



6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 20 and 68

[CG Docket No. 13-46, WT Docket Nos. 07-250 and 10-254; FCC 17-135]

Hearing Aid Compatibility Standards

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: The Commission amends its hearing aid compatibility (HAC) rules to enhance equal access to the national telecommunications network by people with hearing loss and implement the Twenty-First Century Communications and Video Accessibility Act. The changes incorporate by reference a revised technical standard for volume control for wireline telephones, expand the scope of the wireline HAC rules, add a volume control requirement for wireless handsets, and eliminate an outdated wireless technical standard.

DATES: Effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, except 47 CFR 68.501 through 68.504, which contain modified information collection requirements that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act (PRA), and which will become effective after the Commission publishes a document in the *Federal Register* announcing such approval and the relevant effective date.

The incorporation by reference of ANSI/TIA-4965-2012 is approved by the Director of the *Federal Register* as of **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The incorporation by reference of the material in § 20.19 was approved by the Director of the Federal Register as of June 6, 2008 and August 16, 2012. The incorporation by reference of the other material in § 68.317 was approved by the Director of the Federal Register as of October 23, 1996.

Compliance Dates: See SUPPLEMENTARY INFORMATION.

FOR FURTHER INFORMATION CONTACT: Susan Bahr, Disability Rights Office, Consumer and Governmental Affairs Bureau, at (202) 418-0573 or e-mail: Susan.Bahr@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Report and Order and Order on Reconsideration, document FCC 17-135, adopted on October 24, 2017, released on October 26, 2017, in CG Docket No. 13-46, WT Docket Nos. 07-250 and 10-254. The full text of this document will be available for public inspection and copying during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street SW, Room CY-A257, Washington, DC 20554. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice), (844) 432-2272 (videophone), or (202) 418-0432 (TTY).

Document FCC 17-135 concerns the Commission's rules for HAC for wireline and wireless handsets. The Commission previously sought comment on these issues in *Access to Telecommunication Equipment and Services by Persons with Disabilities; Amendment of the Commission's Rules Governing Hearing Aid-Compatible Mobile Handsets; Comment Sought on 2010 Review of Hearing Aid Compatibility Regulations*, Notice of Proposed Rulemaking, published at 80 FR 80722, December 28, 2015 (*NPRM*). Document FCC 17-135 also responds to the Petition for Partial Reconsideration filed by LG Electronics MobileComm U.S.A., Inc., *et al.* on October 8, 2010, concerning *Amendment of the Commission's Rules Governing Hearing Aid-Compatible Mobile Handsets*, Policy Statement and Second Report and Order and Further Notice of Proposed Rulemaking, document FCC 10-145, published at 75 FR 54508, September 8, 2010 (*August 2010 Report and Order*).

Compliance Dates

Wireline telephones manufactured or imported into the United States on or after February 28, 2020, must comply with the revised wireline volume control technical standard (ANSI/TIA-4965-2012) incorporated by reference into 47 CFR 68.317. Wireline telephones manufactured or

imported into the United States before February 28, 2020, may comply with either ANSI/TIA-4965-2012 or the existing wireline volume control standard referenced in 47 CFR 68.317(a)(1). Wireline telephones used for advanced communications services (ACS telephonic CPE) must comply with the applicable provisions of 47 CFR part 68 as amended by document FCC 17-135 if they are manufactured or imported on or after February 28, 2020. However, §§ 68.501 through 68.504 contain information collections that have not yet been approved by OMB. In the event that OMB approval does not occur before February 28, 2020, the FCC will publish a document in the *Federal Register* extending the compliance deadline for these provisions and will subsequently publish a document announcing a later compliance date.

Wireless handsets submitted for equipment certification or for a permissive change relating to hearing aid compatibility starting March 1, 2021, must comply with the wireless volume control requirements set forth in 47 CFR 20.19. Any grants of certification issued to wireless handsets not equipped with such volume control that were submitted for certification before March 1, 2021, remain valid for HAC purposes.

Wireless handsets submitted for equipment certification or for a permissive change relating to HAC beginning August 28, 2018, must comply with the M3 and T3 ratings associated with the ANSI C63.19-2011 standard. Any grants of certification issued for wireless handsets that were submitted for certification before August 28, 2018, under ANSI C63.19-2011, or previous versions of ANSI 63.19, remain valid for HAC purposes.

Incorporation by Reference

The Office of Federal Register (OFR) recently revised its regulations to require that agencies must discuss in the preamble of a final rule ways that the materials the agency is incorporating by reference are reasonably available to interested parties or how it worked to make those materials reasonably available to interested parties. In addition, the preamble of the final rule must summarize the material. Several standards are incorporated by reference: (a) paragraph 4.1.2 (including table 4.4) of ANSI/EIA-470-A-1987; (b) paragraph 4.3.2 of ANSI/EIA/TIA-579-

1991; (c) ANSI/TIA-4965-2012; (d) ANSI C63.19-2007; and (e) ANSI C63.19-2011. These standards address the use of wireless and wireline handsets by people with hearing loss, including people who use hearing aids.

The standards listed as (a), (b) and (c) apply to inductive coupling and volume control for wireline telephones, and by document FCC 17-135, to ACS telephonic CPE. Standards (a) and (b) were previously incorporated in the Commission's rules. Standard (c) is new. This standard modifies in two ways the manner in which amplification is measured for wireline phones. First, the standard discontinues the use of an IEC-318 coupler and specifies instead the Head and Torso Simulator (HATS) method. Second, the standard replaces the Receive Objective Loudness Rating (ROLR) method of calibrating amplification with a new method called Conversational Gain. These three standards may be purchased from the Telecommunications Industry Association (TIA) at (877) 413-5184 and <http://www.tiaonline.org/standards/buy-tia-standards>.

The standards listed as (d) and (e) apply to RF interference reduction and inductive coupling for wireless handsets. These two standards were previously incorporated in the Commission's rules, and are available from the IEEE at (732) 981-0060 and <http://standards.ieee.org/>.

Congressional Review Act

The Commission sent a copy of document FCC 17-135 to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

Final Paperwork Reduction Act of 1995 Analysis

Document FCC 17-135 contains modified information collection requirements, which are not applicable until approval is obtained from OMB. The Commission, as part of its continuing effort to reduce paperwork burdens, will invite the general public to comment on the information collection requirements contained in document FCC 17-135 as required by the Paperwork Reduction Act (PRA) of 1995, Pub. L. 104-13. The Commission will publish a separate document in the *Federal Register* announcing approval of the information collection requirements contained in document FCC 17-135. In addition, the Commission notes that, pursuant to the Small Business Paperwork Relief Act of 2002, Pub. L. 107-198, 44 U.S.C.

3506(c)(4), the Commission previously sought comment on how the Commission might further reduce the information burden for small business concerns with fewer than 25 employees.

Synopsis

REPORT AND ORDER

Revised Wireline Volume Control Technical Standard

1. The Commission amends § 68.317 of its rules to incorporate a revised technical standard for volume control in wireline telephones, ANSI/TIA-4965-2012 (2012 ANSI Wireline Volume Control Standard). The revised standard, developed by TIA technical standards committee, significantly improves the measurement of volume amplification in two ways. First, instead of measuring the volume received by the user with an IEC-318 coupler, which is designed to form a seal with the telephone handset, the standard uses a HATS, which takes into account the lack of a seal between a telephone receiver and the ears of users in real-life settings. Thus, the HATS more closely mirrors how handsets are actually used, offering an improved measurement.

2. Further, instead of measuring loudness in terms of ROLR, where gain is measured relative to each phone's normal unamplified, or nominal, sound level, the new standard uses "conversational gain," where gain is measured relative to an absolute benchmark based on the sound of face-to-face conversation at a distance of 1 meter. This approach eliminates the variation in maximum amplification levels that results from maximum amplification being measured relative to each telephone's nominal sound level.

3. The specified volume levels are formulated to be approximately equivalent to those commonly achieved under the prior standard by older wireline telephones. Thus, telephones will be in compliance with the volume control requirements if they provide at least 18 dB and no more than 24 dB Conversational Gain at the maximum setting. The 18 dB Conversational Gain minimum must be achieved without significant clipping of the speech signal used for testing. The upper limit of 24 dB Conversational Gain may be exceeded if the volume automatically resets to 24 dB Conversational Gain or below upon hang-up.

4. By providing consumers with phones that have standardized, easy-to-understand volume amplification levels measured using a HATS, this action will improve telephone communications, including communication needed for emergencies, for individuals with hearing loss.

5. Any existing inventory and installed base of telephones that comply with the current version of § 68.317 of the Commission's rules may remain in place until retired. The record does not support a determination that the potential benefits of requiring existing telephones to comply with the 2012 Wireline Volume Control Standard are greater than the potential costs.

6. The Commission does not adopt its proposal to require covered manufacturers to test a sample of products that they make available for purchase to assess whether these products are providing a uniform and appropriate range of volume to meet the telephone needs of people with hearing loss. Based on input from commenters, currently required testing will be sufficient. The Commission also does not adopt its proposal to require wireline telephone manufacturers to consult with consumers and their representative organizations under a specified timetable, to assess the 2012 Wireline Volume Control Standard after it goes into effect. Because HAC technical standards are subject to revision over time, the Commission expects that there will be regular opportunities for industry and consumer stakeholders to confer with one another in the course of further reevaluation of the 2012 Wireline Volume Control Standard.

Application of Inductive Coupling and Volume Control Requirements to Wireline VoIP Telephones

7. Section 710(b)(1) of the Act, as amended by the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), Pub. L. 111-260, § 102, 124 Stat. 2751, Pub. L. 111-265, 124 Stat. 2795, directs the Commission to require that “[a]ll customer premises equipment used with advanced communications services that is designed to provide 2-way voice communication via a built-in speaker intended to be held to the ear in a manner functionally equivalent to a telephone” must “provide internal means for effective use with hearing aids that are designed to be compatible with telephones which meet established

technical standards for hearing aid compatibility.” 47 U.S.C. 610(b)(1). The Act defines “advanced communications services” to include interconnected and non-interconnected VoIP service. 47 U.S.C. 153(1).

8. The Commission therefore amends its rules to specify that VoIP telephones and other wireline equipment described in 47 U.S.C. 710(b)(1)(C), collectively termed “ACS telephonic CPE,” must comply with the same HAC requirements that apply to other wireline telephones, including compliance with volume control and inductive coupling standards, as well as, for purposes of HAC compliance, the same testing, attestations of compliance, registration, labeling, and complaint handling requirements that currently apply to CPE that is directly connected to the public switched telephone network.

9. To ensure that the terminal equipment database managed by the Administrative Council for Terminal Attachments (ACTA) will be able to receive and make available the information required for registration of ACS telephonic CPE as of the two-year compliance deadline, the Commission requests that ACTA submit, by **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a report explaining: (a) the progress of any modifications necessary to accommodate ACS telephonic CPE in the database, including any changes to how ACTA will administer the database; (b) the pertinent information that ACTA will request from responsible parties for ACS telephonic CPE, especially for the HAC and volume control features; and (c) any procedures for submitting or accessing information on ACS telephonic CPE that will differ from the existing procedures for currently registered terminal equipment. Responsible parties for ACS telephonic CPE that is manufactured in or imported for use in the United States on or after February 28, 2020, must submit all information required by ACTA (or a successor entity) for inclusion in the database within 30 days after the date that the equipment is manufactured in or imported into the United States.

Volume Control for Wireless Handsets

10. The record in this proceeding confirms that the public interest and the objectives mandated by section 710 of the Act will be served by modifying the Commission’s HAC rules for

wireless handsets to include a volume control requirement designed to accommodate people with hearing loss. Given the significantly expanded reliance on wireless telephone communications—and concomitant decline in wireline phone usage—the Commission affirms its belief that a volume control requirement that specifies certain levels of amplification as an element of hearing aid compatibility is just as necessary for wireless handsets as it is for wireline phones, to ensure the provision of effective telecommunications for people with hearing loss. This is especially true in emergency situations where having access to a phone—be it one’s own device or a device belonging to someone else on the scene—can mean the difference between life and death. Further, a volume control requirement will not only improve communications for those using hearing aids and cochlear implants, it also will help millions of Americans with hearing loss who do not use these devices.

11. The Commission’s conclusions are supported in the record. Two surveys reveal that the existing volume control features contained in wireless handsets often do not produce sufficient amplification to enable people with hearing loss to comprehend wireless telephone conversations through acoustic coupling. Although TIA and CTIA dispute the significance of the survey results, noting that less than 30 percent of the complaints about wireless phones pertained to loudness or volume, we find that these results provide persuasive evidence that current wireless handset volume controls are insufficient to ensure that wireless handsets can be effectively used with hearing aids and that people with hearing loss have effective access to the wireless phone network. Even if only 29 percent of the estimated 48 million Americans with hearing loss were able to benefit from wireless volume control, the Commission concludes that the resulting benefits to some 13.9 million people are sufficient to justify a requirement for wireless phones to provide effective communication through amplification.

12. TIA also asserts that wireless handsets already allow users to adjust the volume on wireless handsets to provide an acceptable, comfortable user experience, but provides no specific or quantitative information on the extent to which amplification levels in wireless handsets have improved since 2010, nor how these levels have been effective in enabling

individuals with hearing loss to receive and understand speech received through wireless handsets. Further, there is no indication in the record that industry volume control standards currently required for wireless handsets were formulated to specifically address the needs of consumers with hearing loss. The record also provides no basis for accepting claims that consumer education is sufficient to address consumer concerns about volume control. Ratings for wireless handsets currently are available only for RF interference reduction and inductive coupling capability, not volume amplification, and selecting a different handset is not a viable option if wireless handsets with effective amplification are not available.

13. Commenters did not supply specific cost data, *e.g.*, to quantify the costs involved in the general claim that a volume control requirement would result in additional testing and design limitations, or to substantiate such design limitations. In contrast, the major benefits to people with hearing loss from increased access to the telephone network—whether achieved by improvements in inductive coupling, RF interference reduction, or volume control—while hard to quantify, are well documented. The hearing aid compatibility legislation enacted in 1988 contains a finding that universal telephone service for people with hearing loss will lead to greater employment opportunities and increased productivity, Pub. L. 100-394, sec. 2(4), 102 Stat. 976, and recognition of the importance of telephone access for people with disabilities has only increased since then. Based on the record, the volume control rule will directly address the problems of an estimated 13.9 million people who experience dissatisfaction with handset volume controls. The Commission further concludes on this record, including the absence of any quantification of costs, that these benefits, while not fully quantified, are sufficient to justify the adoption of a volume control rule, consistent with the Commission’s prior rulings and with its statutory mandate to ensure that “to the fullest extent made possible by technology and medical science, [persons with hearing loss] have equal access to the national telecommunications network.” Pub. L. 100-394, sec. 2. Finally, improving the ability of people with hearing loss to directly access the wireless telephone network through this volume control requirement could reduce the costs associated with support of telecommunications relay services.

14. The Commission also believes that any costs associated with meeting certain levels of volume control in wireless handsets will be mitigated by the flexibility afforded by this order. Rather than relying on a government-mandated technical solution, the Commission adopts a general volume control requirement that provides standards-setting organizations with an opportunity to submit for Commission approval a technical standard that they believe will enable a phone to meet this general requirement and can be implemented in a cost-effective manner. Additionally, because the extended timeline for implementation of the requirement will apply only to handsets newly submitted for HAC certification, volume control meeting the standard that the Commission approves can be incorporated into the mobile handset environment in a cost-effective manner.

15. The Commission notes that its legal authority to adopt a volume control requirement for wireless phones stems from section 710(a) and (b) of the Act and the stated purposes of the HAC provisions of the Act. 47 U.S.C. 610(a), (b); Pub. L. 100-394, sec. 2. The Commission previously found that sections 710(a) and (b) both authorize the adoption of volume control requirements for wireline telephones, published at 61 FR 42181, August 14, 1996, and the Commission's analysis applies equally to wireless telephones.

16. The volume control requirement applies to all wireless handset models newly submitted for HAC certification on or after March 1, 2021. New wireless handset models submitted on or after that date for certification as hearing aid compatible for RF interference reduction and inductive coupling must also comply with the new volume control rule (including technical standards approved by the Commission). By setting a three-year compliance timeline, the Commission allows one year for the completion and adoption of a technical standard for wireless volume control by a standards development organization (SDO) (which began earlier in 2017) and adoption by the Commission, and an additional two years for manufacturers to implement such technical standard in new handset models submitted for HAC certifications through the Commission's existing equipment authorization process. The Commission grandfathers all hearing aid compatible handsets that were certified as HAC compliant without

volume control provided they were submitted for certification prior to the three-year compliance deadline.

17. The adopted timeframe will provide ample opportunity for informed development of a wireless volume control technical standard and the incorporation of such standard into the Commission's rules, as well as for manufacturers to obtain the necessary testing equipment, and to implement design alterations needed to ensure that their new products meet the standard. Further, this approach will afford manufacturers and service providers the flexibility to work through their inventories of older models to meet their M- and T-rating HAC deployment benchmarks, while ensuring that in the ensuing years effective volume control will increasingly become a standard feature as new hearing aid compatible models universally incorporate volume control. In this manner, companies will not be required to retrofit or recertify any HAC-compliant grandfathered models or drop any such models from their portfolios prematurely to comply with the volume control requirements.

18. Upon the completion of a wireless volume control technical standard, the Commission anticipates that it can expeditiously begin a rulemaking process to evaluate the standard and incorporate it by reference into the wireless HAC rules. The Commission will monitor developments in this regard and take appropriate steps if standards development and adoption do not proceed as expected.

19. *Labeling.* Section 710 of the Act instructs the Commission to "establish requirements for the labeling of packaging materials . . . to provide adequate information to consumers on the compatibility between telephones and hearing aids." 47 U.S.C. 610(d). Adoption of a requirement for wireless handset packages to be labeled with volume amplification information is supported by comments explaining that often, when sufficient information is not provided on a handset's packaging, the consumer must first order and wait for delivery of the handset, and only then test it to assess whether its amplification meets the consumer's hearing needs. If such amplification is not suitable, the consumer must return it and start the process again. Although service providers are required to allow consumers to try out handsets in service

provider stores, consumers who shop at other types of retail establishments or shop online do not have the same capability. Further, because during the transitional years following the compliance deadline for the rules, only certain handset models will be required to meet the new volume control requirement, consumers with hearing loss will need labeling information to inform them as to which wireless handsets are suitable for them.

20. To rectify this and achieve consistency with the current Commission requirements for HAC labeling and disclosure for wireless handsets, the Commission requires manufacturers of wireless handsets and service providers to ensure that packaging on each handset covered by the volume control requirement adopted herein clearly displays information to enable consumers to determine the handset's amplification capabilities. The Commission requires compliance with this labeling requirement to be concurrent with the implementation of the volume control requirement—*i.e.*, volume control labeling will be required for wireless handsets newly submitted for certification as compliant with HAC requirements beginning March 1, 2021. The Commission also encourages wireless manufacturers and service providers to provide information about which of their handsets have amplification by other means, such as by providing such information on their call-out cards in retail stores and websites.

21. At this time, the Commission does not specify either the format or language for the volume control label. However, beginning with the three-year compliance deadline discussed above, if a handset is certified as compliant with a HAC technical standard relating to volume control that specifies acceptable numerical metrics or qualitative ratings for handset volume control (comparable to the M- and T-ratings provided under the RF interference reduction and inductive coupling standards), the labeling for handsets granted HAC certification for volume control must include the relevant amplification metrics or ratings. In addition, as is currently required for M- and T-ratings, an explanation of such amplification metrics or ratings must be included in the device's user manual or as an insert in the packaging material for the handset.

22. To the extent that a technical standard for volume control is approved by an SDO and adopted or authorized by the Commission, compliance with the standard will constitute

compliance with the Commission's new wireless volume control rule. Based on current information about volume control and related technical standards, the Commission suggests that a wireless volume control standard could include: (a) the use of conversational gain for measuring receive loudness; (b) the establishment of minimum value(s) for the acceptable maximum volume(s); (c) the use of a HATS; and (d) the use of two pressure measurements for holding the handset next to the ear—one for people who use hearing aids, and one for people who do not use hearing aids.

Wireless RF Interference/Inductive Coupling Standard

23. The Commission adopts its proposal to eliminate the 2007 version of ANSI C63.19 (2007 Wireless RF Interference/Inductive Coupling Standard) as an option for measuring and rating the HAC compliance of wireless handsets and to require the use of ANSI C63.19-2011 (2011 Wireless RF Interference/Inductive Coupling Standard), which has been available as an option for many handsets since 2012.

24. In 2007, the Commission incorporated ANSI C63.19-2007 into its rules. This standard specifies testing procedures for determining the M-rating (RF interference reduction) and T-rating (inductive coupling capability) of digital wireless handsets that operate over the air interfaces that, at the time the standard was promulgated, were commonly used for wireless services in the 800-950 MHz and 1.6-2.5 GHz bands. In 2012, the Commission incorporated ANSI C63.19-2011 into its rules. This standard expanded the range of frequencies over which inductive coupling can be tested to include frequencies between 698 MHz and 6 GHz (to take into account other new technologies), and established a direct method for measuring the RF interference level of wireless devices to hearing aids, enabling testing procedures to be applied to operations over any RF air interface or protocol. Manufacturers currently have the option to obtain certification for new handsets as compliant with either the 2007 or the 2011 Wireless RF Interference/Inductive Coupling Standard.

25. Parties commenting on this issue agree that use of the 2011 Wireless RF Interference/Inductive Coupling Standard provides the most accurate available RF interference

reduction and inductive coupling ratings for handsets generally. Accordingly, the Commission amends its rules to require that manufacturers use the 2011 Wireless RF Interference/Inductive Coupling Standard exclusively to obtain certification for future wireless handsets as HAC compliant.

26. *Power-Down Exception.* For technical reasons, the Commission has permitted some GSM handsets operating at 1900 MHz to meet the HAC requirements under the 2007 Wireless RF Interference/Inductive Coupling Standard at a reduced power level, while other handsets have been subject to testing at maximum power. This “power-down” exception has been permitted because the 2007 standard was not effective in addressing all of the specific characteristics of certain GSM devices. 47 CFR 20.19(e)(1)(iii). The 2011 Wireless RF Interference/Inductive Coupling Standard provides revised measurement methodologies that can be used effectively for these GSM handsets. The Commission therefore eliminates the power-down exception.

27. The Commission allows service providers and manufacturers until August 28, 2018, to transition to the 2011 Wireless RF Interference/Inductive Coupling Standard. The Commission grandfathers handsets previously certified under the 2007 Wireless RF Interference/Inductive Coupling Standard or any previous RF interference reduction or inductive coupling standard, including GSM handsets that were previously certified under the power-down exception.

Outreach

28. The Commission reminds manufacturers and service providers that its rules require them generally to ensure that consumers have the information they need about the availability of hearing aid compatible wireline and wireless phones and the accessibility features of these phones. Specifically, the Commission reminds these entities of the following obligations.

- *Manufacturers and service providers*: Under section 255 of the Act, which requires the usability of telecommunications products if readily achievable, and section 716 of the Act, which requires the usability of products used with advanced communications services unless not achievable, manufacturers and service providers must: (a) make their product information, including information about accessibility features, usable, in part by providing written manuals and instructions in accessible formats, such as large print, and Braille; (b) provide usable and accessible customer and technical support in their call and service centers; and (c) include in their general product materials contact information for obtaining information about the products and their accessibility features. To this end, the Commission expects service providers and manufacturers to have trained staff available during their business hours to answer questions about how their equipment complies with applicable HAC standards and how to operate features of wireline and wireless handsets to make them accessible to and usable by people with hearing loss.
- *Wireless service providers* must permit consumers to test out handsets in any retail store owned or operated by the service provider.
- *Wireless manufacturers and service providers* must ensure that hearing aid compatible handsets clearly display the ratings on the packaging material of the handsets.
- *Wireless manufacturers and service providers with publicly accessible websites* must post a list of all hearing aid compatible models offered, their ratings, and an explanation of the rating system; and provide information about the levels of functionality defined by the service provider and how the functionality of handsets varies at different levels.

29. Consumers may also obtain information about hearing aid compatible wireless handsets from the Hearing Aid Compatibility Status Reports filed by wireless manufacturers and

service providers and the Commission's summaries of those reports. See FCC, Wireless Telecommunications Bureau, *Hearing Aid Compatibility Status Reporting*, <http://wireless.fcc.gov/hac/index.htm?job=home>; *Hearing Aid Compatibility Reports: Device Manufacturers*, http://wireless.fcc.gov/hac/index.htm?job=reports_dm; *Hearing Aid Compatibility Reports: Service Providers*, http://wireless.fcc.gov/hac/index.htm?job=reports_sp. Additional information about hearing aid compatible wireless handsets, although not associated with specific service providers, is available from the Global Accessibility Reporting Initiative, which can be accessed from the Commission's Accessibility Clearinghouse. See Global Accessibility Reporting Initiative, *Find Accessible Devices & Apps*, <https://www.gari.info/findphones.cfm>; FCC, *Accessibility Clearinghouse – Products and Services*, <https://ach.fcc.gov/products-and-services/>; FCC, *Accessibility Clearinghouse – Hearing, Language and Speech Disabilities*, <https://ach.fcc.gov/resources-by-disability/hearing-language-and-speech-disabilities/>.

ORDER ON RECONSIDERATION

30. On October 8, 2010, LG Electronics MobileComm U.S.A., Inc., and several other manufacturers of wireless handsets filed a Petition for Partial Reconsideration (LG Petition) of the Commission's *August 2010 Report and Order*, requesting the Commission to apply the power-down exception uniformly to all manufacturers of GSM handsets that operate in the 1900 MHz band. In the *August 2010 Report and Order*, the Commission had stated that the power-down exception applies to “companies that, but for their size, would be eligible for the amended de minimis exception.” In document FCC 17-135, the Commission eliminates the power-down exception. The Commission therefore concludes that the LG Petition is moot and, accordingly, dismisses the petition.

FINAL REGULATORY FLEXIBILITY ACT ANALYSIS

31. As required by the Regulatory Flexibility Act of 1980 (RFA), as amended, the Commission incorporated an Initial Regulatory Flexibility Analysis (IRFA) into the *NPRM*. The

Commission sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. No comments were received on the IRFA.

Need For, and Objectives of, the Report and Order and Order on Reconsideration

32. Document FCC 17-135 amends the hearing aid compatibility (HAC) rules with the goal of ensuring that Americans with hearing loss are able to access wireline services, wireless services and wireline ACS through a wide array of phones, including voice-over-Internet-protocol (VoIP) telephones. The Commission takes the following actions to ensure that individuals who rely on HAC technologies will have access to emerging communications technologies in accordance with the objectives of the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA) and its legislative predecessors. In the Report and Order of document FCC 17-135, the Commission:

- adopts a new standard to improve the method used to measure volume control on wireline handsets that will be phased in over two years;
- adopts rules to require certain customer premises equipment (CPE) used with ACS, including VoIP telephones, to be HAC compliant;
- adopts a rule requiring volume control on wireless handsets sufficient to meet the communications needs of people with hearing loss;
- eliminates two superseded rules—the inductive coupling standard (2007 Wireless RF Interference/Inductive Coupling Standard) and a power-down exception for certain GSM handsets—and adopts a deadline after which all wireless handsets submitted for new certifications of hearing aid compatibility must adhere to the 2011 Wireless RF Interference/Inductive Coupling Standard; and
- reminds manufacturers and service providers of their existing obligations to provide consumers with sufficient information to make informed decisions about their wireless handset purchases.

In the Order on Reconsideration of document FCC 17-135, the Commission dismisses as moot a pending Petition for Partial Reconsideration concerning the power-down rule, 47 CFR 20.19(e)(1)(iii), because it eliminates the rule in the Report and Order. The above rules reflect adjustments, such as transition times prior to new rules taking effect, that may be particularly helpful to small entities.

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

33. The Commission received no comments directly addressing the IRFA.

Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

34. The Chief Counsel for Advocacy of the Small Business Administration did not file any comments in response to the proposed rules in this proceeding.

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

35. 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 rule changes. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. A “small business concern” is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

36. The entities which may be affected by the rules include: small entities; wireless telecommunications carriers (except satellite); all other telecommunications; telephone apparatus manufacturing; radio and television broadcasting and wireless equipment manufacturing; electronic computer manufacturing; computer terminal manufacturing; and software publishers.

Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

37. Certain rule changes adopted in document FCC 17-135 modify or add requirements governing reporting, recordkeeping, and other compliance obligations. As described above and below, the adoption of these requirements factors in the needs of small entities.

38. First, the Commission incorporates the 2012 Wireline Volume Control Standard into the wireline volume control rules and eliminates the currently applicable standard after a transition period. This action alters the compliance obligations of wireline telephone apparatus manufacturers, including small entities, by requiring them to use a different method for testing and evaluating compliance with the volume control requirement.

39. Second, the Commission explicitly applies the Commission's wireline telephone volume control and other HAC rules to equipment used for ACS, which includes VoIP devices. The Commission also applies related labeling, certification, complaint processing, and registration requirements, to handsets used with ACS. These actions impose new compliance obligations and reporting and recordkeeping obligations on some wireline telephone apparatus manufacturers, electronic computer manufacturers, computer terminal manufacturers, and software publishers, including small entities.

40. Third, the Commission adopts a rule for wireless handsets to address volume control. This action imposes new compliance obligations and may impose additional reporting and recordkeeping obligations on wireless telecommunications carriers and wireless communications equipment manufacturers, including small entities.

41. Fourth, the Commission eliminates the 2007 Wireless RF Interference/Inductive Coupling Standard and a power-down exception, and requires wireless handsets to comply with the existing 2011 Wireless RF Interference/Inductive Coupling Standard to achieve more effective coupling between handsets and hearing aids or cochlear implants. This action could alter the compliance obligations of wireless telecommunications carriers and wireless communications equipment manufacturers, including small entities. However, such changes

would not result in new regulatory burdens. In fact, it is the Commission's understanding that the 2011 Wireless RF Interference/Inductive Coupling Standard already is used almost exclusively.

42. Fifth, the Commission reminds manufacturers and service providers of their existing obligations to provide consumers with sufficient information to make informed decisions about their handset purchases. These requirements are not new. So there are no new compliance obligations.

Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered

43. The Commission considered ways to reduce potential burdens and/or allow sufficient transition time for new requirements, which may be especially helpful to small entities. First, regarding the Commission's incorporation of the 2012 Wireline Volume Control Standard into the wireline volume control rules, the Commission notes that the 2012 Wireline Volume Control Standard is a performance standard, not a design standard. To minimize the difficulty of adjusting to the revised standard, document FCC 17-135 allows a phase-in period during which manufacturers may comply with either the existing standard or the 2012 Wireline Volume Control Standard. To limit any potential burdens regarding the impact of the proposed rule change on previously manufactured telephones, the Commission allows the existing inventory and installed base of telephones that comply with the existing volume control standard to remain in place until retired.

44. In the *NPRM*, the Commission asked for comment generally on the cost of incorporating the 2012 Wireline Volume Control Standard into the Commission's rules. No commenter addresses this issue or raises alternatives. Because this revised standard more accurately measures the amplification achievable by wireline telephone products, incorporation of this standard could lighten regulatory burdens by increasing market certainty, promoting a level playing field, and reducing the number of complaints made to manufacturers by consumers of their products.

45. Second, regarding the Commission's new requirement that wireline CPE used with VoIP or other ACS comply with the wireline HAC and volume control requirements of part 68, the Commission notes that the standards provided in the rules are performance standards, not design standards. To minimize the difficulty of adjusting to the revised standard, document FCC 17-135 allows a two-year phase-in period before compliance is required. The Commission is aware that some manufacturers are already voluntarily complying with some of the new HAC requirements. To limit any potential burdens regarding the impact of the rule change on previously manufactured telephones, the Commission allows the existing inventory and installed base of ACS telephonic CPE to remain in place until retired. The Commission applies the relevant part 68 rules regarding complaint handling, labeling, certifications, and Suppliers' Declarations of Conformity to ACS telephonic CPE. Among other things, these rules provide for HAC consumer complaints to be filed with state public utility commissions or with the Commission, require labels to be affixed to telephones that are HAC compliant, permit equipment to be certified by Telecommunication Certification Bodies, and in the alternative, permit suppliers to make their own Declarations of Conformity. In the *NPRM*, the Commission sought comment on the costs of compliance. No commenter directly addresses this issue or raises alternatives. The Commission continues to believe that these requirements will promote accountability and compliance with the HAC requirements and thus effectively serve people with hearing loss. Finally, the Commission notes that the rule amendment could increase regulatory certainty and market fairness regarding the application of the wireline HAC rules because these rules would apply both to telephones connected to the public switched telephone network and to ACS telephonic CPE used with VoIP services.

46. Third, regarding the Commission's adoption of rules requiring wireless handsets to provide volume control that produces sound levels suitable for persons with hearing loss (including persons with and without hearing aids), these rules also reflect a performance, not a design, standard. The introduction of new handsets that comply with a volume control standard is spread out over about seven years, which corresponds to the timeline of other wireless HAC

requirements. In addition, reduced requirements apply to smaller manufacturers and service providers, and a total exemption is applied to the smallest manufacturers and service providers. The record shows that many wireless handsets already need to comply with volume control standards adopted by European and Asian standards groups; thus, it is possible that in complying with those standards, much of the cost of complying with this rule is already being borne by wireless manufacturers and service providers. Moreover, in the *NPRM*, the Commission asked for comment on the costs and benefits of adopting a wireless volume control requirement, and whether there are any specific burdens associated with requiring handsets to achieve a specified amplification level for manufacturers and service providers. No commenter responds to this issue. The Commission has not identified any alternative to this rule that would have further lessened the economic impact on small entities while remaining consistent with its objectives.

47. Fourth, regarding the Commission's adoption of a requirement for manufacturers to use the 2011 Wireless RF Interference/Inductive Coupling Standard exclusively and to eliminate the power-down exception to the existing wireless HAC rule, the Commission notes that the 2011 Wireless RF Interference/Inductive Coupling Standard is a performance standard, not a design standard. The revised rule will be implemented for new HAC certifications, and all prior certifications are grandfathered. Further, while HAC certifications will be necessary for increasing portions of a manufacturer's offered handset models over the next seven years under other recently adopted requirements, reduced requirements apply to smaller manufacturers and service providers, and a total exemption is applied to the smallest manufacturers and service providers. In the *NPRM*, the Commission asked for comment on the costs of compliance with the 2011 Wireless RF Interference/Inductive Coupling Standard and eliminating the power-down exception. No commenter addresses this issue. The Commission has not identified any alternative to these measures that would have lessened the economic impact on small entities while remaining consistent with its objectives.

48. Fifth, regarding the Commission's reminder to manufacturers and service providers concerning their existing obligations to provide consumers with sufficient information

to make informed decisions about their handset purchases, these obligations include placing HAC information on handset packaging, providing accessible customer support, and posting information on wireless service providers' websites. These are not new obligations, so there are no new costs. The Commission has not identified any alternative to these rules that would have further lessened the economic impact on small entities while remaining consistent with its objectives of improving the ways that Americans with hearing loss can access our nation's wireline and wireless communications services.

Report to Congress

49. The Commission has sent a copy of document FCC 17-135, including this FRFA, in a report to Congress and the Government Accountability Office pursuant to the Congressional Review Act.

Federal Rules Which Duplicate, Overlap, or Conflict with, the Commission's Rules

50. None.

ORDERING CLAUSES

51. Pursuant to sections 4(i), 303(r), and 710 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 303(r), 610, document FCC 17-135 is adopted, and parts 20 and 68 of title 47 are amended.

52. The Petition for Partial Reconsideration filed October 8, 2010 by LG Electronics MobileComm U.S.A., Inc., Motorola, Inc., Nokia Inc., Research in Motion Corp., Samsung Information Systems America, Inc., and Sony Ericsson Mobile Communications (USA) Inc. in WT Docket No. 07-250 is dismissed.

53. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center shall send a copy of document FCC 17-135, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects in 47 CFR Parts 20 and 68

Incorporation by reference, Individuals with disabilities, Telecommunications, Telephones.

FEDERAL COMMUNICATIONS COMMISSION.

Marlene H. Dortch,
Secretary.
Office of the Secretary.

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 20 and 68 as follows:

PART 20 – COMMERCIAL MOBILE SERVICES

1. The authority citation for part 20 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 152(a), 154(i), 157, 160, 201, 214, 222, 251(e), 301, 302, 303, 303(b), 303(r), 307, 307(a), 309, 309(j)(3), 316, 316(a), 332, 610, 615, 615a, 615b, 615c, unless otherwise noted.

2. Amend § 20.19 by:

- a. Revising paragraphs (b)(1) and (2) and (e)(1)(iii)(B) and (C);
- b. Adding paragraph (e)(1)(iii)(D); and
- c. Revising paragraphs (f)(1), (k)(2), and (l) to read as follows:

§ 20.19 Hearing aid-compatible mobile handsets.

* * * * *

(b) * * *

(1) *For radio frequency interference and volume control.* A wireless handset submitted for equipment certification or for a permissive change relating to hearing aid compatibility on or after August 28, 2018, must meet, at a minimum, the M3 rating associated with the technical standard set forth in the standard document “American National Standard Methods of Measurement of Compatibility Between Wireless Communication Devices and Hearing Aids,” ANSI C63.19-2011. Any grants of certification issued before August 28, 2018, under ANSI C63.19-2011, or previous versions of ANSI C63.19, remain valid for hearing aid compatibility purposes. Beginning March 1, 2021, a wireless handset submitted for equipment certification or for a permissive change relating to hearing aid compatibility must also be equipped with volume control that produces sound levels suitable for persons with hearing loss (including persons with and without hearing aids). Any grants of certification

issued to handsets not equipped with such volume control that were submitted for certification before March 1, 2021, remain valid for hearing aid compatibility purposes.

(2) *For inductive coupling.* A wireless handset submitted for equipment certification or for a permissive change relating to hearing aid compatibility on or after August 28, 2018, must meet, at a minimum, the T3 rating associated with the technical standard set forth in the standard document “American National Standard Methods of Measurement of Compatibility Between Wireless Communication Devices and Hearing Aids,” ANSI C63.19-2011. Any grants of certification issued for handsets submitted for such certification before August 28, 2018, under ANSI C63.19-2011, or previous versions of ANSI C63.19, remain valid for hearing aid compatibility purposes.

* * * * *

(e) * * *

(1) * * *

(iii) * * *

(B) 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;

(C) 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; and

(D) The handset was certified as meeting the requirements of paragraph (b)(1) of this section with the power reduction prior to August 28, 2018.

* * * * *

(f) * * *

(1) *Labeling requirements—(i) Inductive coupling and RF interference reduction.*

Manufacturers and service providers shall ensure that handsets that are hearing aid-compatible, as defined in paragraph (b) of this section, clearly display the rating, as defined in paragraphs (b)(1) and (2) of this section, on the packaging material of the handset. In the

event that a hearing aid-compatible handset achieves different radio interference or inductive coupling ratings over different air interfaces or different frequency bands, the RF interference reduction and inductive coupling capability ratings displayed shall be the lowest rating assigned to that handset for any air interface or frequency band. An explanation of the ANSI C63.19 rating system must also be included in the device's user's manual or as an insert in the packaging material for the handset.

(ii) *Volume control.* Beginning March 1, 2021, manufacturers and service providers shall ensure that handsets that are hearing aid compatible, as defined in paragraph (b) of this section, clearly display information indicating the handset's amplification capabilities on the packaging material of the handset. If the handset has been certified as compliant with a technical standard that specifies acceptable numerical metrics or qualitative ratings for handset volume control, the labeling shall include the relevant volume control metrics or ratings. In the event that such a handset achieves different metrics or ratings over different air interfaces or different frequency bands, the volume control metrics or ratings displayed shall be the lowest metrics or ratings assigned to that handset for any air interface or frequency band. An explanation of such volume control metrics or ratings shall be included in the device's user manual or as an insert in the packaging material for the handset.

* * * * *

(k) * * *

(2) 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 if required by statute or otherwise in the public interest, to issue an order amending this section to the extent necessary to approve any version of the technical standards for radio frequency interference, inductive coupling, or volume control adopted subsequently to ANSI C63.19-2007 for use in determining whether a wireless handset meets the appropriate rating over frequency bands and air interfaces for which technical standards have previously been

adopted either by the Commission or pursuant to paragraph (k)(1) of this section. This delegation is limited to the approval of changes to the technical standards that do not raise major compliance issues. Further, by such approvals, the Chiefs may only permit, and not require, the use of such subsequent versions of the technical standards to establish hearing aid compatibility.

(l) The standards required in this section are incorporated by reference into this section with the approval of the Director of the *Federal Register* under 5 U.S.C. 552(a) and 1 CFR part 51. All approved material is available for inspection at the Federal Communications Commission (FCC), 445 12th St. SW, Reference Information Center, Room CY-A257, Washington, DC 20554, (202) 418-0270, and is available from the source indicated below. They are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

(1) IEEE Standards Association (IEEE-SA), 445 Hoes Lane, Piscataway, NJ 08854-4141, (732) 981-0060, email to stds-info@ieee.org, and <http://standards.ieee.org/>.

(i) ANSI C63.19-2007, American National Standard Methods of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids, June 8, 2007.

(ii) ANSI C63.19-2011, American National Standard Methods of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids, May 27, 2011.

(2) [Reserved]

PART 68 – CONNECTION OF TERMINAL EQUIPMENT TO THE TELEPHONE NETWORK

3. The authority citation for part 68 is revised to read as follows:

AUTHORITY: 47 U.S.C. 154, 303, 610.

Subpart A – General

4. The authority citation for part 68, subpart A, is revised to read as follows:

AUTHORITY: Secs. 4, 5, 303, 710, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303, 610).

5. Revise § 68.1 to read as follows:

§ 68.1 Purpose.

The purpose of the rules and regulations in this part is to provide for uniform standards for the protection of the telephone network from harms caused by the connection of terminal equipment and associated wiring thereto, and for the compatibility of hearing aids and telephones so as to ensure that, to the fullest extent made possible by technology and medical science, people with hearing loss have equal access to the national telecommunications network, including advanced communications services.

6. Amend § 68.2 by revising paragraph (a) to read as follows:

§ 68.2 Scope.

(a) Except as provided in paragraphs (b) and (c) of this section, and excluding subpart F, which applies only to ACS telephonic CPE, the rules and regulations of this part apply to direct connection of all terminal equipment to the public switched telephone network for use in conjunction with all services other than party line services. Sections 68.4, 68.5, 68.6, 68.112, 68.160, 68.162, 68.316, and 68.317, and other sections to the extent they are made applicable by subpart F of this part, also apply to ACS and ACS telephonic CPE that is manufactured in the United States or imported for use in the United States on or after February 28, 2020.

* * * * *

7. Amend § 68.3 by adding the definitions of “ACS telephonic CPE” and “Advanced communications services” in alphabetical order, and revising the definitions of “Hearing aid compatible” and “Responsible party” to read as follows:

§ 68.3 Definitions.

* * * * *

ACS telephonic CPE. Customer premises equipment used with advanced communications services that is designed to provide 2-way voice communication via a built-in speaker intended to be held to the ear in a manner functionally equivalent to a telephone, except for mobile handsets.

Advanced communications services. Interconnected VoIP service, non-interconnected VoIP service, electronic messaging service, and interoperable video conferencing service.

* * * * *

Hearing aid compatible. Except as used at §§ 68.4(a)(3) and 68.414, and subpart F of this part the terms hearing aid compatible or hearing aid compatibility are used as defined in § 68.316, unless it is specifically stated that hearing aid compatibility volume control, as defined in § 68.317, is intended or is included in the definition.

* * * * *

Responsible party. The party or parties responsible for the compliance of terminal equipment or protective circuitry intended for connection directly to the public switched telephone network, or of ACS telephonic CPE, with the applicable rules and regulations in this part and with any applicable technical criteria published by the Administrative Council for Terminal Attachments. If a Telecommunications Certification Body certifies the terminal equipment or ACS telephonic CPE, the responsible party is the holder of the certificate for that equipment. If the terminal equipment or ACS telephonic CPE is the subject of a Supplier's Declaration of Conformity, the responsible party shall be: the manufacturer of the equipment, or the manufacturer of protective circuitry that is marketed for use with terminal equipment that is not to be connected directly to the network, or if the equipment is imported, the importer, or if the equipment is assembled from individual component parts, the assembler. If the equipment is modified by any party not working under the authority of the responsible party, the party performing the modifications, if located within the U.S., or the importer, if the equipment is imported subsequent to the modifications, becomes the new responsible party. Retailers or original equipment manufacturers may enter into an agreement with the assembler or importer to

assume the responsibilities to ensure compliance of the terminal equipment or ACS telephonic CPE and to become the responsible party.

* * * * *

8. Amend § 68.224 by revising paragraph (b) to read as follows:

§ 68.224 Notice of non-hearing aid compatibility.

* * * * *

(b) Be accompanied by instructions in accordance with § 68.218(b)(2).

9. The authority citation for subpart D of part 68 is revised to read as follows:

Subpart D – Conditions for Terminal Equipment Approval

AUTHORITY: Secs. 4, 5, 303, 710, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303, 610).

10. Amend § 68.317 by:

- a. Redesignating paragraph (g) as paragraph (i);
- b. Redesignating paragraphs (a) through (f) as (b) through (g);
- c. Adding new paragraph (a);
- d. Redesignating “Note to paragraph (a)” as “Note 1 to paragraph (b)”;
- e. Adding paragraph (h); and
- f. Revising newly redesignated paragraph (i).

The additions and revision read as follows:

§ 68.317 Hearing aid compatibility volume control: technical standards.

(a)(1) A telephone manufactured in the United States or imported for use in the United States prior to February 28, 2020, complies with the volume control requirements of this section if it complies with:

- (i) The applicable provisions of paragraphs (b) through (g) of this section; or
- (ii) Paragraph (h) of this section.

(2) A telephone manufactured in the United States or imported for use in the United States on or after February 28, 2020, complies with the volume control requirements of this section if it complies with paragraph (h) of this section.

* * * * *

(h) A telephone complies with the Commission's volume control requirements if it is equipped with a receive volume control that provides, through the receiver in the handset of the telephone, at the loudest volume setting, a conversational gain greater than or equal to 18 dB and less than or equal to 24 dB Conversational Gain when measured as described in ANSI/TIA-4965-2012 (Telecommunications – Telephone Terminal Equipment – Receive Volume Control Requirements for Digital and Analog Wireline Telephones). A minimum of 18 dB Conversational Gain must be achieved without significant clipping of the speech signal used for testing. The maximum 24 dB Conversational Gain may be exceeded if the amplified receive capability automatically resets to a level of not more than 24 dB Conversational Gain when the telephone is caused to pass through a proper on-hook transition, in order to minimize the likelihood of damage to individuals with normal hearing.

(i) The standards required in this section are incorporated by reference with the approval of the Director of the *Federal Register* under 5 U.S.C. 552(a) and 1 CFR part 51. All approved material is available for inspection at the Federal Communications Commission (FCC), 445 12th St. SW, Reference Information Center, Room CY-A257, Washington, DC 20554, (202) 418-0270, and is available from the source indicated below. They are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

(1) The following standards are available from the Telecommunications Industry Association (TIA), 1320 North Courthouse Road, Suite 200, Arlington, VA 22201, (877) 413-5184, email to smontgomery@tiaonline.org, and <http://www.tiaonline.org/standards/catalog>.

(i) Paragraph 4.1.2 (including table 4.4) of American National Standards Institute (ANSI) Standard ANSI/EIA-470-A-1987, Telephone Instruments with Loop Signaling, July 1987.

(ii) Paragraph 4.3.2 of ANSI/EIA/TIA-579-1991, Acoustic-to-Digital and Digital-to-Acoustic Transmission Requirements for ISDN Terminals, February 1991.

(iii) ANSI/TIA-4965-2012, Telecommunications; Telephone Terminal Equipment; Receive Volume Control Requirements for Digital and Analog Wireline Handset Terminals, approved October 19, 2012.

(2) [Reserved]

11. Amend § 68.320 by revising paragraph (e) to read as follows:

§ 68.320 Supplier's Declaration of Conformity.

* * * * *

(e) No person shall use or make reference to a Supplier's Declaration of Conformity in a deceptive or misleading manner or to convey the impression that such a Supplier's Declaration of Conformity reflects more than a determination by the responsible party that the device or product has been shown to be capable of complying with the applicable technical criteria.

12. Add subpart F to read as follows:

Subpart F – ACS Telephonic CPE

Sec.

68.501 Authorization procedures.

68.502 Labeling, warranty, instructions, and notice of revocation of approval.

68.503 Complaint procedures.

68.504 Administrative Council on Terminal Attachments.

§ 68.501 Authorization procedures.

(a) *Authorization required.* Unless exempt from the requirements of §§ 68.4 and 68.6, ACS telephonic CPE manufactured in or imported into the United States after February 28, 2020, shall be certified as hearing aid compatible by a Telecommunications Certification Body or the

responsible party shall follow the procedures in this part for a Supplier's Declaration of Conformity to establish that such CPE is hearing aid compatible.

(b) *Certification.* The requirements of §§ 68.160 and 68.162 shall apply to the certification of ACS telephonic CPE as hearing aid compatible.

(c) *Supplier's Declaration of Conformity.* The requirements of §§ 68.320-68.350 (except § 68.324(f)) shall apply to the use of the Supplier's Declaration of Conformity procedure to establish that ACS telephonic CPE is hearing aid compatible.

(d) *Revocation procedures.* (1) The Commission may revoke the authorization of ACS telephonic CPE under this section, where:

- (i) The equipment approval is shown to have been obtained by misrepresentation;
- (ii) The responsible party willfully or repeatedly fails to comply with the terms and conditions of its equipment approval; or
- (iii) The responsible party willfully or repeatedly fails to comply with any rule, regulation or order issued by the Commission under the Communications Act of 1934 relating to terminal equipment.

(2) Before revoking such authorization, the Commission, or the Enforcement Bureau under delegated authority, will issue a written Notice of Intent to Revoke part 68 Authorization, or a Joint Notice of Apparent Liability for Forfeiture and Notice of Intent to Revoke part 68 Authorization, pursuant to §§ 1.80 and 1.89 of this chapter. The notice will be sent to the responsible party for the equipment at issue at the address provided to the Administrative Council for Terminal Attachments. A product that has had its authorization revoked may not be reauthorized for a period of six months from the date of revocation of the approval. A responsible party for ACS telephonic CPE that has had its authorization revoked or that has been assessed a forfeiture, or both, may request reconsideration or make administrative appeal of the decision pursuant to part 1 of the Commission's rules: Practice and Procedure, part 1 of this chapter.

§ 68.502 Labeling, warranty, instructions, and notice of revocation of approval.

(a) *Labeling*—(1) *Hearing aid compatible equipment.* All ACS telephonic CPE manufactured in the United States (other than for export) or imported for use in the United States after February 28, 2020, that is hearing aid compatible, as defined in §§ 68.316 and 68.317, shall have the letters “HAC” permanently affixed thereto. “Permanently affixed” means that the label is etched, engraved, stamped, silkscreened, indelibly printed, or otherwise permanently marked on a permanently attached part of the equipment or on a nameplate of metal, plastic, or other material fastened to the equipment by welding, riveting, or a permanent adhesive. The label must be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable.

(2) *Non-hearing aid compatible equipment.* Non-hearing aid compatible ACS telephonic CPE offered for sale to the public on or after February 28, 2020, shall contain in a conspicuous location on the surface of its packaging a statement that the ACS telephonic CPE is not hearing aid compatible, as defined in §§ 68.4(a)(3), 68.316, 68.317, or if offered for sale without a surrounding package, shall be affixed with a written statement that the telephone is not hearing aid compatible, as defined in §§ 68.4(a)(3), 68.316 and 68.317; and be accompanied by instructions in accordance with § 68.218(b)(2).

(b) *Warranty.* In acquiring approval for equipment to be labeled and otherwise represented to be hearing aid compatible, the responsible party warrants that each item of equipment marketed under such authorization will comply with all applicable rules and regulations of this part and with the applicable technical criteria.

(c) *Instructions.* The responsible party or its agent shall provide the user of the approved ACS telephonic CPE the following:

(1) Any consumer instructions required to be included with approved ACS telephonic CPE by the Administrative Council for Terminal Attachments;

(2) For ACS telephonic CPE that is not hearing aid compatible, as defined in § 68.316:

(i) Notice that FCC rules prohibit the use of that handset in certain locations; and

(ii) A list of such locations (*see* § 68.112).

(d) *Notice of revocation.* When approval is revoked for any item of equipment, the responsible party must take all reasonable steps to ensure that purchasers and users of such equipment are notified to discontinue use of such equipment.

§ 68.503 Complaint procedures.

The complaint procedures of §§ 68.414 through 68.423 shall apply to complaints regarding the hearing aid compatibility of ACS telephonic CPE.

§ 68.504 Administrative Council on Terminal Attachments.

The database registration and labeling provisions of §§ 68.354, 68.610, and 68.612 shall apply to ACS telephonic CPE that is approved as hearing aid compatible and is manufactured in or imported to the United States on or after February 28, 2020. After that date, the information required by the Administrative Council on Terminal Attachments shall be submitted within 30 days after the date that the equipment is manufactured in or imported into the United States.

[FR Doc. 2018-04012 Filed: 2/27/2018 8:45 am; Publication Date: 2/28/2018]