



FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 20

[WT Docket No. 23-388; FCC 23-108; FR ID 195641]

Achieving 100% Wireless Handset Model Hearing Aid Compatibility

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Federal Communications Commission (“Commission”) tentatively concludes that requiring 100% of all handset models to be certified as hearing aid-compatible is an achievable object and seeks comment on revising the definition of hearing aid compatibility to include Bluetooth connectivity technology. In addition, the Commission seeks comment on a number of implementation proposals related to this tentative conclusion.

DATES: Interested parties may file comments on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and reply comments on or before **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Written comments on the Paperwork Reduction Act proposed information collection requirements must be submitted by the public, the Office of Management and Budget (OMB), and other interested parties on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Written comments on the Initial Regulatory Flexibility Analysis (IRFA) in this document must have a separate and distinct heading designating them as responses to the IRFA and must be submitted by the public on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may submit comments, identified by WT Docket No. 23-388, by any of the following methods:

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs/>.
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing.

Filings can be sent by commercial overnight courier, or by first-class or overnight U.S.

Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Filing*, Public Notice, 35 FCC Rcd 2788 (2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>

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

FOR FURTHER INFORMATION CONTACT: For further information on this proceeding, contact Eli Johnson, Eli.Johnson@fcc.gov, of the Wireless Telecommunications Bureau, Competition & Infrastructure Policy Division, (202) 418-1395. For additional information concerning the Paperwork Reduction Act proposed information requirements contained in this document, send an email to PRA@fcc.gov or contact Cathy Williams at (202) 418-2918.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s Notice of Proposed Rulemaking (*NPRM*), in WT Docket No. 23-388; FCC 23-108, adopted December 13, 2023, and released on December 14, 2023. The full text of the document is available for download at <https://docs.fcc.gov/public/attachments/FCC-23-108A1.pdf>. The complete text of this document is also available for inspection and copying during normal business hours in the FCC Reference Information Center, 45 L Street NE, Room 1.150, Washington, DC 20554, (202) 418-0270.

Regulatory Flexibility Act: The Regulatory Flexibility Act of 1980, as amended (RFA), requires that an agency prepare a regulatory flexibility analysis for notice-and-comment rulemakings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.” Accordingly, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the possible impact of the rule and policy changes contained in this Notice of Proposed Rulemaking. Written public comments are requested on the IRFA. Comments must be by the deadlines for comments on this Notice of Proposed Rulemaking indicated in the **DATES** section of this document and must have a

separate and distinct heading designating them as responses to the IRFA and must be filed in WT Docket No. 23-388.

Paperwork Reduction Act: This document contains proposed modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. If the Commission adopts any new or revised information collection requirements, the Commission will publish a notice in the *Federal Register* inviting the general public and the Office of Management and Budget to comment on the information collection requirements. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), the Commission seeks specific comment on how it might further reduce the information collection burden for small business concerns with fewer than 25 employees.

Ex Parte Rules: This proceeding shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda, or other filings in the proceeding, then the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other

filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with 47 CFR 1.1206(b). In proceedings governed by 47 CFR 1.49(f), or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

Providing Accountability Through Transparency Act: The Providing Accountability Through Transparency Act, Public Law 118-9, requires each agency, in providing notice of a rulemaking, to post online a brief plain-language summary of the proposed rule. The required summary of this Notice of Proposed Rulemaking is available at <https://www.fcc.gov/proposed-rulemakings>.

SYNOPSIS:

I. INTRODUCTION

1. The Commission has a longstanding commitment to ensuring that all Americans, including those with disabilities, are able to access communications services on an equal basis. The recent pandemic highlighted just how important equal access to communications services is for individual well-being as well as the day-to-day functioning of American society. The Commission's commitment to ensuring accessibility for all Americans includes ensuring those with hearing loss—more than 37.5 million Americans—have equal access to communications services as required by section 710 of the Communications Act. This section directs the Commission to facilitate compatibility between wireless handset models and hearing aids. In

fulfilling this statutory directive, the Commission is committed to ensuring that its wireless hearing aid compatibility provisions keep pace both with the ways handset models couple with hearing devices and requiring all handset models to be hearing aid compatible. It is with these objectives in mind that the Commission initiates today's rulemaking.

2. Specifically, the Commission issues this Notice of Proposed Rulemaking to develop a record with respect to a proposal submitted to the Commission by the Hearing Aid Compatibility (HAC) Task Force on how the Commission can achieve its long held goal of a 100% hearing aid compatibility benchmark for all handset models offered in the United States or imported for use in the United States. The HAC Task Force is an independent organization composed of groups who represent the interests of people with hearing loss, wireless service providers, and wireless handset manufacturers that was formed for the purpose of reporting to the Commission on whether requiring 100% of all handset models to be certified as hearing aid compatible is an achievable objective. The Task Force's Final Report represents a consensus proposal for how the Commission can achieve this objective. The Commission proposes to adopt the Task Force's proposal with certain modifications in order to ensure that all handset models provide full accessibility for those with hearing loss while at the same time ensuring that its rules do not discourage or impair the development of improved technology.

3. Specifically, the Commission tentatively concludes that requiring 100% of all handset models to be certified as hearing aid compatible is an achievable objective under the factors set forth in section 710(e) of the Communications Act. As part of this determination, the Commission seeks comment on adopting the more flexible "forward-looking" definition of hearing aid compatibility that the HAC Task Force recommends. This determination also includes a proposal to broaden the current definition of hearing aid compatibility to include Bluetooth connectivity technology and to require at least 15% of offered handset models to connect to hearing aids through Bluetooth technology as an alternative to or in addition to a

telecoil. The Commission seeks comment on the Bluetooth technology that it should utilize to meet this requirement and how it should incorporate this requirement into its wireless hearing aid compatibility rules.

4. Further, the Commission explores ways to reach the 100% compatibility benchmark, and it proposes a 24-month transition period for handset manufacturers; a 30-month transition period for nationwide service providers; and a 42-month transition period for non-nationwide service providers to transition to a 100% hearing aid-compatible handset standard for all handset models offered for sale in the United States or imported for use in the United States. The Commission seeks comment on certain implementation proposals and updates to the wireless hearing aid compatibility rules related to these proposals. These proposals include requirements for hearing aid compatibility settings in handset models, revised website posting, labeling and disclosure rules, and revised reporting requirements along with seeking comment on renaming its § 20.19 rules to better reflect what this section covers.

5. The Commission's proposals are based on the results of collaborative efforts of members of the HAC Task Force who worked together over a period of years to reach a consensus proposal on how best to ensure that all new handset models meet the needs of those with hearing loss. The revisions that the Commission proposes today to its wireless hearing aid compatibility rules would ensure greater access to wireless communication services for Americans with hearing loss and the ability of these consumers to consider the latest and most innovative handset models for their needs.

II. BACKGROUND

6. Over time, the Commission has progressively increased the deployment benchmarks for hearing aid-compatible wireless handset models. In 2016, the Commission reconfirmed its commitment to pursuing 100% hearing aid compatibility to the extent achievable. The *2016 HAC Order* supported this objective by increasing the number of hearing

aid-compatible handset models that handset manufacturers and service providers were required to offer by adopting two new handset model deployment benchmarks. After a two-year transition for handset manufacturers, and with additional compliance time for service providers, the then-applicable handset model deployment benchmarks were increased to 66%. After a five-year transition period for handset manufacturers, and with additional compliance time for service providers, the 66% handset model deployment benchmarks were increased to 85%.

7. In this same order, the Commission established a process for determining whether a 100% hearing aid compatibility requirement is “achievable.” The Commission stated that it wanted to continue the “productive collaboration between stakeholders and other interested parties” that had been part of the process for enacting the two new handset model deployment benchmarks. The Commission noted the stakeholders’ proposal to form a task force independent of the Commission to “issue a report to the Commission helping to inform” the agency “on whether 100 percent hearing aid compatibility is achievable.” Part of this process included determining whether the hearing aid compatibility requirements should be modified to include alternative technologies such as Bluetooth. The Commission stated that it was deferring action on compliance processes, legacy models, burden reduction, the appropriate transition periods, and other implementation issues until after it received the HAC Task Force’s Final Report on achievability. The Commission specified that it intended to decide by 2024 whether to require 100% of covered wireless handset models to be hearing aid compatible. The Commission indicated that it would make its determination as to whether this goal is achievable by relying on the factors identified in section 710(e) of the Communications Act. After the *2016 HAC Order* was released, stakeholders convened the independent Task Force and filed progress updates with the Commission.

8. In 2018, the Commission imposed new website posting requirements and took

steps to reduce regulatory burden on service providers by allowing them to file a streamlined annual certification under penalty of perjury stating their compliance with the Commission's hearing aid compatibility requirements. As part of the *2018 HAC Order*, the Commission noted that, in the 100% hearing aid compatibility docket, it was considering broader changes to the hearing aid compatibility rules that may be appropriate in the event it required 100% of covered handset models to be hearing aid compatible. The Commission indicated that the website, record retention, and certification requirements it was adopting as part of the *2018 HAC Order* would remain in place unless and until the Commission took further action in the 100% hearing aid compatibility docket and that its decisions did not "prejudge any further steps we may take to modify our reporting rules in that proceeding."

9. In February 2021, the Commission adopted the 2019 ANSI Standard for determining hearing aid compatibility. The 2019 ANSI Standard was to replace the existing 2011 ANSI Standard after a two-year transition period that was set to end on June 5, 2023. Like the 2011 ANSI Standard, the 2019 ANSI Standard addresses acoustic and inductive coupling between wireless handset models and hearing aids but uses heightened testing methodologies intended to ensure handset models offer a better listening experience for consumers. In addition, the 2019 ANSI Standard includes for the first time a volume control requirement. The standard specifically references the TIA 5050 Standard that addresses volume control requirements for wireless handset models. As part of the order adopting the 2019 ANSI Standard and the related TIA 5050 Standard, the Commission reiterated its goal "to continue on the path to making 100% of wireless handsets hearing aid compatible."

10. In December 2022, the HAC Task Force filed its Final Report with the Commission, which makes five central recommendations. The report recommends that the Commission: (1) adopt a more flexible, forward-looking definition of hearing aid compatibility; (2) adjust current technical standards; (3) allow for exploration of changes in coupling

technology (e.g., by additional exploration of Bluetooth and alternative technologies); (4) allow reliance on information linked in the Commission's Accessibility Clearinghouse; and (5) set a 90-day shot clock for the resolution of petitions for waiver of the hearing aid compatibility requirements.

11. The Final Report also recommends that the Commission grant the volume control waiver request that the Alliance for Telecommunications Industry Solutions (ATIS) filed the same day that the HAC Task Force filed its Final Report. In its waiver request, ATIS asserted that the testing performed by the Task Force revealed that the TIA 5050 Standard for volume control was fundamentally flawed because it required the use of a pulsed-noise signal, which ATIS claimed was insufficiently voice-like to be compatible with many modern codecs. ATIS also stated that the standard's use of a pulsed-noise signal resulted in none of the handsets that it tested passing the standard. As a result, ATIS requested that the Commission allow handsets to be certified as hearing aid compatible using a modified volume control testing methodology.

12. On March 23, 2023, the Wireless Telecommunications Bureau (WTB) released a Public Notice seeking comment on the HAC Task Force's Final Report. The Public Notice sought comment generally on the report's recommendations and whether they furthered the Commission's goal of attaining 100% hearing aid compatibility. The Public Notice also asked whether the report's recommendations were consistent with the policy goals the Commission has historically outlined in its hearing aid compatibility-related proceedings and with the Commission's statutory duties under section 710 of the Communications Act of 1934, as amended. The Commission received three comments and three replies in response to the Public Notice.

13. On April 14, 2023, WTB released an order extending the transition period for exclusive use of the 2019 ANSI Standard from June 5, 2023 to December 5, 2023. WTB took this step to ensure that handset manufacturers could continue to certify new handset models with

hearing aid compatibility features under the 2011 ANSI Standard while the Commission considered ATIS's waiver petition. WTB stated that continuing to allow new handset models to be certified as hearing aid compatible is essential as the Commission moves to its goal of all handset models being hearing aid compatible.

14. On September 29, 2023, WTB conditionally granted in part ATIS's request for a limited waiver of the 2019 ANSI Standard's volume control testing requirements. Under the terms of the waiver, a handset model may be certified as hearing aid compatible under the 2019 ANSI Standard if it meets the volume control testing requirements described in the order as well as all other aspects of the 2019 ANSI Standard. This waiver will remain in place for two years to allow time for the development of a new, full volume control standard and for its incorporation into the wireless hearing aid compatibility rules.

III. DISCUSSION

15. Below, the Commission tentatively concludes that a 100% hearing aid compatibility requirement for wireless handset models offered in the United States or imported for use in the United States is an achievable goal. The Commission seeks comment on ways to achieve this goal, including seeking comment on a more flexible, forward-looking definition of hearing aid compatibility, as recommended by the HAC Task Force. In addition, consistent with the HAC Task Force's recommendation, the Commission proposes to broaden the definition of hearing aid compatibility to include Bluetooth connectivity technology. The Commission proposes to implement this revised definition by requiring at least 15% of offered handset models to connect to hearing aids through Bluetooth technology as an alternative to or in addition to a telecoil. The Commission also seeks comment on the Bluetooth technology that it should utilize to meet this requirement and how it should adopt this requirement into its wireless hearing aid compatibility rules. The Commission further explores ways to reach the 100% compatibility benchmark as well as the appropriate transition period for reaching that

benchmark. In addition, the Commission seeks comment on implementation of these proposals and updates to the wireless hearing aid compatibility rules, including proposed requirements for hearing aid compatibility settings in handset models, updates to website posting, labeling and disclosure, and revised reporting requirements. Finally, the Commission seeks comment on renaming its hearing aid compatibility rules to reflect more accurately what those rules cover.

A. Achievability of 100% Hearing Aid Compatibility Under the Section 710(e) Factors

16. In the *2016 HAC Order*, the Commission stated that by 2024, it would make a determination of whether 100% hearing aid compatibility is achievable based on the factors identified in section 710(e) of the Communications Act. The Commission noted that commenters recommend that the Commission use a section 710 analysis (as opposed to the achievability requirements of sections 716 and 718) to determine whether a 100% standard is achievable. The Commission found that this approach was consistent with the analysis it undertook previously when adopting modifications to the then-current deployment benchmarks. The HAC Task Force’s Final Report did not directly address achievability under the section 710(e) factors, and the Commission did not receive comments addressing these factors in response to WTB’s Public Notice seeking comment on the HAC Task Force’s Final Report.

17. The Commission tentatively concludes that requiring 100% of all handset models to be certified as hearing aid compatible is an achievable objective under the factors in section 710(e) of the Communications Act. Section 710(e) requires the Commission, in establishing regulations to help ensure access to telecommunications services by those with hearing loss, to “consider costs and benefits to all telephone users, including persons with and without hearing loss,” and to “ensure that regulations adopted to implement [the Hearing Aid Compatibility Act] encourage the use of currently available technology and do not discourage or impair the

development of improved technology.” It further directs the Commission to use appropriate timetables and benchmarks to the extent necessary due to technical feasibility or to ensure marketability or availability of new technologies to users.

18. The Commission tentatively concludes that the benefits to all handset users of adopting a 100% compliance standard for handset models offered in the United States or imported for use in the United States would exceed the costs. The Commission anticipates that adopting a 100% compliance standard would provide significant benefits to those with hearing loss by ensuring that a greater share of handset models for purchase are hearing aid compatible. At the same time, the Commission does not expect that adopting the 100% standard would impose undue burdens on manufacturers or service providers, as the vast majority of new handset models are already hearing aid compatible today.

19. The HAC Task Force’s Final Report found that, as of August 2022, about 93% of wireless handset models offered by manufacturers were already hearing aid compatible, which exceeds the benchmarks in the Commission’s current rules. The Commission does not anticipate large costs for those with or without hearing loss if non-compliant models are discontinued, considering the overwhelming share of wireless handset models are already hearing aid compatible. Given the existing availability of hearing aid-compatible handset models, the Commission seeks comment on its tentative conclusion and on any specific burden or cost that a 100% compliance standard would impose on manufacturers and service providers. The Commission also seeks comment on the extent to which a 100% compliance standard would reduce the affordability of lowest-cost handset models and adversely affect low-income persons.

20. In addition, the Commission tentatively concludes that adopting a 100% compliance standard would encourage the use of currently available technology and would not discourage or impair the development of improved technology. Handset manufacturers,

service providers, and consumer organizations that compose the HAC Task Force all unanimously support the Task Force’s consensus proposal for achieving 100% compliance, and the Task Force’s Final Report provides no indication or evidence that adopting the new standard would discourage the use of currently available technology or the development of improved technology. To the contrary, the Task Force’s Final Report suggests that revising the wireless hearing aid compatibility rules to permit the use of Bluetooth as a coupling method would better align the Commission’s requirements with current consumer preferences, as Bluetooth has become an increasingly popular method for pairing hearing aid devices to wireless handsets. The Commission seeks comment on this tentative conclusion.

21. Further, with respect to its tentative conclusion regarding the impact of a 100% requirement on technology, the Commission specifically seeks comment on whether allowing Bluetooth coupling as a way to achieve hearing aid compatibility or as an alternative or replacement for telecoil coupling would satisfy relevant statutory criteria. To permit the use of Bluetooth coupling as an alternative or as a replacement for telecoil coupling, is it sufficient for the Commission to find that Bluetooth coupling meets the achievability factors of section 710(e)? If so, commenters should explain how Bluetooth coupling meets the requirements of section 710(e) or why this method does not meet these statutory requirements. Are there other statutory requirements that Bluetooth coupling must meet in order for the Commission to allow its use as an alternative or replacement for telecoil coupling? If so, commenters should explain why Bluetooth coupling meets or does not meet these other statutory requirements.

22. Finally, the Commission tentatively concludes that adopting a 100% compliance standard after a reasonable transition period meets the requirements of section 710(e) that the Commission “use appropriate timetables or benchmarks to the extent necessary (1) due to technical feasibility, or (2) to ensure the marketability or availability of new technologies to

users.” The transition periods that the Commission proposes below will expand access to hearing aid-compatible handset models while giving manufacturers and service providers sufficient notice and lead time to build hearing aid compatibilities into all future handset models rather than just a percentage of handset models. The Commission seeks comment on this tentative conclusion. Do commenters agree with the Commission’s analysis and on the costs and benefits of its proposed finding? Given the current number of handset manufacturers who already include hearing aid compatibility in all of their handset models, would the Commission’s finding adversely impact the ability of handset manufacturers to innovate and create new products? If so, how would shifting to a 100% requirement curtail innovation? Similarly, would requiring hearing aid compatibility in all handset models impose an undue burden on those handset manufacturers who currently do not meet this mark, or otherwise create disruptions in the competitive marketplace?

B. Definition of Wireless Hearing Aid Compatibility

23. As a threshold question for implementing a 100% hearing aid compatibility requirement, the Commission seeks comment on the appropriate definition of hearing aid compatibility for wireless handsets. Specifically, the Commission seeks comment on expanding the definition of hearing aid compatibility to reflect changing coupling technologies. First, the Commission seeks comment on adopting the HAC Task Force’s recommended “flexible” hearing aid compatibility definition. Next, the Commission proposes to expand the definition to include Bluetooth connectivity and to require a certain percentage of offered handset models to include Bluetooth connectivity technology. As part of that proposal, the Commission seeks comment on which Bluetooth technologies it should recognize and how it should adopt these technologies into its rules.

1. HAC Task Force Recommended Hearing Aid Compatibility Definition

24. *Background.* The Commission’s existing wireless hearing aid compatibility rules

do not contain an express definition of hearing aid compatibility in the definitional section. Rather, the Commission's rules provide that a handset model is considered to be hearing aid compatible if it has been certified as such under a Commission-approved technical standard that the Commission has incorporated by reference into the rules through notice and comment rulemaking procedures. As of December 5, 2023, a new handset model can be certified as hearing aid compatible only if it meets the acoustic and inductive coupling requirements of the 2019 ANSI Standard and applicable volume control requirements.

25. The HAC Task Force recommends that the Commission define hearing aid compatibility in a more flexible manner than whether a handset model merely meets the criteria of a technical certification standard that the Commission has incorporated by reference into its rules. Specifically, the Task Force "encourages the Commission to adopt a forward-looking, flexible definition" of hearing aid compatibility "that reflects changing technologies while abiding by Congress's direction in the statute." Specifically, the Task Force recommends that a hearing aid-compatible handset model be defined as a handset model that: (1) has an internal means for compatibility; (2) meets established technical standards for hearing aid coupling or compatibility; and (3) is usable.

26. In the Public Notice, WTB sought comment on whether the Task Force's proposed revised definition of hearing aid compatibility would be consistent with the Commission's goal of ensuring that consumers have access to handset models that are fully hearing aid compatible. WTB asked whether the proposed definition would allow the Commission to determine hearing aid compatibility with certainty and whether a definition that makes general reference to "established technical standards for hearing aid coupling or compatibility" would be consistent with the Administrative Procedure Act (APA) or other legal requirements. In response to the Public Notice, the Consumer Technology Association (CTA) expresses support for the Task Force's proposed definition, arguing that a more flexible

approach encourages innovation while ensuring objective testing standards. In reply comments, the Task Force states that the definition of hearing aid compatibility should incorporate current and alternative hearing aid compatibility technologies.

27. *HAC Task Force Definition.* The Commission seeks comment on the HAC Task Force proposed definition of hearing aid compatibility, including whether it could adopt the definition in a manner that is consistent with the statutory requirements of section 710(c) of the Communications Act. Section 710(c) provides that “[t]he Commission shall establish or approve such technical standards as are required to enforce this section.” Further, this section states that “[a] telephone or other customer premises equipment that is compliant with relevant technical standards developed through a public participation process and in consultation with interested consumer stakeholders . . . will be considered hearing aid compatible for purposes of this section.” It also states that “[t]he Commission shall consult with the public, including people with hearing loss, in establishing or approving such technical standards.” Finally, this section states that “[t]he Commission shall remain the final arbiter as to whether the standards meet the requirements of this section.”

28. Is the more flexible definition of hearing aid compatibility that the Task Force proposes consistent with section 710(c)? Does section 710(c) require the Commission to continue to define hearing aid compatibility through technical standards that the Commission incorporates by reference into its rules or does it permit the Commission to recognize technical standards that industry and consumers are using for hearing aid compatibility without adopting those standards through a rulemaking process? Commenters should provide a detailed analysis of why their approach is consistent with statutory requirements, including why the commenter’s proposal is more consistent with the public interest than the Commission’s current approach. This analysis should also explain the costs and benefits of the commenter’s proposed approach versus the Commission’s current approach.

29. In adopting technical standards into its hearing aid compatibility rules, the Commission has relied historically on standards that were developed by organizations composed of handset manufacturers, wireless service providers, and, in some cases, groups that represent consumers with hearing loss who, through a consensus-driven process, create or revise technical standards. The standards development process does not necessarily include an opportunity for members of the public to participate in the initial creation of new technical standards. Once these technical standards bodies have developed a new standard, they petition the Commission to adopt the new standard into the hearing aid compatibility rules. The Commission accomplishes this task in compliance with the APA and Communications Act through notice and comment rulemaking that allows the Commission to meet public participation requirements.

30. The HAC Task Force recommends, however, that the Commission adopt a more forward-looking definition of hearing aid compatibility that would allow for the express incorporation of alternative and innovative technologies that can enable compatibility between handset models and hearing aid devices. As stated above, the Task Force proposes that the Commission define a hearing aid-compatible handset model as a handset model that: (1) has an internal means for compatibility; (2) meets established technical standards for hearing aid coupling or compatibility; and (3) is usable. The Commission seeks comment on each part of the HAC Task Force's proposed definition of hearing aid compatibility, as discussed below.

31. *"Internal Means of Compatibility."* The Task Force recommends that the Commission define an "internal means of compatibility" to mean that "the capability must be provided as an integral part of the phone, rather than through the use of add-on components that significantly enlarge or alter the shape or weight of the phone as compared to other phones offered by the manufacturer." The Commission seeks comment on this aspect of the HAC Task Force's proposed definition of hearing aid compatibility. As the Task Force notes, its

proposed definition of “internal means of compatibility” is based on language from the 2003 HAC Order. This Order recognized that section 710(b)(1)(B) of the Act refers to providing for internal means for effective use with hearing aids. The Commission interpreted this to mean that the capability must be provided as an integral part of the handset model, rather than through the use of add-on components that significantly enlarge or alter the shape or weight of the handset model as compared to other handset models offered by manufacturers.

Commenters supporting or opposing this part of the HAC Task Force’s proposed definition of hearing aid compatibility should explain why they support or oppose this part of the definition and whether it is consistent with the Commission’s recognition of a possible Bluetooth coupling standard. Is this part of the Task Force’s proposed definition clear and can it be applied effectively by testing organizations? Does it include the types of connectivity components that are desirable to include, and exclude those that are undesirable to include?

32. *“Meets Established Technical Standards.”* The Commission seeks comment on the “meets established technical standards for hearing aid coupling or compatibility” portion of the HAC Task Force’s proposed definition. With respect to this portion of the definition, the Task Force states that “[a]ny established technical standard for hearing aid coupling should be interoperable, non-proprietary, and adopted by industry and consumers alike.” The HAC Task Force also “recommends that the Commission consider factors such as ease-of-use, reliability, industry adoption, and consumer use and adoption when evaluating what technical standards” would meet the proposed definition. The Commission seeks comment on this approach, particularly because use of an “established technical standards” definition would be in contrast to an approach that would seek to reference each and every possible technical standard within § 20.19 of its rules. The Commission notes that incorporating multiple standards by reference may be particularly difficult where technology is rapidly changing, new or revised standards continue to be developed, and the legal requirements for incorporating specific technical

standards by reference into Commission regulations may be resource intensive and would necessarily lag behind marketplace developments.

33. If the Commission adopts this approach, how should it evaluate whether a standard is “established” and “adopted by industry and consumers alike?” What criteria should the Commission rely on to make these determinations? To be deemed “established,” would a given standard have to be adopted by all manufacturers and consumers or just a certain percentage of manufacturers and consumers, and how would the Commission measure the degree of acceptance of a standard by industry and consumers? How would testing bodies and the Commission’s Office of Engineering and Technology determine compliance with such standards? Further, should the Commission qualify the term “non-proprietary” in the Task Force’s proposed definition, to permit reliance on proprietary Bluetooth standards, as discussed in the next section?

34. Further, would adopting this portion of the definition be consistent with the section 710(c) requirement that a wireless handset model is hearing aid compatible if it is compliant with relevant technical standards developed through a public participation process and in consultation with interested stakeholders, including people with hearing loss, as discussed above? The Commission notes that section 710(c) appears to provide that a handset model may be deemed compatible by complying with a technical standard that has not yet been affirmatively adopted or approved by the Commission:

The Commission shall establish or approve such technical standards as are required to enforce this section. *A telephone or handset that is compliant with relevant technical standards developed through a public participation process and in consultation with interested consumer stakeholders (designated by the Commission for the purposes of this section) will be*

considered hearing aid compatible for purposes of this section, until such time as the Commission may determine otherwise. The Commission shall consult with the public, including people with hearing loss, in establishing or approving such technical standards. The Commission may delegate this authority to an employee pursuant to section 155(c) of this title. The Commission shall remain the final arbiter as to whether the standards meet the requirements of this section.

35. Should the Commission interpret section 710(c) to permit handset models to be designated as hearing aid compatible based on a technical standard that has been “developed through a public participation process” and in consultation with designated consumer stakeholders, even if the standard has not yet been adopted or approved by the Commission? How should the Commission define and determine compliance with such a “public participation process” and consumer consultation? Would the Commission’s adoption of such a procedure be consistent with the Commission’s other section 710 obligations, the Administrative Procedure Act, and the U.S. Constitution?

36. Further, would this approach be sufficiently certain for enforcement purposes as required by section 710(c)? If the Commission took this approach, how would it enforce such a standard? Alternatively, can the Commission adopt the Task Force’s proposed definition, while still incorporating by reference industry-developed standards for hearing aid compatibility into its rules, consistent with its current approach?

37. *“Is Usable.”* Finally, the Commission seeks comment on the third aspect of the HAC Task Force’s proposed definition of hearing aid compatibility. The Task Force explains that it defines “usable” in a manner consistent with the Commission’s accessibility requirements. Specifically, the Task Force states that “usable” refers “to ensuring that an individual has

adequate information on how to operate a product and access to the ‘full functionality and documentation for the product, including instructions, product information (including accessible feature information), documentation, bills and technical support which is provided to individuals without disabilities.’” The Commission seeks comment on incorporating this aspect of the proposed definition into its rules. What does this aspect of the HAC Task Force’s proposed definition add to the Commission’s hearing aid compatibility rules that its rules do not already cover? Does “usable” mean anything more than complying with Commission regulations and practicing good consumer relations?

38. *Office of the Federal Register Regulations.* The Commission also seeks comment on the HAC Task Force’s proposed definition in light of the Office of the Federal Register incorporation by reference regulations. When the Commission incorporates by reference a new hearing aid compatibility standard into its rules, it must request approval from the Director of the Federal Register by submitting a request for approval that complies with Office of the Federal Register incorporation by reference requirements. Among other requirements, the Office of the Federal Register rules state that “[i]ncorporation by reference of a publication is limited to the edition of the publication that is approved” and “[f]uture amendments or revisions of the publication are not included.” Further, the Office of the Federal Register requires that the Commission “[e]nsure that a copy of the incorporated material is on file at the Office of Federal Register.” The Commission also makes the document being incorporated by reference available for inspection in the Commission’s public reference room.

39. As a result, when the Commission requests Director of the Federal Register’s approval, it must ensure that the standard that it asks to be incorporated by reference is limited to the approved edition and make clear that future updates to the standard are not incorporated by reference without going through notice and comment rulemaking. Further, to ensure that any technical standard is “reasonably available” to affected parties, the

Commission would ensure that a copy of the incorporated standard is on file at the Office of Federal Register and make a copy of the standard available for public inspection in its reference room. The Commission seeks comment on whether there is a way for it to continue to incorporate by reference ANSI standards for hearing aid compatibility into its rules, while allowing for a more flexible approach for alternative technologies, such as Bluetooth technologies. Is there a way to distinguish alternative coupling technologies, such as Bluetooth technologies, from the traditional ANSI coupling capabilities?

40. The Commission also seeks comment on how the Commission could comply with the Office of the Federal Register incorporation by reference regulations if it adopted a specific Bluetooth standard, such as the non-proprietary Bluetooth Low Energy Audio (Bluetooth LE Audio) and the Bluetooth Hearing Access Profile (Bluetooth HAP) standards. Could the Commission submit a copy of the Bluetooth LE Audio and Bluetooth HAP standards to the Director of the Federal Register with its request for incorporation by reference permission and then make a copy of these standards available for public inspection in the Commission's reference room? Further, how would the Commission address updates to these standards given that the Commission can only incorporate by reference an approved edition of a standard? Is there another way consistent with statutory requirements that would allow the Commission to recognize these standards without following the traditional incorporation by reference process and that would allow the standards to be updated as industry releases revised versions of these standards?

2. Expanding the Definition of Hearing Aid Compatibility to Include Bluetooth Connectivity

41. As part of the *2016 HAC Order*, the Commission requested that the HAC Task Force consider whether the 100% hearing aid compatibility goal could be achieved in part or in whole by relying on alternative hearing aid compatibility technologies, such as Bluetooth,

bearing in mind the importance of ensuring interoperability between hearing aids and alternative technologies. The Task Force's Final Report recommends that the Commission move to a hearing aid compatibility standard that requires a handset model to be able to couple with hearing aids using two of three possible methods. All handset models would have to be capable of coupling using acoustic coupling and these handset models would also have to be capable of coupling through either a telecoil that meets certification standards or through Bluetooth connectivity. In response to WTB's Public Notice seeking comment on the Task Force's recommendation, most commenters expressed support for the Task Force's proposal to permit Bluetooth connectivity to be used as an alternative coupling method to telecoils, noting that most consumers are already using hearing aids that come with Bluetooth connectivity.

42. In light of the record, the Commission proposes to expand the definition of hearing aid compatibility to include Bluetooth connectivity, and it seeks comment on the best way to accomplish this objective. Below, the Commission proposes to require handset models to connect to hearing aids through Bluetooth connectivity as an alternative to telecoil coupling on a limited basis as it continues to study this issue, as long as both types of handset models also meet applicable acoustic coupling and volume control standards. As part of its proposal, the Commission seeks comment on whether it should take a "market based" approach to Bluetooth technology whereby the Commission would not explicitly adopt or incorporate by reference a single Bluetooth connectivity technology but would allow market forces to continue to determine which Bluetooth technology handset models use to pair with hearing aids. Alternatively, the Commission seeks comment on an approach whereby the Commission would broaden the current definition of hearing aid compatibility by explicitly incorporating by reference one or more non-proprietary Bluetooth connectivity standards, such as Bluetooth LE Audio and Bluetooth HAP, into the wireless hearing aid compatibility rules, the use of which would be required on a non-exclusive basis.

a. Requiring Bluetooth Connectivity as an Alternative Coupling

Method to Telecoil Coupling

43. *Background.* The HAC Task Force states that based on a survey that it conducted, most consumers prefer to use Bluetooth connectivity for pairing hearing aid devices with wireless handsets, as compared to acoustic and telecoil coupling methods. Further, it explains that unlike telecoils, Bluetooth audio transmission methods are expressly designed to transmit and facilitate audio. According to the HAC Task Force, consumers are increasingly using—and are increasingly finding a satisfying listening experience with using—Bluetooth connectivity. Bluetooth technology is an umbrella term for related technical standards that enable devices to communicate wirelessly. Some of these standards are proprietary standards, such as Apple’s Made-for-iPhone (MFi) and Google’s Audio Streaming for Hearing Aids (ASHA) standards and other standards are non-proprietary standards, such as LE Audio and Bluetooth HAP standards. The Task Force indicates that variations of these Bluetooth standards can be found in many of today’s handset models. In fact, the HAC Task Force states that “[t]he vast majority of wireless handsets now include at least some type of Bluetooth audio technology, without a regulatory mandate” The Task Force expects even greater use of Bluetooth connectivity in the coming years.

44. The vast majority of commenters support the Task Force’s findings with respect to Bluetooth coupling between wireless handset models and hearing aids. Bluetooth Special Interest Group, Inc. (Bluetooth SIG) states that more than 80% of hearing aids today use some form of Bluetooth technology, and that the Commission should adopt Bluetooth as a primary coupling method. CTA states that nine out of ten consumers own smartphones with Bluetooth and two-thirds report that their hearing device includes satisfactory direct Bluetooth audio streaming. Samsung expresses support for the consensus recommendation on coupling requirements and notes that Bluetooth is among the top three most frequently mentioned

features included in hearing devices desired by consumers. The Mobile & Wireless Form (MWF) states that Bluetooth is a dominant wireless technology and used in over-the-counter hearing aids.

45. The Task Force's Final Report notes, however, that there is a subset of consumers that continue to use telecoils and that these consumers find telecoils to be an important feature in wireless handset models. This finding is consistent with a comment arguing that telecoil coupling facilitates interoperability, is more reliable than Bluetooth, is consistent across devices, and does not require replacing hearing aids or a handset when the other is updated. This commenter states that through its HAC rules, the Commission is helping to maintain the availability of telecoils and urges the Commission to have a 100% telecoil requirement.

46. *Discussion.* The Commission proposes to require some handset models to connect to hearing aids through Bluetooth connectivity as an alternative to telecoil coupling on a limited basis as it continues to study this issue. The Commission seeks comment on this proposal. The record indicates that Bluetooth coupling is presently being widely utilized by consumers to couple handsets with hearing aids and achieving positive results. Under its proposal, the Commission will maintain a telecoil requirement but require a certain percentage of handset models to use Bluetooth connectivity as an alternative to telecoil coupling as long as both types of handset models also meet applicable acoustic coupling and volume control requirements, as discussed in more detail below.

47. Specifically, the Commission seeks comment on how Bluetooth coupling compares with telecoil coupling as far as interoperability between handsets and hearing aids. Is a handset model that meets telecoil certification requirements more expensive to manufacture than a handset model that substitutes Bluetooth connectivity for a telecoil? Does one type of coupling have better sound quality or maintain its connection better than the other type of

coupling? Is it easier to connect a handset to a hearing aid with a telecoil connection versus a Bluetooth connection? What are the costs and benefits of allowing Bluetooth coupling on a limited basis as an alternative to telecoil coupling? Would a gradual transition from telecoil coupling to Bluetooth coupling serve the public interest? As Bluetooth coupling becomes more accepted by consumers, will telecoil coupling become a less favorable way of connecting handsets to hearing aids as the HAC Task Force suggests?

48. The Commission is concerned with the cost to consumers of Bluetooth connectivity versus telecoil coupling. When using Bluetooth connectivity as an alternative to telecoil coupling, how frequently do consumers need to replace hearing aids or a handset when the other is updated? Similarly, does telecoil technology evolve over time, or is it a stable technology that does not change in the way Bluetooth standards are updated and therefore does not require a handset to be replaced when a consumer purchases a new hearing device with telecoil connectivity? In general, do lower priced hearing devices include telecoil or Bluetooth connectivity? Are new over-the-counter hearing aids more likely to include telecoil or Bluetooth connectivity? If they are more likely to include Bluetooth connectivity, what type of Bluetooth technology are they likely to include? How can the Commission ensure that its hearing aid compatibility rules allow consumers to have access to reasonably priced hearing aid-compatible handset models?

49. The Commission also seeks comment on the future of telecoil coupling. Is the HAC Task Force's observation that Bluetooth coupling has been steadily increasing over time while telecoil coupling has been stagnating an accurate reflection of consumer preferences and trends? Is telecoil coupling being replaced with Bluetooth connectivity in the marketplace? Would allowing market conditions to control the replacement of telecoil coupling with Bluetooth connectivity technologies in handset models protect the interests of all consumers? Will relying on market conditions—which may lead to fewer handset models with telecoil

coupling—leave behind the needs of consumers who may not be able to update to the newest handset models or hearing aids or who find that telecoil coupling better meets their needs?

b. Alternative Approaches to Adopting a Bluetooth Connectivity Requirement

50. Given its proposal to require Bluetooth coupling in a certain percentage of handset models (either as an alternative to or in place of telecoil)—and in light of the various Bluetooth technologies currently in use in the market—the Commission seeks comment on how to implement Bluetooth coupling into its rules. Specifically, the Commission seeks comment on two alternative approaches to adopting such a requirement: (1) requiring a certain percentage of handset models to meet a Bluetooth technical standard (either proprietary or non-proprietary) without incorporating by reference any particular standard into its rules; or (2) requiring a certain percentage of handset models to meet a (non-proprietary) Bluetooth standard that has been specifically incorporated by reference into its rules. In considering these approaches, the Commission seeks comment on whether there is a need for it to approve and incorporate by reference particular Bluetooth technical standards into its rules for hearing aid compatibility certification or whether the Commission can adopt a Bluetooth connectivity requirement without incorporating by reference a particular standard into the rules.

51. *Market Based Approach to a Bluetooth Requirement.* Given the variety of Bluetooth standards that exist today—both proprietary and non-proprietary—the Commission seeks comment on an approach to implementing a Bluetooth requirement that does not mandate a particular Bluetooth connectivity technology. Under this approach, the Commission would not explicitly adopt or endorse a particular Bluetooth connectivity technology or standard but would allow manufacturers and service providers to determine which Bluetooth technology to use to satisfy the required percentage of Bluetooth-compatible handset models (e.g., the proposed 15% requirement, as detailed below).

52. Would this approach be in the public interest? How would such an approach impact the development of Bluetooth technology in handset models? This approach appears to be consistent with the *2003 HAC Order*, where the Commission noted that Congress expressly avoided technology mandates so as not to “inhibit future development” of handset models, provided they are compatible with hearing aids. Further, under this approach, the Commission could continue to monitor the development of Bluetooth connectivity between wireless handset models and hearing aids as it has been doing since the release of the *2016 HAC Order*. If an issue develops in the future, the Commission could take action at that time to resolve the problem. The Commission seeks comment on this analysis.

53. The Commission also seeks comment on whether this approach is consistent with the Commission’s obligations under section 710(c). Section 710(c) of the Act states that “[t]he Commission shall establish or approve such technical standards as are required to enforce this section.” If the Commission does not establish or approve a specific Bluetooth standard, how can the Commission enforce a Bluetooth connectivity requirement? For the purposes of implementing section 710(c), can a distinction be drawn between the industry-developed standards for the more traditional coupling technologies (i.e., acoustic and inductive) and volume control on the one hand, and the standards developed for Bluetooth technology on the other hand? For example, should the fact that industry has already developed and implemented a variety of proprietary and non-proprietary standards for Bluetooth coupling impact how the Commission evaluates the need for it to adopt a Bluetooth coupling requirement into its rules? Should the Commission rely on the fact that handset manufacturers have already been including various forms of Bluetooth connectivity in their handset models without the Commission’s involvement, and more recently have been including updated versions of this form of connectivity that permit lower battery usage and can allow a

user to connect to assistive listening devices in movie theaters, convention centers, public transit vehicles, and other ventures?

54. Along these same lines, how would an approach that may allow manufacturers and service providers to meet Bluetooth benchmarks using proprietary standards, be consistent with the “established technical standard for hearing aid coupling compatibility” portion of the HAC Task Force’s proposed definition for hearing aid compatibility? As noted above, the Task Force proposes that “[a]ny established technical standard for hearing aid coupling should be interoperable, non-proprietary, and adopted by industry and consumers alike.” If the Commission adopts this proposed definition, should it limit the permissible Bluetooth standards to non-proprietary standards? Even if the Commission does not adopt a specific Bluetooth standard, should it nevertheless stipulate that any Bluetooth standard that a manufacturer chooses to use in a handset model must at least incorporate LE Audio technology given the efficiency and quality advantages of that technology? Under a market-based approach, could the Commission encourage use of the latest non-proprietary Bluetooth standards, such as the Bluetooth LE Audio and HAP Profile?

55. *Incorporation by Reference of a Non-Proprietary Bluetooth Connectivity Standard.* Alternatively, the Commission seeks comment on requiring a handset model to meet a Bluetooth standard that it has incorporated by reference into its rules in order to meet a Bluetooth requirement. Under this approach, the Commission would broaden the current definition of hearing aid compatibility by explicitly incorporating by reference non-proprietary Bluetooth connectivity standards whose use would be required on a non-exclusive basis. Specifically, the Commission would explicitly incorporate by reference the non-proprietary Bluetooth LE Audio and Bluetooth HAP standards into its hearing aid compatibility rules and require their use instead of a telecoil in a manner consistent with the proposed Bluetooth requirement.

56. Under this approach, handset models could come with other Bluetooth connectivity options, such as Apple's MFi and Google's ASHA proprietary standards, but the handset models also would have to include a non-proprietary Bluetooth standard, such as Bluetooth LE Audio and Bluetooth HAP coupling abilities, in order to satisfy the Commission's certification rules. Handset models that include other Bluetooth technologies rather than the Commission endorsed technologies, such as proprietary technologies, could not be used to satisfy the Bluetooth benchmark, unless the Commission decides to allow interim use of other Bluetooth technologies to meet the Bluetooth benchmark as a means of transitioning to full utilization of the Commission endorsed Bluetooth technology. The Commission seeks comment on this approach.

57. The HAC Task Force's Final Report states that Bluetooth LE Audio is an industry standard and that handset models with Bluetooth LE Audio are likely to increase interoperability with hearing devices entering the marketplace. Further, the Final Report states that Bluetooth HAP, which extends the Bluetooth LE Audio standard, is likely to increase Bluetooth technology's popularity as a coupling method for hearing devices and wireless handsets. The Final Report states, however, that Bluetooth LE Audio and Bluetooth HAP are relatively new standards and that to ensure a seamless transition to full interoperability the Commission should allow the use of well-established standards, such as Bluetooth Classic, ASHA, and MFi in the near term.

58. As an initial matter, the Commission seeks comment on whether it is required by section 710(c) to incorporate specific Bluetooth standards by reference into its rules in order to implement a Bluetooth requirement (e.g., the proposed 15% requirement, as detailed below), or whether it can interpret section 710(c) to allow a handset model to meet a standard that has not been affirmatively adopted or incorporated by reference into the Commission's rules. Further, what are the costs and benefits of this approach relative to the more flexible market-

based approach discussed above? Does this approach balance the need to adopt specific Bluetooth standards into the Commission's rules with the need to avoid excluding other standards, the loss of which might force consumers to replace their hearing aids prematurely to avoid connectivity issues with a new handset? How would this approach affect the availability of proprietary Bluetooth standards? Do proprietary Bluetooth technologies provide superior connectivity that would be sacrificed under this approach? What are the quality differences, if any, between the various Bluetooth standards with regard to the consumer experience in coupling and utilizing such Bluetooth technology? Would this approach be feasible in view of the pace at which Bluetooth technologies change and develop? Would one of these approaches better protect the interests of consumers with hearing loss and the ability of handset manufacturers to innovate?

59. If the Commission adopts a specific non-proprietary Bluetooth standard, would the Commission run the risk of tipping the marketplace in favor of Bluetooth LE Audio and Bluetooth HAP rather than another non-proprietary Bluetooth connectivity standard? In addition to Bluetooth LE Audio and Bluetooth HAP, are there other non-proprietary Bluetooth connectivity standards that the Commission should consider incorporating by reference into the wireless hearing aid compatibility rules? Are there other non-proprietary Bluetooth standards in the development stage? How can the Commission ensure that its choice of a non-proprietary Bluetooth standard is best suited to meet the needs of consumers with hearing loss?

60. *Transitional Use of Proprietary Bluetooth Standards.* The Commission also seeks comment on whether it should permit the use of other Bluetooth standards, such as proprietary standards, to satisfy its certification requirements on an interim basis as the industry transitions to full use of the Bluetooth LE Audio and Bluetooth HAP. In its Final Report, the HAC Task Force states that the Commission should consider incorporating Bluetooth

technology such as Apple's MFi and Google's ASHA into the Commission's rules for a period of transition. The Task Force states that Bluetooth LE Audio and Bluetooth HAP represent a long-term goal and current "widespread use" of these other Bluetooth standards "indicates that these methods should be considered to ensure a seamless transition toward full interoperability."

61. Recently, the HAC Task Force reiterated its commitment to continuing to explore the development and inclusion of Bluetooth LE Audio and Bluetooth HAP in new handset models. How likely is it that handset manufacturers will replace proprietary Bluetooth connectivity in their handset models with non-proprietary standards and over what time period? If the Commission allows the use of proprietary Bluetooth standards to meet the Bluetooth benchmark before transitioning to exclusive use of Bluetooth LE Audio and Bluetooth HAP, how long should the transition period be? What are the costs and benefits of allowing the use of proprietary standards for a period of time while the marketplace transitions to full use of Bluetooth LE Audio and Bluetooth HAP?

62. *Other Approaches to Adopting Bluetooth Standards.* The Commission also seeks comment on whether the Commission should establish a Bluetooth safe harbor or allow WTB to use its delegated authority to approve new Bluetooth connectivity standards or new editions of currently adopted standards that meet certain requirements.

63. Under the safe harbor approach, the Commission would require a certain percentage of handset models to include Bluetooth LE Audio and Bluetooth HAP connectivity technologies, but the Commission would not require compliance with a certain edition or version of these technologies by referencing those editions or versions in its rules. As long as the handset model included some edition or version of the technologies, the handset model would meet certification requirements in terms of the proposal to require a certain percentage of handset models to meet Bluetooth connectivity requirements. Is the establishment of a

Bluetooth safe harbor consistent with the requirements of section 710(c)? Under the safe harbor approach, how would the Commission enforce compliance with these technologies if it does not require compliance with a specific edition or version of the technologies?

64. Along these same lines, the Commission seeks comment on whether WTB could use its delegated authority under § 20.19(k) to adopt new Bluetooth connectivity technologies into the hearing aid compatibility rules or use this authority to revise the edition that could be used for certification purposes. Under this approach, the Commission could establish criteria that should guide the Bureau when making the determination of whether to approve a new Bluetooth connectivity standard or new edition of a currently approved standard. Alternatively, the Commission could adopt the Bluetooth connectivity standard and allow WTB to use its delegated authority to approve new editions of the Commission's adopted standard. WTB could make a list of approved standards publicly available that handset manufacturers could use for certification purposes.

65. If the Commission adopted this approach, would WTB be required to use notice-and-comment rulemaking procedures or could WTB release a Public Notice authorizing the use of a new Bluetooth connectivity standard or the use of a new edition of a currently approved standard? Would such an approach be consistent with section 710(c) of the Act and other statutory requirements, such as notice and comment rulemaking procedures? Would the Commission need to differentiate the process of adopting new ANSI standards from the processes of adopting new Bluetooth connectivity standards or editions? If the Commission needed to differentiate the two processes, how would the Commission make this distinction? Would the Commission need to adjust or supplement WTB's delegated authority under § 20.19(k) if it determine to use this approach?

66. *Bluetooth Compliance Requirements.* Finally, the Commission seeks comment on how it could ensure a handset model is in compliance with the Bluetooth standards permitted

by any of the above approaches. How could the Commission ensure that a handset model complies with the Bluetooth connectivity standard that the manufacturer indicates that it meets, and how can it ensure that this standard meets minimum consumer requirements for a quality wireless connection with a hearing device?

67. The HAC Task Force suggests that a handset manufacturer should be required to submit a Bluetooth attestation as part of its FCC equipment certification application. The Commission seeks comment on this suggestion. Would the submission of an attestation be sufficient to meet statutory requirements? How could the Commission ensure that a handset model submitted with an attestation actually meets the Bluetooth connectivity standards that the manufacturer indicates is embedded within the handset model? What kind of testing does a handset model undergo in order to receive such an attestation? Should the Commission rely on the Bluetooth standard party's own testing process such that an attestation is sufficient to satisfy that process including any interoperability concerns? Even if a handset model receives an attestation, how can the Commission ensure that the standard that is incorporated into the handset model is robust enough to meet the minimum consumer needs with respect to establishing a quality connection between the handset model and a hearing device?

68. Bluetooth SIG has indicated that it has its own qualification process, which involves testing at the product level for interoperability. If the Commission adopts Bluetooth LE Audio and Bluetooth HAP standards, should the Commission rely on the Bluetooth SIG's own testing process such that an attestation is sufficient to satisfy that process including any interoperability concerns? Is there reason to believe that some Bluetooth standards bodies provide more robust testing than other standards bodies?

C. Compliance Benchmarks

69. *Background.* The Commission's hearing aid compatibility rules require that 85% of the total number of handset models that manufacturers and service providers offer must be

certified as hearing aid compatible. The Commission's rules, however, do not impose separate benchmarks for the three components of the 2019 ANSI Standard (acoustic coupling, inductive coupling, and volume control). That is, in order for a handset model to be certified as hearing aid compatible under this standard, the handset model must meet all aspects of the standard and not just certain parts of the standard. Further, the Commission's rules allow handset manufacturers and service providers to grandfather existing hearing aid-compatible handset models for benchmark purposes as long as the handset models are still offered to the public.

70. Under the HAC Task Force's 100% proposal, after the applicable transition period passes, all of the handset models that manufacturers and service providers offer in their handset portfolios would have to be certified as hearing aid compatible. The Task Force proposes, however, that a portion of handset models could be certified as hearing aid compatible by meeting only certain aspects of the 2019 ANSI Standard's requirements rather than all of the requirements as presently required. Specifically, the Task Force proposes that to meet the 100% compatibility requirement, all handset models would have to meet the 2019 ANSI Standard's acoustic coupling requirements, but only 85% of these handset models would have to continue to meet the 2019 ANSI standard's telecoil coupling requirements. The remaining 15% of these handset models would have to meet a new Bluetooth connectivity requirement. To the extent the handset model "does not pass the telecoil test, it would have to support Bluetooth, and vice-versa." While the Task Force's Final Report does not contain a specific volume control benchmark proposal, recently members of the Task Force reiterated their commitment to working towards the goal that all new handset models will meet hearing aid compatibility requirements and that this will include an applicable volume control requirement.

71. As discussed above, the HAC Task Force has recommended that the Commission consider a "more forward-looking" definition of HAC. The Task Force asserts that its proposed

85/15% split between telecoil and Bluetooth coupling requirements is an appropriate way to reflect the popularity of Bluetooth connectivity for pairing hearing aid devices to handsets. According to a survey that it conducted, most consumers prefer to use Bluetooth connectivity for pairing hearing aid devices with wireless handsets, as compared to acoustic and telecoil coupling methods. Further, the Task Force states that unlike telecoils, Bluetooth audio transmission methods are expressly designed to transmit and facilitate audio. By contrast, the HAC Task Force explains, telecoils are a “by-product” of certain 1940s-era phone designs that later proved useful to couple to a similarly coiled piece of copper in a hearing aid. Noting that consumers are already familiar with Bluetooth technology, the Task Force reports that the vast majority of wireless handset models now include at least some type of Bluetooth audio technology. The Task Force expects even greater use of Bluetooth connectivity in the coming years and that consumers will prefer Bluetooth applications over acoustic and inductive coupling.

72. The Task Force’s Final Report appears to recommend that at the end of its proposed four-year transition period for manufacturers and five-year transition period for service providers, all handset models in a manufacturer’s or service provider’s overall handset portfolio would have to be certified as hearing aid compatible under the 2019 ANSI Standard, subject to the percentages detailed above. The Final Report, though, is ambiguous regarding the grandfathering of existing handset models that have been certified as hearing aid compatible under older technical standards and are still being offered to the public. While the body of the Final Report does not discuss this issue, it does suggest in its Model Rule section that the current grandfathering rule be kept in place but given a new subparagraph designation. The Final Report does not explain how the grandfathering rule would operate with respect to the overall composition of a handset manufacturer’s or service provider’s handset portfolio after the end of the relevant transition periods.

73. In response to WTB's Public Notice seeking comment on the Task Force's Final Report, CTA, MWF, and Samsung state that they support the HAC Task Force's consensus recommendations that provide a path to 100% hearing aid compatibility. Further, CTA and Samsung state that they support the Task Force's recommendation regarding the 85% benchmark for telecoil coupling and the 15% benchmark for Bluetooth coupling. Samsung also states that the Commission should adopt a benchmark for the volume control requirement, but it does not propose a benchmark for this requirement. The HAC Task Force states that the Commission should adopt a new Bluetooth connectivity benchmark, and Bluetooth SIG states that the use of a Bluetooth coupling requirement will help the Commission achieve its 100% hearing aid compatibility objective. As noted above, however, an individual commenter argues that the Commission should adopt a 100% telecoil requirement. This commenter states that telecoil coupling facilitates interoperability, is more reliable than Bluetooth, is consistent across devices, and does not require replacing hearing aids or a handset when the other is updated. Further, this commenter states that the Commission "is helping to maintain the availability of telecoils" and that the Commission "should require telecoil technology in 100% of all mobile devices . . . and mandate a timeline for compliance."

74. *100% Benchmark.* Consistent with its tentative conclusion regarding achievability, the Commission proposes that after the expiration of the relevant transition periods, 100% of the handset models that manufacturers and service providers offer or import for use in the United States must be certified as hearing aid compatible. As part of this requirement, the Commission proposes to require all handset models offered or imported for use in the United States to have at least two forms of coupling, as proposed by the HAC Task Force: (1) 100% of handset models would be required to meet an acoustic coupling requirement; and (2) 100% of handset models would be required to meet *either* a telecoil or a Bluetooth coupling requirement. Specifically, at least 85% of handset models would be

required to meet a telecoil requirement and at least 15% of handset models would be required to meet a Bluetooth requirement. Any handset models not meeting a telecoil requirement would be required to meet a Bluetooth requirement, and any handset models not meeting a Bluetooth requirement would be required to meet a telecoil requirement. The Commission seeks comment on this proposal in more detail below and throughout this *NPRM*. These handset models would have to be certified as hearing aid compatible under the requirements of part 2 subpart J—Equipment Authorization Procedures of the Commission’s rules, and include the relevant test reports showing compliance with these rules and the Commission’s § 20.19 hearing aid compatibility testing requirements for mobile handset models. All of these procedures must be complied with in full for a handset model to be labeled as hearing aid compatible and offered in the United States or imported for use in the United States. Once the relevant transition period ends, handset manufacturers and service providers will no longer be able to offer handset models that are not certified as hearing aid compatible.

75. The Commission seeks comment on its proposal to require all handset models that manufacturers and service providers offer in the United States or imported for use in the United States to be hearing aid compatible after the end of the applicable transition periods. Since the Commission has tentatively concluded above that 100% is achievable, and no commenters opposed or found issue with some form of a 100% requirement when WTB sought comment on the HAC Task Force’s Final Report, any commenter objecting to the Commission’s proposal should explain why this objective is not achievable using the statutory criteria outlined above.

76. Additionally, the Commission seeks comment below on a proposal—as well as an alternative approach—for meeting the 100% hearing aid-compatible handset portfolio requirement, including its proposed 85/15% split for telecoil and Bluetooth connectivity. Under the Commission’s proposal, manufacturers and service providers could meet the 100%

requirement by including grandfathered handset models that have been certified as hearing aid compatible in their overall handset portfolios as long as the handset models are still being offered in the United States or imported for use in the United States, as the Commission's current rule allows. Manufacturers and service providers could meet the 85/15% telecoil/Bluetooth requirement using new or grandfathered handset models. Alternatively, the Commission seeks comment on an approach where it would discontinue its grandfathering rule and not allow handset manufacturers and service providers to count grandfathered handset models certified under older certification standards towards the benchmark. Under this alternative, 100% of the handset models in a manufacturer's or service provider's handset portfolio would have to be certified as hearing aid compatible using the 2019 ANSI Standard's requirements, as modified by a possible telecoil and Bluetooth connectivity split.

77. *Grandfathering Proposal to Reach 100%.* Consistent with its existing rules, the Commission proposes to allow manufacturers and service providers to continue to offer handset models that are already certified as hearing aid compatible under older technical standards after the end of the relevant transition periods. These handset models would be grandfathered, and manufacturers and service providers could include these handset models as part of their 100% handset portfolios as long as the handset models are still being offered. Under this proposal, 100% of handset models would have to meet an acoustic coupling requirement, and could meet this requirement with handset models certified under the 2019 ANSI Standard or with grandfathered handset models (i.e., handset models previously certified using a pre-2019 ANSI Standard). Further, all handset models would have to meet a telecoil or Bluetooth requirement, with at least 85% meeting a telecoil requirement—which could be met using handset models certified under the 2019 ANSI Standard or grandfathered handset models—and with at least 15% meeting a Bluetooth requirement. The Commission seeks comment on this proposal.

78. Under the Commission's grandfathering proposal, handset manufacturers and service providers would have in their handset portfolios handset models that have been certified under different certification standards. For instance, manufacturer and service provider handset portfolios might include handset models certified as hearing aid compatible using the 2011 ANSI Standard and other handset models certified under the 2019 ANSI Standard. With respect to handset models certified under the 2019 ANSI Standard, some of these handset models might be certified as hearing aid compatible under the conditions of WTB's volume control waiver order or, depending on timing, under a new volume control standard that the Commission has adopted. Further, if the Commission adopts the Task Force's proposal regarding the 85/15% split between telecoil and Bluetooth connectivity, manufacturer and service provider handset portfolios might include these types of handset models as well. All of these handset models could be part of a manufacturer's or service provider's 100% hearing aid-compatible handset portfolio as long as the handset models are still being offered.

79. If the Commission adopts this proposal, should it modify its grandfathering rule to allow only a certain percentage of a handset portfolio to include handset models certified under older certification standards or older volume control requirements (e.g., the volume control waiver standard)? Should the Commission modify the grandfathering rule if it adopts a new volume control requirement to replace the waiver condition standard? How would such an approach work and would it require that certified handset models be taken out of a handset portfolio prior to the end of a handset model's product cycle? What would be the costs and benefits of such a rule and how would such a rule impact consumers, manufacturers, and service providers? Would removal of handset models certified under prior standards adversely affect consumers by prematurely removing from the market handset models that are relatively low-priced or that offer special features relied upon by certain groups of customers?

80. If the Commission adopts the Task Force's proposed 85/15% split between

telecoil and Bluetooth connectivity, but allows grandfathered handset models to count towards these benchmarks, how should the Commission count handset models certified under pre-2019 ANSI Standards towards this split? Under a grandfathering approach to the 85/15% split, would handset manufacturers and service providers be likely to offer fewer new handset models with telecoil connectivity? Or are market incentives sufficient to ensure that manufacturers and service providers would continue to offer new handset models with telecoil coupling technology? What percentage of handset models have both Bluetooth connectivity and telecoil capabilities? If the Commission adopts its grandfathering proposal, should it impose a requirement on service providers that they have to offer a certain percentage of new handset models that meet telecoil requirements and the rest would have to meet Bluetooth connectivity requirements? If so, what percentage should the Commission impose and how would this percentage work with small or rural service providers that may only add one or two new handset models over a period of years? Alternatively, does the fact that a consumer can purchase a handset directly from a manufacturer and bring the handset to the service provider's network solve this problem? What are the costs and benefits to consumers to having to purchase a handset from a manufacturer and bring it to the service provider for service? What impact does this approach have on manufacturers and service providers?

81. *Alternative Approach to Reach 100%.* Alternatively, instead of allowing grandfathering, should the Commission require 100% of all handset models offered in the United States or imported for use in the United States to meet the 2019 ANSI Standard (or any future ANSI standards), with 100% of handset models meeting the acoustic coupling portion of the 2019 ANSI standard, at least 85% of all handsets models meeting the telecoil portion of the 2019 ANSI standard, and at least 15% meeting a Bluetooth component? Under this approach, manufacturers and service providers would no longer be able to offer handset models certified as hearing aid compatible under earlier (pre-2019) versions of the ANSI standard and would

either have to remove these handset models from their handset portfolios or recertify these handset models under the 2019 ANSI Standard. The Commission seeks comment on this approach, as opposed to its proposal above to allow handset models to meet the 100% benchmark using grandfathered handset models. What are the benefits and drawbacks of such an approach? Would an approach that requires service providers and manufacturers either to retire older handset models or certify those handset models under the 2019 ANSI Standard lead to better options available in the market for consumers with hearing loss? Given the pace of technology advancement, would such an approach be feasible for manufacturers and service providers? Would it be more straightforward and thus (i) easier for manufacturers and service providers to implement; (ii) easier for consumers to understand; and (iii) easier for the Commission to enforce?

82. The Commission seeks comment on the differences between its grandfathering proposal and this alternative approach, including the costs and benefits of each option, and how either approach might impact transition time. Should the Commission consider a hybrid of the two, such as a phased approach that would enable it to reach a 100% benchmark using grandfathered handset models within a shorter period of time, with the ultimate goal of 100% of handset models meeting the 2019 ANSI Standard (or newer ANSI standards as they are developed)? For example, after one year, 75% of handset models could be grandfathered; after two years, 50%; after three years, 25%; and after four years, no grandfathered handset models could be counted towards the 100% benchmark.

83. *Volume Control Benchmark.* Under either the Commission's grandfathering proposal or the alternative 100% 2019 ANSI Standard approach, how should the Commission incorporate the volume control requirement into its benchmarks? As noted above, under the Commission's current rules, as of December 5, 2023, handset models can no longer be certified as hearing aid-compatible using the older 2011 ANSI Standard that does not include a volume

control requirement. After this date, handset models can only be certified as hearing aid-compatible if they meet the requirements of the 2019 ANSI Standard and the related TIA 5050 Standard that sets forth volume control requirements for wireless handset models. The recently issued *HAC Waiver Order*, however, modified these requirements by allowing handset models to be certified as hearing aid-compatible if the handset model meets the limited volume control standard set out in that order and all other aspects of the 2019 ANSI Standard. This waiver remains in effect for a two-year period that ends on September 29, 2025.

84. If the Commission adopts an approach where all handset models must be certified as hearing aid-compatible using the 2019 ANSI Standard, as modified by the *HAC Waiver Order*, should it include a 100% volume control requirement at the end of the transition period? On the other hand, if the Commission allows manufacturers and service providers to meet the 100% requirement using grandfathered handset models, as it proposes above, should it impose a requirement that a certain percentage of handset models must meet the volume control portion of the 2019 ANSI Standard, as modified by the *HAC Waiver Order*? Or should the Commission limit the volume control requirement to all new handset models certified as hearing aid compatible using the 2019 ANSI Standard, as modified by the *HAC Waiver Order*, without setting an overall volume control benchmark for the portfolio? How would the grandfathering approach—which means that not all available handset models would meet a volume control requirement—impact consumers with hearing loss?

85. How should the Commission handle the volume control requirement if the Commission adopts a new volume control standard to replace the TIA 5050 Standard, as modified by the *HAC Waiver Order*? Under these circumstances, should the Commission allow a limited grandfathering of handset models that meet the *HAC Waiver Order's* volume control standard and all other aspects of the 2019 ANSI Standard, but not the requirements of the new volume control standard? Should the Commission impose a requirement that these types of

handset models should be eliminated from handset portfolios over a certain time period, such as two years from the effective date of the new volume control standard? Alternatively, should the Commission just allow these types of handset models to be phased-out over the handset model's normal product life cycle? What are the costs and benefits to consumers and manufacturers of permitting these types of handset models to be grandfathered?

86. *Telecoil/Bluetooth Benchmarks.* The Commission also seeks comment on implementing its proposed 85/15% split between telecoil and Bluetooth connectivity under the two alternatives discussed above (i.e., its grandfathering proposal and the 100% 2019 ANSI Standard approach), as well as some alternative approaches to setting benchmarks for telecoil and Bluetooth coupling. In this regard, the Commission notes that members of the HAC Task Force have recently reiterated their commitment to working towards the goal of including Bluetooth connectivity as an alternative to telecoil coupling in a certain percentage of handset models as described in the HAC Task Force's Final Report. Under either approach, how does the Commission enforce a requirement that at least 85% of handset models must meet telecoil requirements and at least 15% must meet a Bluetooth connectivity standard? Should the Commission allow a handset model that meets telecoil certification requirements and Bluetooth connectivity requirements to be counted as meeting both the telecoil and Bluetooth connectivity requirements? Should the Commission allow for some fluctuation within a range close to an 85/15% split, or should it strictly enforce that number? For example, should the Commission require that a manufacturer or service provider offer at least 85% of handset models that meet the telecoil requirements and the rest of the handset models offered meet a Bluetooth connectivity standard, without imposing a 15% minimum? If a manufacturer releases one new handset model a year, how many years after the transition date will it take for the 85/15% split to be reached?

87. Instead of its proposed 85/15% split between telecoil and Bluetooth

connectivity, the Commission seeks comment on a number of alternative approaches to establishing a telecoil and Bluetooth coupling benchmark.

- Under the first alternative, instead of the Commission's proposed 85/15% split, should it continue to require all handset models to meet the 2019 ANSI Standard's telecoil requirements? This approach would require 100% compliance with all three aspects of the 2019 ANSI Standard (acoustic coupling, telecoil coupling, and volume control) and would ensure that consumers who use telecoils in their hearing aids could purchase any new handset model on the market without having their selection of handset models reduced by an 85% benchmark. This approach would not require a certain percentage of handsets to meet a Bluetooth connectivity requirement.
- Under the second alternative, should the Commission require 100% of new handset models to meet all three aspects of the 2019 ANSI Standard and impose an additional requirement that 15% of these handset models must also meet a Bluetooth connectivity requirement?
- Under the third alternative, should the Commission set a deadline for 50% or more of handset models to incorporate Bluetooth connectivity technology, while retaining an 85% telecoil requirement? This alternative reflects the fact that Bluetooth connectivity is popular among consumers with hearing loss and that 56% of handset models already support some form of Bluetooth connectivity. Would this approach create redundancy in coupling requirements or provide consumers with hearing loss much needed flexibility to connect with hearing devices?
- Under the fourth alternative, instead of an 85/15% split, should the Commission impose a different telecoil/Bluetooth split such as a 75/25% or 60/40% split or should the Commission's rules provide for a gradual change in the split over a period of years that

results in a more even split between the telecoil and Bluetooth coupling requirements?

- Under the fifth alternative, should the Commission avoid imposing a precise percentage and give manufacturers and service providers more flexibility to follow market demands and determine the percentage of handset models that they offer that meet either telecoil or Bluetooth connectivity requirements? Would such a flexible approach benefit or harm consumers with hearing loss and how would the Commission monitor and evaluate whether the split that develops is appropriate or harmful to consumers with hearing loss?

88. The Commission seeks comment on these alternative approaches. Is there a significant additional cost to incorporating both forms of connectivity in a single handset model (even though most new handsets today offer both technologies)? Would any of these approaches impede the development or improvement of handset model technology, either for consumers in general or for consumers with hearing loss? The Commission seeks comment on this issue in light of the Task Force's statement that consumers prefer Bluetooth coupling over telecoil coupling. Is one of these approaches more in the interest of consumers while allowing more opportunity for handset manufacturers to innovate? What are the costs and benefits of each of these approaches or an approach that gradually evens the split between telecoil and Bluetooth coupling requirements over a period of years and what should the period of years be?

D. Transition Periods for 100% Hearing Aid Compatibility

89. The Commission proposes to establish a 24-month transition period for handset manufacturers to meet the 100% benchmark, running from the effective date of an amended rule adopting the 100% requirement, and a 30-month transition period for nationwide service providers. Further, the Commission proposes a 42-month transition period for non-nationwide service providers. The Commission seeks comment on this proposal.

90. While the Commission's proposed transition periods are shorter than the four-year transition period the HAC Task Force recommends for handset manufacturers and the five-year transition period it recommends for service providers, the Commission previously has relied on a two-year transition period when transitioning to new technical standards and the Commission proposes that establishing a two-year transition period again would be appropriate to balance the product development cycles for manufacturers and service providers with the needs of consumers with hearing loss. The longer transition periods the Commission proposes for service providers will allow new handset models certified using the latest certification standards to flow downstream and be available for providers to offer for sale.

91. Given that the Commission adopted the 2019 ANSI Standard in February 2021 and that WTB has conditionally granted ATIS's volume control waiver request, the Commission believes that these transition periods are reasonable. Handset manufacturers have been on notice since February 2021 of the requirements of the new standard and WTB granted ATIS's request to adjust the volume control testing requirements by waiver, based on the conditions set out in the ATIS Ex Parte Letter. Is there any reason why handset manufacturers cannot meet a two-year transition requirement assuming that the volume control testing requirements are those recently approved by WTB and the Commission does not adopt a new volume control standard before the end of the manufacturer transition period? Since the current volume control testing requirements are based on ATIS's request, is there a reason why manufacturers cannot meet ATIS's requested testing methodology by the end of a two-year transition period?

92. In order to meet the 2019 ANSI Standard's requirements and related volume control requirements, is it simply a matter of testing existing hearing aid-compatible handset models under the new standards or is there reason to believe that handset models need to be redesigned to meet the new standards? If handset models have to be redesigned to meet the new standards, would this process already be underway? The Commission notes that the Task

Force indicates that part of the reason it is supporting the 85/15% split is because the 2019 ANSI Standard's telecoil testing requirements are "more difficult" to meet than the 2011 ANSI Standard's telecoil requirements. Given that the Task Force is accounting for the new telecoil testing standards in its proposed 85/15% split, why does this not support a two-year transition period for manufacturers? Commenters arguing that the new telecoil testing standard requires a longer transition period should explain why adjusting the split downward is not a better solution than drawing out the transition period.

93. The Commission seeks comment on whether manufacturers and service providers can achieve compliance with a 100% requirement within the proposed timeframes, and if not, about potential alternative timeframes. The Commission seeks comment on the steps manufacturers and service providers must take to meet a 100% compliance standard and the scope and timeline of any necessary changes. What, if any, obstacles do manufacturers or service providers anticipate facing? Given the significant public interest in moving quickly to achieve 100% compliance as well as the current extensive availability of hearing aid-compatible handset models, any commenters proposing longer transition periods should provide specific information about why more time is needed.

94. The Commission seeks comment on how the two alternatives outlined above for reaching 100% compatibility (i.e., the grandfathering proposal or the 100% 2019 ANSI Standard approach) would impact transition times. Would the 100% 2019 ANSI Standard approach require a longer transition period to 100% hearing aid compatibility than its grandfathering proposal? What impact would that longer period have on consumers with hearing loss? If the Commission requires 100% of handset models to meet only certain aspects of the 2019 ANSI Standard (or future ANSI standards adopted by the Commission), is a 24-month transition period for manufacturers and a 30-month or 42-month transition period for service providers feasible? Alternatively, if the Commission adopts the 100% 2019 ANSI Standard approach,

should it impose the transition period proposed by the Task Force—four years for manufacturers and five years for service providers? Instead of a single timeline, should the Commission develop separate timelines for reaching different aspects of hearing aid compatibility, such as 100% compliance on acoustic coupling, as compared to reaching 100% compliance for “magnetic/wireless coupling” (i.e., the 85/15% proposal for telecoil coupling and Bluetooth connectivity), and another timeline for reaching 100% for volume control?

E. Handset Settings for Hearing Aid Compatibility

95. The Commission’s wireless hearing aid compatibility rules do not address whether a handset model by default must come out-of-the-box with its hearing aid compatibility functions fully turned on, or whether it is permissible for a manufacturer to require a consumer to turn these functions on by going into the handset’s settings. Further, the Commission’s rules do not address whether a handset model can have two different settings: one setting that turns on acoustic coupling and volume control, but not telecoil coupling, and a second separate setting that turns on the handset model’s telecoil coupling capabilities. In addition, the Commission’s rules do not address whether a handset model in telecoil mode has to continue to fully meet acoustic and volume control requirements.

96. While the Commission’s hearing aid compatibility rules do not address this issue, staff has informally advised handset manufacturers that handset models cannot have separate selections for volume control compliance and another for RF interference and telecoil compliance. Staff has stated that only one hearing aid compatibility selection is permitted and multiple selections are not permitted. Recently, staff has been asked whether this informal advice could be modified to allow two hearing aid compatibility modes of operation in a handset model and whether a handset model in telecoil mode must continue to fully meet acoustic coupling and volume control requirements.

97. The HAC Task Force’s Final Report does not address this hearing aid compatibility

handset model setting issue. The Task Force does recommend, however, that the Commission require acoustic coupling in all handset models and adopt a Bluetooth connectivity requirement as an alternative coupling method to telecoil coupling in a certain percentage of handset models. If the Commission adopts this Bluetooth proposal, then a handset model certified as hearing aid compatible under the 2019 ANSI Standard would have to meet at least three hearing aid compatibility requirements. The handset model would have to meet acoustic coupling and volume control requirements and—depending on the handset model—would also have to meet either a telecoil coupling or Bluetooth connectivity requirement. It is also conceivable that a handset model might meet acoustic, telecoil, and Bluetooth coupling requirements as well as the volume control requirements that WTB recently addressed.

98. Given these potential alternative coupling methods and informal manufacturer requests that the Commission allow more than one mode of operation for hearing aid compatibility in a handset model and detail what each mode of operation must include, the Commission believes stakeholders would benefit from the establishment of a rule, and it seeks comment on this issue. The Commission proposes that after the expiration of the manufacturer transition period, all handset models must by default come out-of-the-box with acoustic coupling and volume control certification requirements fully turned on. The Commission further proposes to permit handset models to have a specific setting that turns on the handset model's telecoil or Bluetooth coupling function, depending on the secondary capability included in a particular handset model. The Commission seeks comment on these proposals as well as whether a handset model operating in telecoil or Bluetooth coupling mode must also continue to meet acoustic coupling and volume control requirements or some aspects of these requirements.

99. In this regard, the Commission seeks comment on whether it is necessary for a handset model in telecoil or Bluetooth coupling mode to continue to fully meet acoustic and

volume control requirements. Should the Commission allow handset models operating in telecoil or Bluetooth coupling mode to automatically turn off acoustic coupling or the volume control function, or should it require these functions to remain on or some portion of these functions to remain on? Is it technically feasible for a handset model in telecoil or Bluetooth coupling mode to meet the 2019 ANSI Standard's acoustic and volume control requirements in full or even necessary from a consumer's perspective for a handset model in telecoil mode or Bluetooth coupling mode to meet these requirements? Should a handset model that meets all four hearing aid compatibility requirements be required to meet all aspects of acoustic and volume control requirements or only some part of those requirements when it is operating in telecoil or Bluetooth coupling mode? If it is technically feasible for a handset model to operate with telecoil and/or Bluetooth coupling at the same time as meeting the acoustic coupling and volume control requirements, should the Commission require all available coupling options to be turned on in the handset model's default mode?

100. If the Commission determines to allow more than one hearing aid compatibility mode of operation, it is concerned with how difficult it might be for consumers to discover these features and to understand their functionality. In this regard, should the Commission establish standard hearing aid compatibility settings that would be consistent across all hearing aid-compatible handset models? Would it be helpful if the Commission were to establish uniform, industry-wide nomenclature for compatibility modes in handset models? If the Commission allows a handset model to have two compatibility modes, what should it call these modes? Should the default mode be called HAC mode and the second mode be called Telecoil or Bluetooth mode, depending on the handset model? What if a handset model meets all four hearing aid compatibility requirements? Under these circumstances, should it allow three different modes of compatibility and, if so, what should the Commission require each of these modes to be called, and what hearing aid compatibility functions should it require to be

included in each mode?

101. Commenters should fully explain why they support or oppose the Commission's proposals for different modes of operations and why the Commission's proposals are in the public interest or not in the public interest. What are the costs and benefits of each of the Commission's proposals? What are the advantages and the disadvantages of the Commission's proposals in terms of their impact on handset manufacturers and consumers?

F. Consumer Notification Provisions

1. Labeling and Disclosure Requirements

102. The Commission seeks comment on whether to revise the labeling and disclosure requirements in § 20.19(f). As stated above, the Commission proposes that, after the expiration of the applicable transition period for handset manufacturers, all handset models must be certified as hearing aid compatible. Further, the Commission proposes that at least 85% of these handset models must meet a telecoil coupling requirement and that at least 15% of these handset models must meet the Commission's new Bluetooth coupling requirement. The Commission proposes using either its grandfathering proposal or a 100% 2019 ANSI Standard alternative. Under either approach, the Commission proposes that all new handset models must be certified using the 2019 ANSI Standard's acoustic coupling requirements and the related volume control requirements, and that all new handset models must meet either the standard's telecoil coupling requirement or a Bluetooth requirement. If the Commission adopts these proposed changes, it tentatively concludes that it should revise the package labeling provisions in § 20.19(f)(1) of the Commission's rules to reflect these changes. Specifically, it tentatively concludes that the handset model's package label must state whether the handset model includes telecoil coupling capability that meets certification requirements; includes Bluetooth connectivity as a replacement for meeting telecoil certification requirements; or includes both. The Commission seeks comment on whether revising the

package labeling rule in this way would be sufficient to ensure that consumers can easily determine from looking at a handset model's package label whether the handset model has the coupling ability that meets their needs.

103. The Commission also tentatively concludes that it should make a corresponding change to the package insert and handset user manual requirements in § 20.19(f)(2) to require information in a package insert or user manual about whether a handset model meets telecoil certification requirements; replaces this requirement with Bluetooth coupling ability; or includes both. Section 20.19(f)(2) establishes labeling and disclosure requirements for manufacturers and service providers and requires them to include certain information about the hearing aid compatibility of each handset model in a package insert or user manual for the handset. For new handset models that use Bluetooth coupling rather than telecoil coupling to meet Commission requirements, the Commission proposes to require that the package insert or handset model user manual explain that the handset model does not meet telecoil certification requirements and instead couples with hearing aids using a Bluetooth standard and provide the name of that Bluetooth standard. The Commission seeks comment on whether revising the rule in this way would provide sufficient information for consumers.

104. Further, if the Commission allows handset models to have default and secondary hearing aid compatibility modes of operation, it tentatively concludes that it should modify its handset package insert and user manual requirements to require an explanation of each of these modes, what each mode does and does not include, and how to turn these settings on and off. The Commission seeks comment on this proposal. How can the Commission ensure that consumers can easily understand these modes of operation and what each mode of operation includes and does not include? Besides the name of the mode, how does the Commission ensure that consumers can easily find these modes in a handset model's setting and that the modes are not buried in subheadings? Commenters supporting this modification

should provide examples of what the package insert or user manual rule should state.

Commenters supporting or opposing this change should explain why this change is or is not in the public interest and why this change is consistent or inconsistent with section 710(d) of the Act.

2. Digital Labeling Technology

105. As an additional proposed change to § 20.19(f)(2), the Commission proposes to permit manufacturers and service providers to provide the information required under this section to consumers through the use of digital labeling technology (e.g., quick response (QR) codes) on handset boxes rather than through a package insert or user manual. A QR code is a type of barcode that can be read easily by a digital device, such as a handset with a camera, and is typically used for storing Uniform Resource Locator (URL) information. Companies often use QR codes to link consumers to a company's webpage in order to provide consumers with additional information on a company product.

106. When the Commission adopted the requirement for package inserts, it considered requests from industry to give manufacturers and service providers more flexibility in the methods used to convey information on a handset model's hearing aid compatibility and volume control capabilities, including providing this information online rather than in the packaging insert or user manual. The Commission found, however, that consumers may not necessarily visit service provider websites before going to a service provider's store and purchasing a hearing aid-compatible handset. Therefore, the Commission required that package inserts and user manuals be provided with hearing aid-compatible handset models and that this information not just be provided online.

107. The Commission proposes to reconsider its determination and allow manufacturers and service providers to meet the requirements of § 20.19(f)(2) through the use of digital labeling technology such as QR codes on handset boxes, or other accessible formats.

When the Commission required manufacturers and service providers to include this information in package inserts or user manuals and declined to permit this information to be provided online, it based its decision on its finding that consumers may not necessarily visit service provider websites before going to a service provider's store and purchasing a hearing aid-compatible handset. By contrast, permitting service providers and manufacturers to include QR codes on handset packaging would not require consumers to visit a website before purchasing a handset and instead would provide consumers with access to relevant information at the point of sale while consumers are in stores making purchasing decisions. Further, permitting manufacturers and service providers to use QR codes on a handset model's package as an alternative to including a paper insert or user manual with the required hearing aid compatibility information could help ensure that consumers receive more up to date information, while saving paper and helping to streamline packaging.

108. The Commission seeks comment on this proposal and whether permitting the use of QR codes would be an effective alternative approach for ensuring that consumers with hearing loss receive relevant hearing aid compatibility information when purchasing their mobile devices. Would allowing the use of QR codes provide a more consumer friendly approach than continuing to require the use of paper inserts and user manuals? How familiar are consumers with QR codes? Are there enough consumers that are not familiar with QR codes that the Commission should continue to require the use of paper inserts and user manuals in addition to allowing the use of QR codes? Do consumers have the ability to scan a QR code before purchasing a handset, or would they have to rely on store employees to scan the code for them so that they could read the information?

109. Do paper inserts and user manuals have benefits that QR codes cannot provide? If so, what are these benefits? Along these same lines, are there other types of digital labeling technology that the Commission should consider permitting as either an alternative to or in

conjunction with the use of QR codes? What are these other digital labeling technologies? Further, if the Commission allows the use of digital labeling technology as an alternative to paper inserts and user manuals, how can it ensure that these methods of labeling do not become obsolete before it can update the labeling rules? Finally, what are the costs and benefits of permitting the use of QR codes or other types of digital labeling as an alternative to continuing to require the use of paper inserts and user manuals?

3. Handset Model Number Designation

110. The Commission seeks comment on whether to update its rule on handset model number designations. Section 20.19(g) of the Commission's rules requires that "where a manufacturer has made physical changes to a handset that result in a change in the hearing aid compatibility rating under the 2011 ANSI standard or an earlier version of the standard, the altered handset must be given a model designation distinct from that of the handset prior to its alteration." The Commission seeks comment on how this rule should apply in cases where a handset model that has passed the 2011 ANSI Standard and has an assigned model number subsequently passes the 2019 ANSI Standard. Under the current rule, if there have been no physical changes to the handset model (i.e., no changes in hardware or software) a new model number would not be required, but the handset manufacturer may issue the handset model a new model number if it chooses to.

111. In these cases, where a handset model that is already certified as hearing aid compatible is re-certified under an updated ANSI standard, the Commission seeks comment on whether to revise the rule to require a manufacturer to issue a new model number even if there is no physical change to the handset model. Would revising the rule to require manufacturers to issue a new model number for such handset models benefit consumers with hearing loss by making it easier for them to identify the handset models that have been certified under updated standards? How would consumers be able to discern which models

have been certified under updated standards otherwise? Would the costs or other burdens associated with such an approach be significant enough to outweigh the potential benefits for consumers?

G. Website, Record Retention, and Reporting Requirements

1. Website and Record Retention Requirements

112. After the end of the applicable transition periods, the Commission tentatively concludes that it should require handset manufacturers and service providers to identify on their publicly accessible websites which handset models in their handset portfolios meet telecoil certification requirements. For those handset models that do not meet telecoil certification requirements, the Commission tentatively concludes that handset manufacturers and service providers must affirmatively state that the handset model does not meet telecoil certification requirements and identify which Bluetooth connectivity standards the handset model meets instead. The Commission also tentatively concludes that handset manufacturers and service providers must identify on their publicly accessible websites the conversational gain with and without hearing aids for each handset model that they offer regardless of whether the handset model meets telecoil certification standards or includes Bluetooth connectivity instead. The posting of a handset model's conversational gain with and without hearing aids is consistent with the Commission's current handset model package label rule. The Commission believes that all of this information is essential for consumers to have access to in order to purchase handset models that meet their individual needs.

113. The Commission seeks comment on these tentative conclusions. Commenters opposing these tentative conclusions should clearly explain why these tentative conclusions are not in the public interest. What are the costs and benefits of these tentative conclusions? The Commission notes that if it allows the use of QR codes or other digital labeling technology as an alternative to paper inserts or user manuals, this may be the only way a consumer might be

able to access some of this information. Further, consumers might research this information online before going to a store or may actually buy the handset online without going to the store. Commenters should provide a detailed explanation as to why they support or oppose these tentative conclusions.

114. Further, if the Commission adopts a 100% hearing aid compatibility requirement, it seeks comment on whether to streamline other components of the website and record retention requirements in the Commission's rules. In 2018, the Commission imposed new website posting requirements for service providers and required providers to retain information necessary to demonstrate compliance with the Commission's wireless hearing aid compatibility rules. Under these requirements, each manufacturer and service provider that operates a publicly-accessible website must make available on its website a list of all hearing aid-compatible handset models currently offered, the ANSI standard used to evaluate hearing aid compatibility, the ratings of those handset models under the relevant ANSI standard, if applicable, and an explanation of the rating system. In addition, service providers must post on their websites: a list of all non-hearing aid-compatible handset models currently offered, as well as a link to the current FCC web page containing information about the wireless hearing aid compatibility rules and service providers' obligations. Each service provider must also include the marketing model name/number(s) and FCC ID number of each hearing aid-compatible and non-hearing aid-compatible handset model currently offered.

115. Service providers must also retain on their website a link to a third-party web site as designated by the Commission or WTB, with information regarding hearing aid-compatible and non-hearing aid-compatible handset models or, alternatively, a clearly marked list of hearing aid-compatible handset models that have been offered in the past 24 months but are no longer offered by that provider. The rules also require that the information on a manufacturer's or service provider's website must be updated within 30 days of any relevant

changes, and any website pages containing information so updated must indicate the day on which the update occurred.

116. Further, the rules require service providers to retain internal records for discontinued handset models, to be made available upon Commission request of: (1) handset model information, including the month year/each hearing aid-compatible and non-hearing aid-compatible handset model was first offered; and (2) the month/year each hearing aid-compatible handset model and non-hearing aid-compatible handset model was last offered for all discontinued handset models until a period of 24 months has passed from that date.

117. The Commission seeks comment on whether to streamline these requirements by eliminating the requirement to post or retain information about non hearing aid-compatible handset models. If the Commission requires that 100% of handset models be hearing aid compatible, it does not anticipate that there would continue to be a need for providers to post information about non hearing aid-compatible handset models on their websites. Do commenters disagree? Should the Commission continue to require service providers to post information and keep records about the non-hearing aid-compatible handset models they offered previously? Would doing so provide useful information for consumers? If the Commission adopts the 100% compliance standard, would the website and record retention rules continue to be necessary to help ensure compliance with the hearing aid compatibility requirements?

2. FCC Form 655 and 855

118. In this section, the Commission tentatively concludes that after the handset manufacturer 100% transition period ends, it will revise the handset manufacturer annual reporting requirement by eliminating the requirement that a manufacturer use FCC Form 655 for reporting purposes and instead replace this requirement with the requirement that it use FCC Form 855 for reporting purposes. FCC Form 855 is the same form that service providers

presently file to show compliance with the Commission's wireless hearing aid compatibility provisions. The Commission also tentatively concludes that after the expiration of the manufacturer transition period, it will change the reporting deadline for handset manufacturers from July 31 each year to January 31 each year. Along with requiring handset manufacturers to file the same form as service providers, this change would align the filing deadline for handset manufacturers with the current filing deadline for service providers. The Commission seeks comment on these tentative conclusions below.

119. *Background.* Under § 20.19(i), handset manufacturers are presently required to submit FCC Form 655 reports on their compliance with the Commission's hearing aid compatibility requirements each year. FCC Form 655 requires manufacturers to provide information on: (i) handset models tested since the most recent report, for compliance with the applicable hearing aid compatibility technical ratings; (ii) compliant handset models offered to service providers since the most recent report, identifying each model by marketing model name/number(s) and FCC ID number; (iii) for each compliant model, the air interface(s) and frequency band(s) over which it operates, the hearing aid compatibility ratings for each frequency band and air interface under the ANSI standard (if applicable), the ANSI standard version used, and the months in which the model was available to service providers since the most recent report; (iv) non-compliant models offered to service providers since the most recent report, identifying each model by marketing model name/number(s) and FCC ID number; (v) for each non-compliant model, the air interface(s) over which it operates and the months in which the model was available to service providers since the most recent report; (vi) total numbers of compliant and non-compliant models offered to service providers for each air interface as of the time of the report; (vii) any instance, as of the date of the report or since the most recent report, in which multiple compliant or non-compliant devices were marketed under separate model name/numbers but constitute a single model for purposes of the hearing

aid compatibility rules, identifying each device by marketing model name/number and FCC ID number; (viii) status of product labeling; (ix) outreach efforts, and (x) if the manufacturer maintains a public website, the website address of the page(s) containing the required information regarding handset models.

120. Section 20.19(i) also requires that service providers submit FCC Form 855 each year certifying under penalty of perjury their compliance with the Commission's hearing aid compatibility requirements. Certifications filed by service providers must include: (i) the name of the signing executive and contact information; (ii) the company(ies) covered by the certification; (iii) the FCC Registration Number (FRN); (iv) if the service provider maintains a public website, the website address of the page(s) containing the required information regarding handset models; (v) the percentage of handset models offered that are hearing aid compatible; and (vi) a statement certifying that the service provider was in or was not in full compliance with the hearing aid compatibility provisions for the reporting period.

121. Prior to the *2018 HAC Order*, the Commission required service providers to show compliance with the Commission's wireless hearing aid compatibility provisions by filing FCC Form 655 just as handset manufacturers are presently required to do. In the *2018 HAC Order*, however, the Commission took steps to reduce regulatory burden on service providers by eliminating annual service reporting requirements and allowing service providers to instead file a streamlined annual certification stating their compliance with the Commission's hearing aid compatibility requirements. The Commission found that many of the benefits of annual status reporting by service providers had become increasingly outweighed by the burdens that such information collection placed on those entities. The Commission noted that the action it was taking would streamline "the Commission's collection of information while continuing to fulfill the underlying purposes of the current reporting regime."

122. While the *2018 HAC Order* did not change the reporting requirements for

handset manufacturers, the Commission noted that in the 100% hearing aid compatibility docket it was considering broader changes to the hearing aid compatibility rules that may be appropriate in the event it required 100% of covered handset models to be hearing aid compatible. The Commission indicated that the website, record retention, and certification requirements it was adopting as part of the *2018 HAC Order* would remain in place unless and until the Commission took further action in the 100% hearing aid compatibility docket and that its decisions did not “prejudge any further steps we may take to modify our reporting rules in that proceeding.”

123. Currently, handset manufacturer compliance filings are due by July 31 each year and cover the reporting period from the previous July 1 to June 30. Service providers compliance filings are due by January 31 of each year and cover the previous calendar year—January 1 through December 31.

124. *Discussion.* The Commission seeks comment on its tentative conclusions to require handset manufacturers to file FCC Form 855 instead of FCC Form 655 and to align the filing deadline for handset manufacturers to the January 31 deadline that currently applies to service providers. Is moving handset manufacturers to FCC Form 855 after the end of the manufacturer transition period consistent with a 100% hearing aid compatibility standard? If the Commission requires all handset models to be hearing aid compatible, would requiring manufacturers to submit information on the more detailed FCC Form 655 still be necessary? After the transition period expires, handset manufacturers will no longer be permitted to offer non-hearing-aid compatible handset models. Is there any reason why the Commission would need to continue to collect information about handset models such as the marketing name or model number, air interface, or months offered?

125. Is it in the public interest to move handset manufacturers to FCC Form 855 once the handset manufacturer transition period ends? The Commission seeks comment on the

relative costs and benefits of moving handset manufacturers to FCC Form 855 rather than continuing to require them to file FCC Form 655. Would moving manufacturers to FCC Form 855 be sufficient to emphasize to manufacturers the importance of compliance with the Commission's rules while reducing the burdens of gathering, formatting, and submitting data for FCC Form 655? Similarly, would aligning the manufacturer compliance filing deadline with the current January 31 deadline for service providers provide for efficiencies or create any difficulties for handset manufacturers or service providers?

126. As discussed above, as part of its proposal for a 100% hearing aid compatibility benchmark, the Commission proposes to require that at least 85% of handset models offered meet a telecoil coupling requirement and that at least 15% of handset models offered meet a Bluetooth connectivity requirement. If the Commission adopts these proposed benchmarks, should it retain the FCC Form 655 reporting obligation for handset manufacturers so that it can monitor manufacturers' compliance, or would it be sufficient to require manufacturers to certify that they are in compliance with these requirements and all other requirements by filing under penalty of perjury FCC Form 855 as service providers presently do? Given the Commission's proposal that handset manufacturers would have to indicate on their websites which of their offered handset models meet telecoil certification standards and which do not, would such a requirement eliminate the need to require manufacturers to file FCC Form 655 and allow the Commission to replace this requirement with a requirement that they file FCC Form 855?

127. In addition, if the Commission adopts its grandfathering proposal for the 100% requirement, handset manufacturers would have in their handset portfolios handset models certified under different certification standards, including some handset models certified under the 2011 ANSI Standard and others certified under the 2019 ANSI Standard. Would maintaining the FCC Form 655 reporting requirement be necessary to obtain information about the

different hearing aid-compatible handset models that manufacturers offer? In this regard, the Commission notes that handset manufacturers are required to indicate on their websites the ANSI standard under which a handset model is certified. Does this website posting requirement eliminate the need to file FCC Form 655 because of grandfathered handset models? Further, can the Commission gather relevant handset model information from equipment authorization reports instead of from FCC Form 655?

128. Finally, if the Commission maintains the FCC Form 655 filing requirement for handset manufacturers after the end of the manufacturer transition period, are there any changes that the Commission should make to this form in regards to the information that the form collects? Further, are there any changes that the Commission should make to FCC Form 855 in regards to the information that this form collects either in terms of service providers or if it moves handset manufacturers to this form, too?

3. Reliance on Accessibility Clearinghouse

129. The Commission proposes to decline the HAC Task Force's recommendation that the Commission permit service providers to rely on the information linked to in the Commission's Accessibility Clearinghouse as a legal safe harbor when making a determination of whether a handset model is hearing aid compatible for purposes of meeting applicable benchmarks.

130. The HAC Task Force's Final Report recommends that service providers should be able to rely on the information reported in the Global Accessibility Reporting Initiative (GARI) database, which is linked at the Accessibility Clearinghouse website. The Report asserts that the GARI database would provide a more up-to-date snapshot of hearing aid-compatible handset models than the annual FCC Form 655 report that manufacturers file. Presently, the Commission allows service providers to rely on the information from a handset manufacturer's FCC Form 655 as a safe harbor. In its Public Notice, WTB sought comment on the HAC Task

Force's recommendation. MWF commented that its GARI website had "gained global recognition" and that the database "is kept up to date with the available devices in the marketplace." MWF also noted that for the GARI website, "all manufacturer statements" are "subject to the legal requirements for accuracy of representations to consumers." The HAC Task Force, in its reply, argued that being able to rely on the GARI database "will provide a user-friendly experience for service providers to receive timely information, compared to the Form 655 reports and Equipment Authorization System."

131. While handset manufacturers must certify to the accuracy of their FCC Form 655 reports, there is no similar requirement with respect to the information handset manufacturers submit to the GARI database. The GARI database is not a Commission-maintained database, and the Commission does not control who can access the database and what information is added to the database. The Commission has no means of ensuring that the information in the GARI database is accurate, timely, or complete. Further, the Commission already allows service providers to rely on the information from a handset manufacturer's FCC Form 655 as a safe harbor, and it is not convinced that it is necessary to allow service providers a second safe harbor that may not contain accurate information.

132. Accordingly, the Commission proposes to decline the Task Force's recommendation that would allow a service provider to rely on the information linked to in the Commission's Accessibility Clearinghouse to determine whether a handset model is hearing aid compatible for the purpose of meeting applicable benchmarks. The Commission seeks comment on its proposed determination. The Commission also seeks comment on whether, once the transition to 100% hearing aid compatibility is completed, its rules should continue to require service providers to either link to the GARI database on their publicly accessible websites or provide a list for the past 24 months of hearing aid-compatible handset models that they no longer offer.

133. The Commission also proposes to decline the Task Force’s recommendation that, if a handset model is not in the GARI database, the Commission “automatically and immediately upload” handset manufacturers’ FCC Form 655 reports to the Accessibility Clearinghouse after they are submitted to the Commission. The Commission already posts these reports on the Commission’s wireless hearing aid compatibility website and links to that website on the Accessibility Clearinghouse website. The Commission seeks comment on its proposed determinations.

4. Contact Information for Consumers

134. The Commission tentatively concludes that it should modify its website posting requirements to require handset manufacturers and service providers to include on their publicly accessible websites a point-of-contact for consumers to use in order to resolve questions they have about a company’s hearing aid-compatible handset models. Under its tentative conclusion, handset manufacturers and service providers would provide the name of a department or a division that is staffed with knowledgeable employees and provide an email address, mailing address, and a toll free number that consumers could contact in order to find out information about a hearing aid-compatible handset model that the company offers or to ask questions about how a particular handset model links to the consumer’s hearing device. The Commission would expect manufacturers and service providers to be responsive to consumer questions and interact with consumers asking questions about hearing aid-compatible handset models in a manner consistent with the Consumer Code for Wireless Service that can be found on CTIA’s website.

135. Section 710(a) of the Act requires the Commission to “establish such regulations as are necessary to ensure reasonable access to telephone service by persons with impaired hearing.” The Commission seeks comment on whether requiring handset manufacturers and service providers to post contact information on their publicly accessible websites is necessary

in order to ensure that consumers with hearing loss have reasonable access to telephone service. The Commission believes such a requirement might be beneficial to consumers in terms of getting their questions answered and may help handset manufacturers and service providers sell new handsets and services. Further, by requiring the contact information to be provided on publicly accessible websites, the information can be easily updated and is readily accessible to the public; a provider's website is also a place the public reasonably expects to find contact information for these types of inquiries. The Commission's website posting rules require websites to be updated within 30 days of a change.

136. The Commission seeks comment on its tentative conclusion that handset manufacturers and service providers should be required to include contact information on their publicly accessible websites that consumers can use regarding questions that they might have on a company's hearing aid-compatible handset models. How can the Commission ensure that handset manufacturers and service providers display contact information in a uniform fashion and in a uniform location on their websites? Should the Commission require that this information be provided on the first page of their hearing aid compatibility webpages and in a particular location on this page, such as the upper right-hand corner? Should the Commission require that this information be labeled as HAC Contact Information or something similar? How can the Commission ensure that consumers can easily find the required contact information, and should the Commission require additional information to be provided beyond what it is proposing?

137. The Commission also seeks comment on whether to require handset manufacturers and service providers both to provide this contact information on their publicly accessible websites, and also to provide this contact information in their FCC Form 655 and 855 filings. Under this alternative, the Commission would modify these forms to provide a space where this contact information would be provided. These forms contain certification

requirements to ensure the accuracy of the information that is provided; however, the forms are only due once a year and are not required to be updated within 30 days of a change as the Commission's website posting rule requires. Further, consumers might not be aware of these forms or where to access them but are likely familiar with company websites and understand how to access them. Moreover, consumers would expect to find this type of contact information on a company website.

138. Alternatively, the Commission seeks comment on whether it should require handset manufacturers and service providers to enter the required contact information in a Commission-maintained database. Under this approach, the Commission would create a database that would contain company point-of-contact information for consumers who have hearing aid compatibility questions related to a company's hearing aid-compatible handset models that they offer. Companies would be required to enter their contact information for hearing aid compatibility questions directly into the database and to update their contact information within 30 days of any changes. This database would operate similarly to the Commission's Recordkeeping Compliance Certification and Contact Information Registry. This database could be used to search for a company's representatives who are knowledgeable about the company's hearing aid-compatible handset models that they offer and could answer consumer questions related to these models.

139. Commenters supporting or opposing the above approaches should explain why these proposals are consistent or inconsistent with statutory requirements. In addition, commenters should explain why these proposals are or are not in the public interest and what the costs and benefits of each of these proposals are. Is the Commission's website posting approach more beneficial to consumers in terms of getting questions answered and to companies in terms of selling new handsets and services than the other approaches outlined above? Are consumers familiar with FCC Form 655 and 855 filings, and do they know where to

find these filings and how to access them? From a consumer's perspective is it necessary for consumers to be able to find this contact information on the certification forms or is being able to locate it on a company's website sufficient? Is the website posting approach more consumer friendly than adding the contact information to FCC Forms 655 and 855 or the database approach? If the Commission adopts a database approach, how would consumers know about the database or where to find it? Are consumers more likely to go to a company's website before exploring other options? Further, is there an existing Commission database that is accessible to consumers that the Commission could utilize for purposes of requiring handset manufacturers and service providers to list customer service contact information?

140. Finally, the Commission proposes to delete the last sentence of § 20.19(j) which provides that for state enforcement purposes the procedures set forth in part 68, subpart E of the Commission's rules should be followed. The rules in part 68, subpart E relate to sections 255, 716, and 718 of the Communications Act rather than section 610 and the Commission, therefore, proposes to delete this sentence.

H. Sunsetting the *De Minimis* Exception

141. In view of its tentative conclusion to require 100% of handset models to be hearing aid compatible after the expiration of the relevant transition periods, the Commission tentatively concludes that it should remove the *de minimis* exception in § 20.19(e) of the Commission's rules. Under this tentative conclusion, once the applicable transition periods expire handset manufacturers and service providers will no longer be able to claim *de minimis* status.

142. Section 20.19(e) provides a *de minimis* exception to hearing aid compatibility obligations for those manufacturers and mobile service providers that only offer a small number of handset models. Specifically, section 20.19(e)(1) provides that manufacturers and service providers offering two handset models or fewer in the United States over an air

interface are exempt from the requirements of § 20.19, other than the reporting requirement.

Section 20.19(e)(2) provides that manufacturers or service providers that offer three handset models over an air interface must offer at least one compliant model. Section 20.19(e)(3) provides that manufacturers or service providers that offer four or five handset models in an air interface must offer at least two handset models that are hearing aid compatible in that air interface.

143. The Commission first adopted the *de minimis* rule together with the initial wireless hearing aid compatibility requirements in 2003, based on its recognition that the hearing aid compatibility requirements could have a disproportionate impact on small manufacturers or those that sell only a small number of digital wireless handset models in the United States, as well as on service providers that offer only a small number of digital wireless handset models. In the *2005 HAC Order*, the Commission clarified that the *de minimis* rule applies on a per air interface basis, rather than across a manufacturer's or service provider's entire product line. In 2010, the Commission modified the *de minimis* exception as applied to companies that are not small entities by deciding that, beginning two years after it offers its first handset model over an air interface, a manufacturer or service provider that is not a small entity, must offer at least one model that is hearing aid compatible.

144. The Commission seeks comment on its tentative conclusion to remove the *de minimis* exception to its hearing aid compatibility rules. Maintaining a *de minimis* exception that would permit a manufacturer to certify less than 100% of its handset models as hearing aid compatible or would allow a service provider to maintain a handset portfolio that is less than 100% composed of hearing aid-compatible handset models would be inconsistent with the Commission's objective of developing a 100% compliance standard. While the *de minimis* exception served an important purpose when it was implemented two decades ago, today manufacturers and service providers are able to offer more easily a range of hearing aid-

compatible handset models using a variety of technologies including Bluetooth. Considering the developments in hearing aid compatibility technologies, and the greater availability of hearing aid-compatible handset models, the Commission seeks comment on whether maintaining the *de minimis* exception is necessary. Are there reasons why smaller manufacturers cannot certify all of their handset models as hearing aid compatible or why smaller manufacturers or wireless providers cannot ensure that all of the handset models that they offer are hearing aid compatible? Do commenters believe that maintaining a *de minimis* exception would still be necessary to preserve competitive opportunities for small entities?

I. 90-Day Shot Clock for Waivers

145. The HAC Task Force's Final Report recommends that the Commission set a 90-day shot clock for the resolution of petitions for waiver of the hearing aid-compatibility requirements, which would include a public notice comment cycle. In the Public Notice on the Task Force's recommendations, WTB sought comment on this proposal. In its reply comments, the Task Force reiterated its recommendation. No other commenters addressed this issue.

146. The Commission proposes to decline the Task Force's recommendation because it does not anticipate that establishing a shot clock would be necessary to ensure the timely resolution of potential future requests for waiver of the hearing aid compatibility rules or to ensure that the deployment of new technologies is not delayed. In addition, given the highly technical nature of the questions that arise in the hearing aid-compatibility proceedings, establishing a 90-day shot clock could limit public participation and negatively impact staff's ability to work with affected stakeholders to develop consensus solutions that serve the interest of consumers with hearing loss. The Commission notes that not only is the 90-day proposal half of what it sought comment on, but that the Commission also sought comment on whether there are situations in which it should have the ability to extend the waiver deadline. The Commission also notes that section 710(f) requires the Commission to periodically review

the regulations established pursuant to the Hearing Aid Compatibility Act. This statutory obligation should curtail the need for waivers. The Commission seeks comment on its proposed determination.

J. Renaming Section 20.19

147. Finally, the Commission seeks comment on whether it should revise the heading of § 20.19 of its rules to better reflect the scope of its requirements. Section 20.19 is currently titled “Hearing aid-compatible mobile handsets.” The rules, however, are intended to help ensure access to communications services for consumers who use hearing aids as well as other types of hearing devices such as cochlear implants and telecoils as well as consumers who have hearing loss but do not use hearing devices. The Commission seeks comment on whether it should revise the heading of § 20.19 to better reflect the scope of the requirements. If so, the Commission seeks comment on what heading the it should adopt. For example, should the Commission rename § 20.19 to “Accessibility for Consumers with Hearing Loss” or “Hearing Loss Interoperability Requirements?” Are there alternative headings the Commission should consider? Would revising the section heading create consumer confusion or provide needed clarity?

K. Promoting Digital Equity and Inclusion

148. To the extent not already addressed, the Commission, as part of its continuing effort to advance digital equity for all, including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations and benefits (if any) that may be associated with the proposals and issues discussed herein. Specifically, the Commission seeks comment on how its inquiries may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission’s relevant legal authority.

149. Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated in the DATES section above. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998). All filings related to this document shall refer to WT Docket No. 23-388.

IV. INITIAL REGULATORY FLEXIBILITY ANALYSIS

150. As required by the Regulatory Flexibility Act of 1980, as amended, (RFA), the Federal Communications Commission (Commission) has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the Notice of Proposed Rulemaking (*NPRM*). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided in the *NPRM*. The Commission will send a copy of the *NPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the *Federal Register*.

A. Need for, and Objectives of, the Proposed Rules

151. The Commission's hearing aid compatibility rules ensure that the millions of Americans with hearing loss will have access to the same types of technologically advanced telephone handsets as those without hearing loss. Both manufacturers and service providers, some of which are small entities, are required to make available handsets that meet specified technical criteria for hearing aid compatibility. The Commission issued the *NPRM* to develop a record relating to a proposal submitted by the Hearing Aid Compatibility (HAC) Task Force on how the Commission can achieve its goal of requiring 100% of handsets offered by handset manufacturers and service providers to be certified as hearing aid compatible.

152. The *NPRM* tentatively concludes that requiring 100% of all handsets to be certified as hearing aid compatible is an achievable objective under the factors set forth in section 710(e) of the Communications Act. As part of this determination, the *NPRM* seeks comment on adopting the more flexible “forward-looking” definition of hearing aid compatibility that the HAC Task Force recommends. This determination also includes a proposal to broaden the current definition of hearing aid compatibility to include Bluetooth connectivity technology and to require at least 15% of offered handset models to connect to hearing aids through Bluetooth technology as an alternative to or in addition to a telecoil. The *NPRM* seeks comment on the Bluetooth technology the Commission should utilize to meet this requirement and how to incorporate this requirement into the wireless hearing aid compatibility rules. Additionally, the *NPRM* proposes a 24-month transition period for handset manufacturers; a 30-month transition period for nationwide service providers; and a 42-month transition period for non-nationwide service providers to transition to a 100% hearing aid-compatible handset standard for all handset models offered for sale in the United States or imported for use in the United States. The *NPRM* also seeks comment on certain implementation proposals and updates to the wireless hearing aid compatibility rules related to these proposals.

B. Legal Basis

153. The proposed action is authorized pursuant to sections 1-4 and 641-646 of the Communications Act of 1934, as amended, 47 U.S.C. 151-154 and 641-646.

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

154. 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. 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 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 SBA.

155. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* The Commission’s actions, over time, may affect small entities that are not easily categorized at present. The Commission therefore describe, at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.

156. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations. Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.

157. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.” U.S. Census Bureau data from the 2017 Census of Governments indicate there were 90,075 local governmental

jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number, there were 36,931 general purpose governments (county, municipal, and town or township) with populations of less than 50,000 and 12,040 special purpose governments—independent school districts with enrollment populations of less than 50,000. Accordingly, based on the 2017 U.S. Census of Governments data, the Commission estimates that at least 48,971 entities fall into the category of “small governmental jurisdictions.”

158. *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment. The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small. U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year. Of this number, 624 firms had fewer than 250 employees. Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

159. *Part 15 Handset Manufacturers.* Neither the Commission nor the SBA have developed a small business size standard specifically applicable to unlicensed communications handset manufacturers. Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing is the closest industry with a SBA small business size standard. The Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing industry is comprised of establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS

equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment. The SBA small business size standard for this industry classifies firms having 1,250 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year. Of this number, 624 firms had fewer than 250 employees. Thus, under the SBA size standard the majority of firms in this industry can be considered small.

160. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless Internet access, and wireless video services. The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year. Of that number, 2,837 firms employed fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 594 providers that reported they were engaged in the provision of wireless services. Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

161. *Wireless Resellers*. Neither the Commission nor the SBA have developed a small business size standard specifically for Wireless Resellers. The closest industry with a SBA small business size standard is Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in

this industry resell telecommunications and they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry. Under the SBA size standard for this industry, a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services during that year. Of that number, 1,375 firms operated with fewer than 250 employees. Thus, for this industry under the SBA small business size standard, the majority of providers can be considered small entities.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

162. The Commission expects potential rule changes proposed in the *NPRM*, if adopted, could impose some new reporting, recordkeeping, or other compliance requirements on some small entities. If the proposals in the *NPRM* are adopted, small and other manufacturers and service providers would be required to certify that 100% of handsets offered are hearing aid compatible. Small and other manufacturers' and service providers' handset portfolios would be allowed to meet this 100% requirement, with grandfathered handsets, or in the alternative, could be required to have 100% of handsets meet aspects of the 2019 ANSI Standard. Additionally, small and other manufacturers' and service providers' could be subject to a compliance requirement that 85% of these handsets must meet the 2019 ANSI standard's telecoil coupling requirements and the remaining 15% of these handsets meet a new Bluetooth connectivity requirement as a replacement for meeting the standard's telecoil requirements.

163. If adopted, the transition period for compliance would allow a 24-month transition period for handset manufacturers; a 30-month transition period for nationwide service providers; and a 42-month transition period for non-nationwide service providers, which are typically small entities, to transition to a 100% hearing aid-compatible handset

standard for all handset models offered for sale in the United States or imported for use in the United States.

164. In addition, small and other handset manufacturers could be subject to compliance requirements should certain implementation proposals and updates to the wireless hearing aid compatibility rules be adopted. For example, a revision to the package labeling provisions in section 20.19(f)(1) of the Commission's rules could require handset manufacturers to have the handset package label state whether the handset has a telecoil that meets certification requirements or instead includes Bluetooth connectivity as a replacement for meeting telecoil certification requirements. Also, if a corresponding change to the package insert and handset manual requirements in section 20.19(f)(2) is adopted, manufacturers could be required to provide information in a package insert or user manual about whether a handset meets telecoil certification requirements or replaces this requirement with Bluetooth coupling ability.

165. If the proposed rules are adopted small and other handset manufacturers and service providers would be required to identify on their publicly accessible websites which handsets in their handset portfolios meet telecoil certification requirements. For those handsets that do not meet telecoil certification requirements, handset manufacturers and service providers would be required to identify which Bluetooth connectivity standards these handsets include. Handset manufacturers and service providers would also be required to identify on their publicly accessible websites the conversational gain with and without hearing aids for each handset that they offer regardless of whether the handset meets telecoil certification standards or includes Bluetooth connectivity instead.

166. Additionally, after the expiration of the manufacturer transition period, all handsets would be required by default to have their acoustic and volume control functions on. Handsets would also be allowed to have a secondary mode whereby the handset's telecoil is

turned on or, for those handsets that substitute Bluetooth connectivity for telecoil connectivity, the Bluetooth function is turned on. In addition, proposed modifications of the handset package insert and user manual requirements could require an included explanation of each of these modes, what each mode does and does not include, and how to turn these settings on and off. In view of the proposal to require 100% of handsets to be hearing aid compatible, should it be adopted, the *de minimis* exception in section 20.19(e) of the rules would be removed.

167. Small entities may be required to hire attorneys, engineers, consultants, or other professionals to comply with the rule changes proposed in the *NPRM*, if adopted. The Commission does not believe, however, that the costs and/or administrative burdens associated with any of the proposal rule changes will unduly burden small entities. While the Commission cannot quantify the cost of compliance with the potential rule changes and compliance obligations raised in the *NPRM*, in its discussion of the proposals the Commission has requested comments from the parties in the proceeding including cost and benefit analyses which may help the Commission identify and evaluate relevant matters for small entities, such as compliance costs and burdens that may result from the proposed rules and the matters on which the Commission has requested comments.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

168. The RFA requires an agency to describe any significant, specifically small business alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than

design, standards; and (4) exemption from coverage of the rule, or any part thereof, for such small entities.”

169. In the *NPRM*, the Commission considers specific steps it could take and alternatives to the proposed rules that could minimize potential economic impact on small entities that might be affected by the proposed rule changes, as well as any other rule changes that may be required as a result of comments provided by interested parties. The Commission proposes a 24-month transition period for handset manufacturers; a 30-month transition period for nationwide service providers; and a 42-month transition period for non-nationwide service providers, which are typically small entities, to transition to a 100% hearing aid-compatible handset standard for all handset models offered for sale in the United States or imported for use in the United States. The proposed transition periods would minimize some economic impact for small manufacturers and service providers since they would not have to immediately comply with the revised standard in the short term. In particular, the 42-month transition period would be particularly beneficial for non-nationwide providers, which are usually small entities. The Commission seeks comment on whether the proposed transition periods are reasonable timeframes to allow implementation of the 100% compliance standard. Alternatively, the Commission considered using the longer transition periods recommended by the HAC Task Force; however, the proposal in the *NPRM* is both more in keeping with previous transition periods the Commission has utilized for new technical standards and serves the needs of consumers with hearing loss as soon as possible without negatively impacting product development cycles for manufacturers and service providers.

170. To limit any potential burdens regarding the impact of the proposed transition to a 100% compliance standard on previously manufactured wireless handsets, the Commission proposes to allow manufacturers and service providers to continue to offer handsets that are already certified as hearing aid compatible as part of their hearing aid-compatible handset

portfolio. Under this proposal, handsets would be grandfathered and manufacturers and service providers can include these handsets in their 100% handset portfolios as long as the handsets are still being offered. This grandfathering proposal could minimize the burdens associated with implementing the new standard for small entities because they would not have to recertify previously approved handsets. In developing the proposal, the Commission considered discontinuing its grandfathering rule, in which case 100% of the handset models in a manufacturer's or service provider's handset portfolio would have to be certified as hearing aid-compatible using the 2019 ANSI Standard's requirements, as modified by a possible telecoil and Bluetooth connectivity split. The *NPRM* seeks comment from small and other entities on the economic impact of adopting such an approach.

171. To reduce potential reporting burdens, the Commission seeks comment on whether to eliminate website and record retention requirements that may no longer be necessary if it adopts a 100% compliance standard. Specifically, the Commission seeks comment on whether to eliminate the requirement that service providers and manufacturers post or retain information about non hearing aid-compatible handsets. Additionally, the Commission proposes to eliminate the annual service reporting requirements for manufacturers if the Commission adopts a 100% compliance standard. Alternatively, the Commission considered approaches that would retain website and record retention requirements as well as annual service reporting requirements, but believes the proposed approach would better serve the needs of small entities for the reasons stated above.

172. The Commission seeks to balance the potential economic impact and burdens that small entity manufacturers and service providers might face in light of the 100% compliance requirement with the need to ensure that Americans with hearing loss can access a wide array of handsets with emerging technologies. Therefore the *NPRM* seeks comment on alternative obligations, timing for implementation, and other measures including costs and

benefits analyses that will allow the Commission to more fully consider and evaluate the economic impact on small entities. The Commission will review the comments filed in response to the *NPRM* and carefully consider these matters as it relates to small entities before adopting final rules in this proceeding.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

173. None.

V. ORDERING CLAUSES

174. Accordingly, IT IS ORDERED that, pursuant to sections 1-4 and 641-646 of the Communications Act of 1934, as amended, 47 U.S.C. 151-154 and 641-646, this Notice of Proposed Rulemaking IS ADOPTED.

175. IT IS FURTHER ORDERED that WT Docket No. 15-285 IS HEREBY TERMINATED.

176. IT IS FURTHER ORDERED that the Commission's Office of the Secretary, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects in 47 CFR Part 20

Incorporation by reference, Individuals with disabilities, Telecommunications, Telephones.
Federal Communications Commission.

Marlene Dortch,

Secretary,

Office of the Secretary.

Proposed Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 20 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), 155, 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, and 615c, unless otherwise noted.

2. Amend § 20.19 by:

- a. Revising paragraphs (b)(1) through (3), (c) introductory text, (c)(1) through (3);
- b. Removing paragraph (e);
- c. Redesignating paragraphs (f) through (l) as paragraphs (e) through (k);
- d. Revising newly redesignated paragraphs (e) introductory text, (e)(1), and (e)(2) introductory text;
- e. Adding paragraph (e)(2)(ix) to newly redesignated paragraph (e);
- f. Revising newly redesignated paragraph (g)(1);
- g. Adding paragraphs (h)(1)(i) and (ii) to newly redesignated paragraph (h); and
- h. Revising newly redesignated paragraphs (h)(2) introductory text, and (h)(2)(iv) through (vi).

The revisions and additions read as follows:

§ 20.19 Hearing aid-compatible mobile handsets.

* * * * *

(b) * * *

(1) *Handset model compatibility on or after December 31, 2026.* In order to satisfy a manufacturer or service provider's obligations under paragraph (c) of this section, a handset model submitted for equipment certification or for a permissive change relating to hearing aid compatibility on or after December 31, 2026 must meet:

(i) The 2019 ANSI standard's acoustic coupling requirements;

(ii) The 2019 ANSI standard's volume control requirements; and

(iii) Either the 2019 ANSI standard's telecoil coupling requirements or have Bluetooth connectivity technology as a replacement for or in addition to meeting the standard's telecoil coupling requirements.

(iv) All such new handset models must by default have their acoustic and volume control functions on. Such handset models may also have a secondary mode whereby the handset model's telecoil is turned on or, for those handset models that substitute Bluetooth connectivity for telecoil connectivity, the Bluetooth function is turned on.

(2) *Handset model compatibility before December 31, 2026.* In order to satisfy a manufacturer's or service provider's obligations under paragraph (c) of this section, a handset model submitted for equipment certification or for a permissive change relating to hearing aid compatibility before December 31, 2026 must meet either:

(i) The 2019 ANSI standard; or

(ii) The 2019 ANSI standard's acoustic coupling requirements, applicable volume control requirements, and either the standard's telecoil coupling requirements or have

Bluetooth connectivity technology as a replacement for or in addition to meeting the standard's telecoil coupling requirements.

(3) Handset models operating over multiple frequency bands or air interfaces

(i) Beginning on December 31, 2026, a handset model is hearing aid-compatible if it meets the requirements of paragraph (b)(1) of this section for all frequency bands that are specified in the 2019 ANSI standard and all air interfaces over which it operates on those frequency bands, and the handset model has been certified as compliant with the test requirements for the 2019 ANSI standard pursuant to § 2.1033(d) of this chapter.

(ii) Before December 31, 2026, a handset model is hearing aid-compatible if it meets the requirements of paragraph (b)(2) of this section for all frequency bands that are specified in the 2019 ANSI standard and all air interfaces over which it operates on those frequency bands, and the handset model has been certified as compliant with the test requirements for the 2019 ANSI standard pursuant to § 2.1033(d) of this chapter.

* * * * *

(c) Phase-in of hearing aid-compatibility requirements. The following applies to each manufacturer and service provider that offers handset models used to deliver digital mobile services as specified in paragraph (a) of this section.

(1) Manufacturers—Number of hearing aid-compatible handset models offered. After December 31, 2026, for each digital air interface for which it offers handset models in the United States or imported for use in the United States, one-hundred (100) percent of the handset models that the manufacturer offers must be certified as hearing aid-compatible.

(i) At least eighty-five (85) percent of those handset models must meet the 2019 ANSI standard's telecoil coupling requirements or have been certified as meeting the T3 telecoil rating under a previous ANSI standard; and

(ii) At least fifteen (15) percent of those handset models must have Bluetooth connectivity technology as a replacement for or in addition to meeting the 2019 ANSI standard's telecoil coupling requirements or the T3 telecoil rating under a previous ANSI standard.

(2) *Tier I carriers.* After June 30, 2027, for each digital air interface for which it offers handset models to customers, one-hundred (100) percent of the handset models that the provider offers must be certified as hearing aid-compatible.

(i) At least eighty-five (85) percent of those handset models must meet the 2019 ANSI standard's telecoil coupling requirements or have been certified as meeting the T3 telecoil rating under a previous ANSI standard; and

(ii) At least fifteen (15) percent of those handset models must have Bluetooth connectivity technology as a replacement for or in addition to meeting the 2019 ANSI standard's telecoil coupling requirements or the T3 telecoil rating under a previous ANSI standard.

(3) *Service providers other than Tier I carriers.* After June 30, 2028, for each digital air interface for which it offers handset models to customers, one-hundred (100) percent of the handset models that the provider offers must be certified as hearing aid-compatible.

(i) At least eighty-five (85) percent of those handset models must meet the 2019 ANSI standard's telecoil coupling requirements or have been certified as meeting the T3 telecoil rating under a previous ANSI standard; and

(ii) At least fifteen (15) percent of those handset models must have Bluetooth connectivity technology as a replacement for or in addition to meeting the 2019 ANSI standard's telecoil coupling requirements or the T3 telecoil rating under a previous ANSI standard.

* * * * *

(e) *Labeling and disclosure requirements for hearing aid-compatible handset models.*

(1) *Package label.* For all handset models certified to be hearing aid-compatible, manufacturers and service providers shall ensure that the handset model's package label states that the handset model is hearing aid-compatible and the handset model's actual conversational gain with and without a hearing aid if certified using a technical standard with volume control requirements. The actual conversational gain displayed for use with a hearing aid shall be the lowest rating assigned to the handset model for any covered air interface or frequency band. The label shall also state whether the handset model has a telecoil that meets certification requirements, includes Bluetooth connectivity as a replacement for meeting telecoil certification requirements, or includes both.

(2) *Package insert or handset manual.* For all handset models certified to be hearing aid-compatible, manufacturers and service providers shall disclose to consumers through the use of digital labeling (e.g., a QR Code) on the handset model's package label, or through the use of a package insert, or in the handset model's user manual:

* * * * *

(ix) Where applicable, an explanation that the handset model does not meet telecoil certification requirements and instead couples with hearing aids using a Bluetooth connectivity standard and provide the name of that Bluetooth standard. This

explanation should also indicate that the handset model will, by default, have its acoustic and volume control functions on and that it may also have a secondary mode whereby the handset model's telecoil is turned on or, for those handset models that substitute Bluetooth connectivity for telecoil connectivity, the Bluetooth function is turned on. The explanation must include an explanation of each of these modes, what each mode does and does not include, and how to turn these settings on and off.

* * * * *

(g) * * *

(1) Each manufacturer and service provider that operates a publicly-accessible website must make available on its website:

(i) A list of all hearing aid-compatible models currently offered, the ANSI standard used to evaluate hearing aid compatibility, the ratings of those models under the relevant ANSI standard, if applicable, and an explanation of the rating system. Each service provider must also include on its website: A list of all non-hearing aid-compatible models currently offered, as well as a link to the current FCC web page containing information about the wireless hearing aid compatibility rules and service provider's obligations. Each service provider must also include the marketing model name/number(s) and FCC ID number of each hearing aid-compatible and non-hearing aid-compatible model currently offered.

(ii) In addition, each manufacturer and service provider must identify on their publicly accessible websites, for all handset models in their handset portfolios that are certified as hearing aid compatible under (b) of this section, which of those handset models meet telecoil certification requirements and which have Bluetooth connectivity technology.

For those handset models that do not meet telecoil certification requirements, each manufacturer and service provider must affirmatively state that the handset model does not meet the telecoil certification requirements. For handset models that have Bluetooth connectivity technology as a replacement to or in addition to telecoil, manufacturers and service providers must identify which Bluetooth connectivity standards these handset models include.

(iii) Each handset manufacturer and service provider must identify on their publicly accessible websites the conversational gain with and without hearing aids for each handset model certified as hearing aid compatible that they offer regardless of whether the handset model meets telecoil certification standards or includes Bluetooth connectivity instead.

(iv) Each handset manufacturer and service provider must include on its website a point-of-contact for consumers to use in order to resolve questions they have about a company's hearing aid-compatible handset models. Handset manufacturers and service providers must provide the name of a department or a division that is staffed with knowledgeable employees and provide an email address, mailing address, and a toll free number that consumers could contact to find out information about a hearing aid-compatible handset model that the company offers or to ask questions about how a particular handset model couples with the consumer's hearing device.

* * * * *

(h) * * *

(1) * * *

(i) On or after December 31, 2026, manufacturers and service providers shall submit Form 855 certifications on their compliance with the requirements of this section by January 31 of each year. Information in each certification and report must be up-to-date as of the last day of the calendar month preceding the due date of each certification and report.

(ii) Before December 31, 2026, service providers shall submit Form 855 certifications on their compliance with the requirements of this section by January 31 of each year. Manufacturers shall submit Form 655 reports on their compliance with the requirements of this section by July 31 of each year. Information in each certification and report must be up-to-date as of the last day of the calendar month preceding the due date of each certification and report.

(2) *Content of manufacturer and service provider certifications.* Certifications filed by service providers and manufacturers must include:

* * * * *

(iv) If the company is subject to paragraph (g) of this section, the website address of the page(s) containing the required information regarding handset models;

(v) The percentage of handset models offered that are hearing aid-compatible (companies will derive this percentage by determining the number of hearing aid-compatible handset models offered across all air interfaces during the year divided by the total number of handset models offered during the year); and

(vi) The following language:

I am a knowledgeable executive [of company x] regarding compliance with the Federal Communications Commission's wireless hearing aid compatibility requirements as a company covered by those requirements.

I certify that the company was [(in full compliance/not in full compliance)] [choose one] at all times during the applicable time period with the Commission's wireless hearing aid compatibility handset model deployment benchmarks and all other relevant wireless hearing aid compatibility requirements.

The company represents and warrants, and I certify by this declaration under penalty of perjury pursuant to 47 CFR 1.16 that the above certification is consistent with 47 CFR 1.17, which requires truthful and accurate statements to the Commission. The company also acknowledges that false statements and misrepresentations to the Commission are punishable under Title 18 of the U.S. Code and may subject it to enforcement action pursuant to Sections 501 and 503 of the Act.

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