Inc. (T-Mobile)
Telecommunications Industry Association (TIA)

Reply Comments

ATIS
ANSI ASC C63®
Apple, Inc. (Apple)
AT&T
CTIA – The Wireless Association (CTIA)
Iowa Wireless Services, LLC
MetroPCS
Motorola
Nokia
PerrineCrest Radio Consulting (PRC)
RIM
SouthernLINC Wireless
T-Mobile
Verizon Wireless
Voice on the Net Coalition (VON Coalition)
Virgin Mobile, USA, L.P. (Virgin Mobile)

Ex Parte Comments of 08/28/08

CTIA
Hearing Loss Association of America, Telecommunications for the Deaf and Hard of Hearing, Inc.,
Association of Late-Deafened Adults, Inc., Deaf & Hard of Hearing Consumer Advocacy Network, and
National Association of the Deaf (HLAA *et al.*)

Motorola
RERC-TA
RIM
TIA

APPENDIX B

Final Rules

Part 20 of Title 47 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 20 reads as follows:

AUTHORITY: 47 U.S.C. 154, 160, 201, 251-254, 303, 332, and 710 unless otherwise noted.

2. Section 20.19 is amended by adding a new paragraph (a)(3)(i), redesignating existing paragraphs (a)(3)(i)-(a)(3)(iv) as (a)(3)(ii)-(a)(3)(v), revising paragraph (b), revising paragraph (c)(1), adding a new paragraph (c)(1)(ii)(C), revising paragraph (d)(1), redesignating paragraph (e)(1) as paragraph (e)(1)(A), adding new paragraphs (e)(1)(B) and (e)(1)(C), revising paragraph (f)(2), adding a new paragraph (f)(3), and amending paragraph (k)(1) to read as follows:

§ 20.19 Hearing aid-compatible mobile handsets.

(a) * * *

(3) * * *

(i) *Handset* refers to a device used in delivery of the services specified in paragraph (a)(1) of this section that contains a built-in speaker and is typically held to the ear in any of its ordinary uses.

* * * * *

(b) *Hearing aid compatibility; technical standards.* A wireless handset used for digital CMRS only over the frequency bands and air interfaces referenced in paragraph (a)(1) of this section is hearing aid-compatible with regard to radio frequency interference or inductive coupling if it meets the applicable technical standard(s) set forth in paragraphs (b)(1) and (b)(2) of this section for all frequency bands and air interfaces over which it operates, and the handset has been certified as compliant with the test requirements for the applicable standard pursuant to Sec. 2.1033(d) of this chapter. A wireless handset that incorporates an air interface or operates over a frequency band for which no technical standards are stated in ANSI C63.19-2007 (June 8, 2007) is hearing aid-compatible if the handset otherwise satisfies the requirements of this paragraph.

* * * * *

(c) * * *

(1) *Manufacturers.*

(i) *Number of hearing aid-compatible handset models offered.* For each digital air interface for which it offers wireless handsets in the United States or imported for use in the United States, each manufacturer of wireless handsets must offer handset models that comply with paragraph (b)(1) of this section as set forth below. Prior to [INSERT DATE ONE YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], handset models for purposes of this paragraph include only models offered to service providers in the United States.

(A) If it offers four to six models, at least two of those handset models must comply with the requirements set forth in paragraph (b)(1) of this section.

(B) If it offers more than six models, at least one-third of those handset models (rounded down to the nearest whole number) must comply with the requirements set forth in paragraph (b)(1) of this section;

(ii) * * *

(C) Beginning [INSERT DATE TWO YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], for manufacturers that together with their parent, subsidiary, or affiliate companies under common ownership or control, have had more than 750 employees for at least two years and that offer two models over an air interface for which they have been offering handsets for at least two years, at least one new model rated M3 or higher shall be introduced every other calendar year.

* * * * *

(d) * * *

(1) *Manufacturers.* Each manufacturer offering to service providers four or more handset models, and beginning [INSERT DATE ONE YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], each manufacturer offering four or more handset models, in a digital air interface for use in the United States or imported for use in the United States must ensure that it offers to service providers, and beginning [INSERT DATE ONE YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] must ensure that it offers, at a minimum, the following number of handset models that comply with the requirements set forth in paragraph (b)(2) of this section, whichever number is greater in any given year.

* * * * *

(e) * * *

(1) * * *

(B) Notwithstanding paragraph (e)(1)(A) of this section, beginning [INSERT DATE TWO YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], manufacturers that have had more than 750 employees for at least two years and service providers that have had more than 1500 employees for at least two years, and that have been offering handsets over an air interface for at least two years, that offer one or two digital wireless handsets in that air interface in the United States must offer at least one handset model compliant with paragraphs (b)(1) and (b)(2) of this section in that air interface, except as provided in paragraph (e)(1)(C) of this section. Service providers that obtain handsets only from manufacturers that offer one or two digital wireless handset models in an air interface in the United States, and that have had more than 750 employees for at least two years and have offered handsets over that air interface for at least two years, are required to offer at least one handset model in that air interface compliant with paragraphs (b)(1) and (b)(2) of this section, except as provided in paragraph (e)(1)(C) of this section. For purposes of this paragraph, employees of a parent, subsidiary, or affiliate company under common ownership or control with a manufacturer or service provider are considered employees of the manufacturer or service provider. Manufacturers and service providers covered by this paragraph must also comply with all other requirements of this section.

(C) Manufacturers and service providers that offer one or two digital handset models that operate over the GSM air interface in the 1900 MHz band may satisfy the requirements of paragraph (e)(1)(B) of this section by offering at least one handset model that complies with paragraph (b)(2) of this section and that

either complies with paragraph (b)(1) of this section or meets the following conditions: (i) the handset enables the user optionally to reduce the maximum power at which the handset will operate by no more than 2.5 decibels, except for emergency calls to 911, only for GSM operations in the 1900 MHz band; (ii) the handset would comply with paragraph (b)(1) of this section if the power as so reduced were the maximum power at which the handset could operate; and (iii) customers are informed of the power reduction mode as provided in paragraph (f)(3) of this section. Manufacturers and service providers covered by this paragraph must also comply with all other requirements of this section.

* * * * *

(f) * * *

(2) *Disclosure requirement relating to handsets that operate over an air interface or frequency band without hearing aid compatibility technical standards.* Each manufacturer and service provider shall ensure that, wherever it provides hearing aid compatibility ratings for a handset that incorporates an air interface or operates over a frequency band for which no technical standards are stated in ANSI C63.19-2007 (June 8, 2007), it discloses to consumers, by clear and effective means (e.g., inclusion of call-out cards or other media, revisions to packaging materials, supplying of information on Web sites) that the handset has not been rated for hearing aid compatibility with respect to that operation. This disclosure shall include the following language:

This phone has been tested and rated for use with hearing aids for some of the wireless technologies that it uses. However, there may be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids. It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise. Consult your service provider or the manufacturer of this phone for information on hearing aid compatibility. If you have questions about return or exchange policies, consult your service provider or phone retailer.

However, service providers are not required to include this language in the packaging material for handsets that incorporate a Wi-Fi air interface and that were obtained by the service provider before **[INSERT DATE 6 MONTHS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, provided that the service provider otherwise discloses by clear and effective means that the handset has not been rated for hearing aid compatibility with respect to Wi-Fi operation.

(3) *Disclosure requirement relating to handsets that allow the user to reduce the maximum power for GSM operation in the 1900 MHz band.* Handsets offered to satisfy paragraph (e)(1)(C) of this section shall be labeled as meeting an M3 rating. Each manufacturer and service provider shall ensure that, wherever this rating is displayed, it discloses to consumers, by clear and effective means (e.g., inclusion of call-out cards or other media, revisions to packaging materials, supplying of information on Web sites), that user activation of a special mode is necessary to meet the hearing aid compatibility standard. In addition, each manufacturer or service provider shall ensure that the device manual or a product insert explains how to activate the special mode and that doing so may result in a reduction of coverage.

* * * * *

(k) *Delegation of rulemaking authority.* (1) The Chief of the Wireless Telecommunications Bureau and the Chief of the Office of Engineering and Technology are delegated authority, by notice-and-comment rulemaking, to issue an order amending this section to the extent necessary to adopt technical standards

for additional frequency bands and/or air interfaces upon the establishment of such standards by ANSI Accredited Standards Committee C63™, provided that the standards do not impose with respect to such frequency bands or air interfaces materially greater obligations than those imposed on other services subject to this section. Any new obligations on manufacturers and Tier I carriers pursuant to paragraphs (c) through (i) of this section as a result of such standards shall become effective no less than one year after release of the order adopting such standards and any new obligations on other service providers shall become effective no less than 15 months after the release of such order, except that any new obligations on manufacturers and service providers subject to paragraph (e)(1)(B) of this section shall become effective no less than two years after the release of such order.

* * * * *

APPENDIX C

Proposed Rules

The Federal Communications Commission proposes to amend Part 20 of Title 47 of the Code of Federal Regulations as follows:

1. The authority citation for Part 20 reads as follows:

AUTHORITY: 47 U.S.C. 154, 160, 201, 251-254, 303, 332, and 710 unless otherwise noted.

2. The Federal Communications Commission proposes to amend Section 20.19 by revising paragraph (a)(1), adding a new paragraph (a)(3), redesignating existing paragraph (a)(3) as (a)(4), revising paragraphs (a)(4)(iv) and (a)(4)(v) as redesignated, revising paragraph (b), adding new paragraph (b)(1)(iii), revising paragraph (c)(4), deleting paragraph (c)(4)(i)-(ii), revising paragraph (d)(4), deleting paragraph (d)(4)(i)-(ii), revising the first sentence of paragraph (f)(3), and adding paragraph (l) to read as follows:

§ 20.19 Hearing aid-compatible mobile handsets.

(a) Scope of section; definitions. (1) The hearing aid compatibility requirements of this section apply to providers of wireless service that can be used for voice communications among members of the public or a substantial portion of the public, where such service is provided over frequencies in the 800–950 MHz or 1.6–2.5 GHz bands using any air interface for which technical standards are stated in the standard document “American National Standard Methods of Measurement of Compatibility Between Wireless Communication Devices and Hearing Aids,” American National Standards Institute (ANSI) C63.19–2007 (June 8, 2007).

* * * * *

(3) The requirements of paragraph (l) of this section apply to all entities that sell wireless handsets that are used in delivery of the services specified in paragraph (a)(1) of this section to consumers through a physical location, whether or not those entities are included in paragraph (a)(1) or (a)(2) of this section.

(4) *Definitions.* For the purposes of this section:

* * * * *

(iv) *Service provider* refers to a provider of wireless service to which the requirements of this section apply.

(v) *Tier I carrier* refers to a service provider that offers commercial mobile radio service nationwide.

(b) *Hearing aid compatibility; technical standards.* A wireless handset used only over the frequency bands and air interfaces referenced in paragraph (a)(1) of this section is hearing aid-compatible with regard to radio frequency interference or inductive coupling if it meets the applicable technical standard(s) set forth in paragraphs (b)(1) and (b)(2) of this section for all frequency bands and air interfaces over which it operates, and the handset has been certified as compliant with the test requirements for the applicable standard pursuant to §2.1033(d) of this chapter. A wireless handset that incorporates an air interface or operates over a frequency band for which no technical standards are stated in ANSI C63.19-2007 (June 8, 2007) is hearing aid-compatible if the handset otherwise satisfies the requirements of this paragraph.

(1) * * *

(iii) *GSM operations at 1900 MHz.* Notwithstanding paragraphs (b)(1)(i) and (ii) of this section, a wireless handset that operates over the GSM air interface in the 1900 MHz frequency band is hearing aid-compatible for radio frequency interference if (A) the handset enables the user optionally to reduce the maximum power at which the handset will operate by no more than 2.5 decibels, except for emergency calls to 911, only for GSM operations in the 1900 MHz band; (B) the handset would meet, at a minimum, the M3 rating associated with the technical standard set forth in ANSI C63.19-2007 (June 8, 2007) if the power as so reduced were the maximum power at which the handset could operate; and (C) customers are informed of the power reduction mode as provided in paragraph (f)(3) of this section.

* * * * *

(c) * * *

* * * * *

(4) *All service providers.* Each Tier I carrier and other service provider must offer its customers a range of hearing aid-compatible models with differing levels of functionality (*e.g.*, operating capabilities, features offered, prices). Each provider may determine the criteria for determining these differing levels of functionality, and must disclose its methodology to the Commission pursuant to paragraph (i)(3)(vii) of this section.

(d) * * *

* * * * *

(4) *All service providers.* Each Tier I carrier and other service provider must offer its customers a range of hearing aid-compatible models with differing levels of functionality (*e.g.*, operating capabilities, features offered, prices). Each provider may determine the criteria for determining these differing levels of functionality, and must disclose its methodology to the Commission pursuant to paragraph (i)(3)(vii) of this section.

* * * * *

(f) * * *

(3) *Disclosure requirement relating to handsets that allow the user to reduce the maximum power for GSM operation in the 1900 MHz band.* Handsets that meet the technical standard for radio frequency interference pursuant to paragraph (b)(1)(iii) of this section shall be labeled as meeting an M3 rating.

* * *

* * * * *

(l) *In-store testing.* Any entity that sells wireless handsets to consumers through a physical location must make available for consumers to test, in each retail store that it owns or operates, all of its handset models that comply with paragraph (b)(1) or (b)(2) of this section.

APPENDIX D

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Federal Communications Commission (Commission) included an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities of the policies and rules considered in the *Notice* in WT Docket No. 07-250.² The Commission sought written public comment on the *Notice* in this docket, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Need for, and Objectives of, the Rules

2. In the Second Report and Order, the Commission makes several changes to its existing hearing aid compatibility requirements so that they will continue effectively to ensure in an evolving marketplace of new technologies and services that consumers with hearing loss are able to access wireless communications services through a wide selection of handsets without experiencing disabling interference or other technical obstacles. First, the Commission provides that multi-band and multi-mode handsets that meet hearing aid compatibility requirements over all air interfaces and frequency bands for which technical standards have been established, but that also accommodate voice operations for which standards do not exist, may be counted as hearing aid-compatible, provided consumers are informed that they have been tested for the operations for which there are not standards. This rule change extends to all such handsets the same regulatory regime that currently applies to handsets that incorporate Wi-Fi capability, and it ensures that consumers will have the information they need to best evaluate how a handset will operate with their hearing aids. In order to further ensure that consumers are provided with consistent and sufficient information, the Commission also prescribes specific language to be used in the disclosure.

3. Second, the Commission refines the *de minimis* exception in its existing rule so that companies that are not small entities will be required to offer at least one hearing aid-compatible model after a two-year initial period. Manufacturers subject to this rule will also be required to offer at least one new model that is hearing aid-compatible for acoustic coupling every other calendar year. The Commission thereby helps ensure that people with hearing loss will have access to new and popular models, while continuing to protect the ability of small companies to compete and to foster innovation by new entrants. Further, in recognition of specific challenges that this rule change will impose for companies offering handsets operating over the legacy GSM air interface in the 1900 MHz band, the Commission permits companies that will no longer qualify for the *de minimis* exception under this rule change to meet hearing aid compatibility requirements by installing software that enables customers to reduce the power output by a limited amount for such operations.

4. Third, the Commission extends the hearing aid-compatible handset deployment requirements applicable to manufacturers to include handsets distributed by the manufacturer through channels other than service providers. This action ensures that consumers will continue to experience the benefits of hearing aid compatibility as innovative business plans give rise to a diversity of distribution

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² 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®, *Notice of Proposed Rulemaking*, 22 FCC Rcd 19760 (2007) (*Notice*).

channels.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

5. No comments specifically addressed the IRFA. Nonetheless, small entity issues raised in comments are addressed in this FRFA in Sections D and E.

C. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

6. The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the proposed rules, if adopted.³ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁴ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁵ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁶

7. *Small Businesses.* Nationwide, there are a total of approximately 29.6 million small businesses, according to the SBA.⁷

8. *Cellular Licensees.* The SBA has developed a small business size standard for small businesses in the category “Wireless Telecommunications Carriers (except satellite).”⁸ Under that SBA category, a business is small if it has 1,500 or fewer employees.⁹ The census category of “Cellular and Other Wireless Telecommunications” is no longer used and has been superseded by the larger category “Wireless Telecommunications Carriers (except satellite)”. However, since currently available data was gathered when “Cellular and Other Wireless Telecommunications” was the relevant category, earlier Census Bureau data collected under the category of “Cellular and Other Wireless Telecommunications” will be used here. Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.¹⁰ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.¹¹ Thus, under this category and size standard, the majority of firms can be considered small.

³ 5 U.S.C. § 604(a)(3).

⁴ 5 U.S.C. § 601(6).

⁵ 5 U.S.C. § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

⁶ 15 U.S.C. § 632.

⁷ See SBA, Office of Advocacy, “Frequently Asked Questions,” <http://web.sba.gov/faqs> (last visited Jan. 2009).

⁸ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517210.

⁹ *Id.*

¹⁰ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 517212 (issued Nov. 2005).

¹¹ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

9. Broadband Personal Communications Service. The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.¹² For Block F, an additional small business size standard for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹³ These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.¹⁴ No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the C Block auctions. A total of 93 “small” and “very small” business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.¹⁵ On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.¹⁶

10. On January 26, 2001, the Commission completed the auction of 422 C and F Block PCS licenses in Auction 35.¹⁷ Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In 2005, the Commission completed an auction of 188 C block licenses and 21 F block licenses in Auction 58. There were 24 winning bidders for 217 licenses.¹⁸ Of the 24 winning bidders, 16 claimed small business status and won 156 licenses. In 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction 71.¹⁹ Of the 14 winning bidders, six were designated entities.²⁰ In 2008, the Commission completed an auction of 20 Broadband PCS licenses in the C, D, E, and F Block licenses in Auction 78.²¹

11. Specialized Mobile Radio. The Commission awards “small entity” bidding credits in

¹² See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

¹³ See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶ 60.

¹⁴ See Letter from Aida Alvarez, Administrator, Small Business Administration, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, dated December 2, 1998.

¹⁵ FCC News, “Broadband PCS, D, E and F Block Auction Closes,” No. 71744 (rel. Jan. 14, 1997).

¹⁶ See “C, D, E, and F Block Broadband PCS Auction Closes,” *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

¹⁷ See “C and F Block Broadband PCS Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 2339 (2001).

¹⁸ See “Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58,” *Public Notice*, 20 FCC Rcd 3703 (2005).

¹⁹ See “Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71,” *Public Notice*, 22 FCC Rcd 9247 (2007).

²⁰ *Id.*

²¹ See Auction of AWS-1 and Broadband PCS Licenses Rescheduled For August 13, 2008, Notice of Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures For Auction 78, *Public Notice*, 23 FCC Rcd 7496 (2008) (*AWS-1 and Broadband PCS Procedures Public Notice*).

auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.²² The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.²³ The SBA has approved these small business size standards for the 900 MHz Service.²⁴ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.²⁵ A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 licenses. One bidder claiming small business status won five licenses.²⁶

12. The auction of the 1,053 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders that won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed “small business” status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

13. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1500 or fewer employees.²⁷ The Commission assumes, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities.

14. *Advanced Wireless Services.* In 2008, the Commission conducted the auction of Advanced Wireless Services (“AWS”) licenses.²⁸ This auction, which was designated as Auction 78, offered 35 licenses in the AWS 1710-1755 MHz and 2110-2155 MHz bands (“AWS-1”). The AWS-1 licenses were licenses for which there were no winning bids in Auction 66. That same year, the Commission completed Auction 78. A bidder with attributed average annual gross revenues that exceeded \$15 million and did not exceed \$40 million for the preceding three years (“small business”)

²² 47 C.F.R. § 90.814(b)(1).

²³ *Id.*

²⁴ See Letter from Aida Alvarez, Administrator, Small Business Administration, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, dated August 10, 1999.

²⁵ See “Correction to Public Notice DA 96-586 ‘FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,’” *Public Notice*, 18 FCC Rcd 18367 (WTB 1996).

²⁶ See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

²⁷ See generally 13 C.F.R. § 121.201, NAICS code 517210.

²⁸ See *AWS-1 and Broadband PCS Procedures Public Notice*, 23 FCC Rcd 7496. Auction 78 also included an auction of Broadband PCS licenses.