

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Amendment of Part 15 of the Commission’s Rules)
to Amend the Definition of Auditory Assistance) ET Docket No. 10-26
Device in Support of Simultaneous Language)
Interpretation)

REPORT AND ORDER

Adopted: May 1, 2013

Released: May 2, 2013

By the Commission: Commissioner McDowell not participating.

I. INTRODUCTION

1. In this Report and Order, we modify the definition of “auditory assistance device” in Part 15 of our rules to permit these devices to be used by anyone at any location for simultaneous language interpretation (simultaneous translation), where the spoken words are translated continuously in near real time. Under these rules, Part 15 auditory assistance devices are permitted to operate in the 72-73 MHz, 74.6-74.8 MHz, and 75.2-76 MHz (72-76 MHz) bands on an unlicensed basis to provide aural assistance to persons with disabilities (e.g., amplification of sounds for the hard of hearing and audio description for the blind). Expanding the permissible uses of Part 15 auditory assistance devices to include simultaneous language interpretation will allow these devices to be used for both purposes. This action will expand the opportunities to deploy auditory assistance devices and remove barriers to communication and provide greater flexibility and enhanced benefits for persons wishing to use auditory assistance technologies. It will also harmonize the definition of “auditory assistance device” in Part 15 of our rules with the definition of “auditory assistance communications” in Part 95 of our rules.

2. In support of the Commission’s goal of improving the reception of very high frequency television (VHF TV) service by reducing the electronic noise from nearby consumer electronics equipment as we discuss below, we also lower the limit for Part 15 auditory assistance devices’ unwanted emissions. We establish an 18-month transition period after which Part 15 auditory assistance devices’

1 Simultaneous language interpretation is the translation of a spoken language into a second language as the first language is being spoken. See “Petition for Declaratory Ruling to Clarify That Part 15 Auditory Assistance Devices May Be Used in Support of Simultaneous Language Translation,” Petition for Declaratory Ruling by Williams Sound Corporation, ET Docket No. 10-26, at 4 (filed Sept. 25, 2009) (“Williams Sound Petition”). Typically, the listener hears both languages simultaneously, with the translated language at full volume and the original language at a substantially reduced volume. Id.

2 47 C.F.R. § 15.237. Under Section 15.237, unlicensed use of the 72-76 MHz bands is restricted to auditory assistance devices. Id.

unwanted emissions must comply with the Section 15.209 emissions limits for equipment approval, and a 3-year transition period after which these devices' unwanted emissions must comply with the Section 15.209 emissions limits for manufacturing, marketing, and importation purposes. However, Part 15 auditory assistance devices which are installed or in use prior to the end of the 3-year transition period may continue to operate without having to meet the lower unwanted emissions limits.

II. BACKGROUND

3. Part 15 of the Commission's rules provides for the operation of low power radio frequency (RF) devices without an individual license from the Commission.³ A party seeking to market a Part 15 unlicensed device to the public must first comply with the Commission's equipment authorization procedures, which, *inter alia*, require a demonstration that the device complies with the Commission's rules.⁴ As a general condition of operation, Part 15 devices may not cause harmful interference to any authorized services and must accept any interference that may be received from them or other Part 15 devices.⁵ Common Part 15 devices include cordless telephones, Wi-Fi devices, automated utility meter reading equipment, and auditory assistance devices.

4. Part 15 auditory assistance devices transmit audio via RF signals to specialized receivers used by listeners to enhance the reception of speech. By minimizing the disproportionate effects of background noise and reverberation on speech perception by people with disabilities, these devices improve the quality of sound over that which would be received via a loudspeaker system.⁶ Under the Part 15 rules, an auditory assistance device is defined as “[a]n intentional radiator used to provide auditory assistance to a handicapped person or persons. Such a device may be used for auricular training in an educational institution, for auditory assistance at places of public gatherings, such as a church, theater, or auditorium, and to handicapped individuals, only, in other locations.”⁷

³ 47 C.F.R. § 15.1(a).

⁴ 47 C.F.R. §§ 2.803, 2.901, 15.201(b).

⁵ 47 C.F.R. § 15.5.

⁶ Under the Americans with Disabilities Act of 1990 (ADA), operators of public gathering places are required to provide auditory assistance devices for use by persons with disabilities. *See* 42 U.S.C. §§ 12103, 12181(7)(A)-(L), 12182.

⁷ 47 C.F.R. § 15.3(a). The Commission first authorized Part 15 auditory assistance devices to use the 72-73 MHz and 75.4-76 MHz bands in 1972 for auditory training systems in institutional education programs for auricular instruction of persons having speech or hearing handicaps, and expanded that authorization to include the 74.6-74.8 MHz and 75.2-75.4 MHz bands in 1992. *See* Amendment of the Commission's Rules and Regulations to Provide for the Licensing of Auditory Training Devices for the Partially Deaf in the Bands 72-73 and 75.4-76 MHz, Docket No. 19185, *Report and Order*, 35 FCC 2d 677, 685 para. 34, 688, Appendix, Subpart G – Auditory Training Devices, § 15.331 (1972) (“1972 Auditory Training Device Order”); Amendment of Part 15 to Provide Additional Frequencies for Auditory Assistance Devices for the Hearing Impaired, ET Docket No. 91-150, *Report and Order*, 7 FCC Rcd 2256 (1992). In 1982, the Commission expanded the permissible uses of Part 15 auditory assistance devices beyond the initial limitations of operating solely in educational institutions for amplification of sounds to include any aural assistance that may be given to a handicapped person (*e.g.*, audio description for the blind) but maintained the restrictions that these devices be used only by and for handicapped persons. *See* Amendment of Subpart G of Part 15 of the Commission's Rules and Regulations regarding Auditory Training Devices., General Docket No. 81-786, RM-3832, RM-3126, *Report and Order*, 90 FCC 2d 1015, 1017 para. 5; 1018 para. 8 (1982) (“1982 Auditory Training Device Order”).

5. The 72-76 MHz bands (72-73 MHz, 74.6-74.8 MHz, and 75.2-76 MHz) in which Part 15 auditory assistance devices are permitted to operate are allocated on a primary basis to licensed stations in the Public Mobile Service (Part 22), the Maritime Service (Part 80), the Aviation Service (Part 87), the Private Land Mobile Radio Service (Part 90), and the Radio Control (R/C) Radio Service (Part 95).⁸ In the bands adjacent to those bands in which Part 15 auditory assistance devices operate, the 73-74.6 MHz band is allocated on a primary basis to the Radio Astronomy Service for Federal and non-Federal use; the 74.8-75.2 MHz band is allocated on a primary basis to the Aeronautical Radionavigation Service for Federal and non-Federal use and is available for licensed use in the Radiodetermination Service (Part 87); and the 54-72 MHz (VHF TV channels 2-4) and 76-88 MHz bands (VHF TV channels 5 and 6) are allocated to the Broadcasting Service on a primary basis and are available for licensed TV broadcasting stations (Part 73).⁹

6. On September 9, 2011, the Commission adopted an *Order and Notice of Proposed Rulemaking (Auditory Assistance Device NPRM)* in this proceeding that proposed to modify the Part 15 definition of “auditory assistance device” to expand the permissible uses of these devices to include simultaneous language interpretation.¹⁰ The expanded definition would allow Part 15 auditory assistance devices to be used by any person requiring simultaneous language interpretation at any location, in the same manner as permitted under Part 95 for Low Power Radio Service stations that operate in the 216-217 MHz band.¹¹ The Commission took this action in response to a petition for declaratory ruling

⁸ Specifically, the 72-73 MHz and 75.4-76 MHz bands are allocated on a primary basis for non-Federal Fixed and Mobile services; the 74.6-74.8 MHz and 75.2-75.4 MHz bands are allocated on a primary basis for Federal and non-Federal Fixed and Mobile services. The 72-73 MHz and 75.4-76 MHz bands are available for use under the Public Mobile, Maritime, Aviation, Private Land Mobile, and R/C Radio Services. The 74.6-74.8 MHz and 75.2-75.4 MHz bands are available for use only under the Private Land Mobile Service. Under Part 22, frequencies in the 72-73 MHz and 75.4-76 MHz bands are allocated for licensing fixed transmitters that support other transmitters that provide Public Mobile Service. *See* 47 C.F.R. § 22.591. Under Parts 80, 87, and 90, respectively, frequencies in the 72-73 MHz and 75.4-76 MHz bands may be licensed for operational fixed stations, which provide control, repeater, or relay functions for their associated Part 80 coast stations (*i.e.*, land stations in the Maritime Mobile Service), Part 87 aeronautical stations (*i.e.*, land stations in the Aeronautical Mobile Service), and Part 90 base, control, fixed, operational fixed, and fixed relay stations (*i.e.*, land stations in the Private Land Mobile Service), telemetry operations, and radio call box stations for the public to request fire, police, ambulance, road service, and other emergency assistance. *See* 47 C.F.R. §§ 80.5, 80.381, 80.555; 87.5, 87.173(b), 87.445, 87.449; 90.7, 90.20(c)(3), 90.35(b)(3), 90.238(a), 90.241(a), and 90.257(a)(1). Under Part 90, frequencies in the 72.4-72.6 MHz and 75.4-75.6 MHz bands may be licensed for mobile stations in the Public Safety Pool and frequencies in the 72-72.6 MHz, 74.6-74.8 MHz, and 75.2-75.6 MHz bands may be licensed for mobile stations in the Industrial/Business Pool. Under Part 95, R/C Radio Service stations may use frequencies in the 72-73 MHz band to operate model aircraft devices and in the 75.4-76 MHz band to operate model surface craft devices. *See* 47 C.F.R. § 95.207(a)(2), (3).

⁹ *See* 47 C.F.R. §§ 2.106 United States Table of Frequency Allocations, 73.601, 73.603, 87.173(b). Under Part 87, aeronautical marker beacon (*i.e.*, radionavigation land) stations may be authorized to transmit on 75 MHz (74.8-75.2 MHz) to provide position information to aircraft using an instrument landing system (ILS). *See* 47 C.F.R. §§ 87.173(b), 87.475(b)(3).

¹⁰ *See* Amendment of Part 15 of the Commission’s Rules to Amend the Definition of Auditory Assistance Device in Support of Simultaneous Language Interpretation, ET Docket No. 10-26, *Order and Notice of Proposed Rulemaking*, 26 FCC Rcd 13600 (2011) (“*Auditory Assistance Device NPRM*”).

¹¹ Under the Part 95 rules, Low Power Radio Service stations in the 216-217 MHz band are permitted to provide “auditory assistance communications (including but not limited to applications such as assistive listening devices, audio description for the blind, and simultaneous language translation)” for persons with disabilities, persons who require language translation, or persons who may otherwise benefit from auditory assistance in educational settings. *See* 47 C.F.R. § 95.1009(a)(1)-(3).

filed by Williams Sound Corporation (Williams Sound), a provider of wireless auditory assistance devices.¹²

7. In the *Auditory Assistance Device NPRM*, the Commission sought comment on the advantages and disadvantages and potential benefits of expanding the permissible uses of Part 15 auditory assistance devices and any qualitative or quantitative costs associated with this proposal.¹³ It also sought comment on whether increased use of Part 15 auditory assistance devices for simultaneous language interpretation would increase the potential for harmful interference¹⁴ to authorized services in the 72-76 MHz and adjacent bands and whether additional safeguards or changes to the technical requirements for these devices would be necessary to prevent harmful interference to those services.¹⁵ In addition, the Commission sought comment on whether a more restrictive limit for Part 15 auditory assistance devices' out-of-band emissions is needed to prevent harmful interference to authorized services in the 72-76 MHz and adjacent bands and improve the reception of VHF TV channels 2-6.¹⁶

8. Part 15 auditory assistance devices may operate in a full duplex mode of operation using necessary bandwidths up to 200 kilohertz wide. All fundamental emissions must be contained wholly within the 72-73 MHz, 74.6-74.8 MHz, and 75.2-76 MHz bands with a maximum field strength of 80 millivolts per meter (mV/m) measured at a distance of 3 meters, which is equivalent to a maximum effective radiated power (ERP) of 1.2 milliwatts (mW).¹⁷ The field strength of any unwanted emissions must not exceed 1,500 microvolts per meter (μ V/m) measured at a distance of 3 meters, which is equivalent to an ERP of 0.4 microwatts (μ W).¹⁸ The Commission asked what out-of-band emissions limit

¹² See Williams Sound Petition, *supra*.

¹³ See *Auditory Assistance Device NPRM*, 26 FCC Rcd at 13605 para. 16.

¹⁴ Under the Commission's rules, harmful interference is defined as interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service operating in accordance with the International Telecommunication Union Radio Regulations. 47 C.F.R. § 2.1(c).

¹⁵ See *Auditory Assistance Device NPRM*, 26 FCC Rcd at 13606 para. 19. If additional safeguards or changes to the Part 15 technical requirements are needed to prevent harmful interference to authorized services, the Commission asked commenters to specify what rule changes are necessary and whether there are any qualitative or quantitative costs associated with such rule changes. *Id.*

¹⁶ See *Auditory Assistance Device NPRM*, 26 FCC Rcd at 13607 para 21. If a more restrictive out-of-band emissions limit is necessary, the Commission sought information and comment on specific technologies that could be used, their advantages, disadvantages, and associated qualitative or quantitative costs to manufacturers and users, and whether Part 15 auditory assistance devices' performance would be impaired in other ways and how. It also sought comment on any benefits for authorized services in the 72-76 MHz and adjacent bands in reducing the out-of-band emissions limit for these devices. See *id.* at 13607-8 paras. 21-22. We note that the term "out-of-band" emissions was used in the *Auditory Assistance Devices NPRM* when referring to emissions outside of the frequency bands in which the auditory assistance devices operate (paras. 20 and 21). The correct term to describe the emissions outside of the necessary bandwidth of the transmitting system is "unwanted" emissions, and so the term "unwanted" emissions is being used where appropriate throughout this Report and Order.

¹⁷ 47 C.F.R. § 15.237(b), (c).

¹⁸ 47 C.F.R. § 15.237(c). The fundamental and unwanted emissions limits of Part 15 auditory assistance devices are relatively low compared to the ERPs of devices used in authorized services in the 72-76 MHz and adjacent bands; there have not been any reports of Part 15 auditory assistance devices' fundamental or unwanted emissions causing harmful interference to these authorized services. For example, the maximum allowed ERP for fixed stations that operate in the 72-73 MHz and 75.4-76 MHz bands is 150 Watts under Part 22 and 300 Watts under Part 90. Mobile (continued....)

would be appropriate – the Section 15.209 limit,¹⁹ the unlicensed TV bands device limit,²⁰ or some other limit – what would be an appropriate transition period for compliance, and whether currently approved Part 15 auditory assistance devices should be grandfathered for a limited time or permanently.²¹

9. The Commission received six comments, two reply comments, and two *Ex Parte* comments in response to the *Auditory Assistance Device NPRM*.²² The majority of commenters, which include providers of auditory assistance and/or simultaneous language equipment, support the Commission’s proposal to expand the permissible uses of Part 15 auditory assistance devices to include simultaneous language interpretation.²³ Two commenters oppose the Commission’s proposal.²⁴

III. DISCUSSION

10. Based on the record in this proceeding, we modify the definition of “auditory assistance device” in Part 15 of our rules to expand the permissible uses of these devices to include simultaneous language interpretation. The expanded definition permits the use of Part 15 auditory assistance devices by any person requiring translation services at any location. We conclude that the public interest will be served by expanding the permissible uses of Part 15 auditory assistance devices to include simultaneous translation. We also conclude that the benefits of expanding service to the public far outweigh any additional costs associated with implementing these changes.

11. The majority of commenters submit that expanding the permissible uses of Part 15 auditory assistance devices to include simultaneous interpretation is in the public interest. Bridge and Infinity agree with the Commission’s tentative assessment that expanding the permissible uses of Part 15 auditory assistance devices beyond only aural assistance to persons with disabilities would be beneficial in that it will allow these devices to provide either auditory assistance or simultaneous translation, or

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stations that operate under Part 90 in the 72-76 MHz bands are limited to a maximum transmitter power of 1 Watt. *See* 47 C.F.R. §§ 22.593, 90.205(c).

¹⁹ Under Section 15.209, most other Part 15 devices’ emissions in the 72-76 MHz and adjacent bands are limited to a maximum of 100 $\mu\text{V}/\text{m}$ at 3 meters, which is equivalent to an ERP of 1.83 nanowatts (nW). *See* 47 C.F.R. § 15.209(a).

²⁰ The unwanted emissions of Part 15 personal/portable TV bands devices that operate in bands adjacent to occupied TV channels are limited to 84 $\mu\text{V}/\text{m}$ at 3 meters, which is equivalent to an ERP of 1.3 nW. *See* 47 C.F.R. § 15.709(c)(1)(ii).

²¹ *See Auditory Assistance Device NPRM*, 26 FCC Rcd at 13607 para. 21. If existing equipment should not be grandfathered, the Commission asked what qualitative or quantitative costs would be associated with acquiring compliant devices. In addition, it sought comment on whether the advantages of improving the reception of VHF TV channels 4 and 5 would outweigh any disadvantages to device manufacturers and users associated with further restricting Part 15 auditory assistance devices’ out-of-band emissions. *See id.* at 13607-8 paras. 21-22.

²² Comments were due November 4, 2011, and reply comments were due November 21, 2011. *See* 76 FR 61655.

²³ *See, e.g.*, Comments of Chris Redish, Owner, A Bridge Between Nations, Inc. (Bridge); Comments of Joseph Rhody, Owner, Infinity Translation Services Inc. (Infinity); Comments of Williams Sound Corporation (Williams Sound); Hearing Industries Association Comments; and iProbe Multilingual Solutions, Inc. (iProbe) *Ex Parte* comments (filed Dec. 8, 2011).

²⁴ *See* Reply Comments of Mr. Keir Milan, President of Lingualink, which provides translation and interpretation services via infrared technology; Reply Comments of Michael Held, Ph.D, Chief Executive Officer of the Etta Israel Center, which provides educational, clinical, and support services to individuals with disabilities.

both, without imposing additional costs.²⁵ Infinity also states that this action will serve the public interest by aiding the comprehension of individuals who require language interpretation.²⁶ Williams Sound submits that adoption of the proposed rule changes would enhance the auditory experience for all audience members by lowering the noise level for those who do not care to listen to an interpreter and would benefit individuals who require both auditory assistance and language interpretation.²⁷ Rodrigo Tranamil notes the need of non-English speakers with hearing disabilities as well as the need to increase and improve the availability of translation services in general, and submits that expanding the use in this manner could foster technological advances in the use of these auditory assistance devices.²⁸ Charles Wurm submits that the proposed rule would allow both current and new technologies to be developed to enable people to better communicate with persons supporting international and global training applications and with U.S. international allies.²⁹ The Hearing Industries Association (HIA) – the national trade association of manufacturers of hearing aids, assistive listening devices, component parts, and power sources – states that the Commission’s proposal “appears to be a reasonable expansion in support of a service that is needed” and “the reasons for the proposed changes are sound and the application worthy of the Commission’s proposed action.”³⁰

12. The majority of commenters also agree with the Commission’s tentative assessment that expanding the permissible uses of Part 15 auditory assistance devices to include simultaneous interpretation will not increase costs to the public. Bridge and Infinity submit that broadening the permitted uses of Part 15 auditory assistance devices will likely reduce the costs of providing translation services by increasing competition in the market and reduce translation devices’ prices by increasing their availability.³¹ Williams Sound states that by expanding the permissible uses of Part 15 auditory assistance devices, parties responsible for providing auditory assistance will find it easier to stock receivers operating in one band and will have the flexibility to configure their operations to meet different service needs.³² Williams Sound further submits that for non-profit organizations such as schools and houses of worship, the ability to simplify their equipment acquisitions and to operate with added flexibility will be most beneficial.³³

13. iProbe submits that many small to medium business rental companies and end users, including non-profit organizations and freelance professionals, with frequent interpretation needs have accumulated a large number of 72-76 MHz bands transmitters and receivers that could be used for language interpretation. iProbe contends that it would be detrimental to these organizations to have to invest in translation equipment that operates on different frequencies.³⁴ In opposition, Keir Milan and

²⁵ See Bridge comments at 1; Infinity comments at 1.

²⁶ See Infinity comments at 1.

²⁷ See Williams Sound comments at 2.

²⁸ See Rodrigo Tranamil comments at 1-2,

²⁹ See Charles Wurm comments at 1.

³⁰ See HIA comments at 2 and 6.

³¹ See Bridge comments at 1; Infinity comments at 1.

³² See Williams Sound comments at 4.

³³ See Letter from David E. Hilliard, Counsel for Williams Sound, to Marlene H. Dortch, Secretary, FCC in ET Docket No. 10-26, Attachment at 2 (filed Aug. 14, 2012) (“Williams Sound Aug. 14, 2012 *Ex Parte* Letter”).

³⁴ See iProbe *Ex Parte* comments at 1.

Michael Held contend that the permissible uses of Part 15 auditory assistance devices should not be expanded to include simultaneous translation, arguing respectively that doing so would be anticompetitive by penalizing entities that provide translation services via higher-cost infrared technology equipment and that such use is not covered by the ADA.³⁵

14. We agree with those commenters who contend that expanding the permissible uses of Part 15 auditory assistance devices to include simultaneous translation is in the public interest and will not increase costs. Permitting Part 15 auditory assistance devices to be used for simultaneous translation could reduce the costs of translation services by increasing competition and allowing providers to use less expensive RF equipment for simultaneous translation instead of higher-cost infrared technology equipment.³⁶ It is likely also to reduce auditory assistance equipment costs, result in economies of scale in production and marketing, and introduce more competition for such devices. This action will promote more flexible and efficient use of Part 15 auditory assistance devices by allowing them to be used for either auditory assistance or simultaneous translation, or both, without impeding their ability to provide auditory assistance to persons with disabilities.³⁷ Permitting such use of these devices will increase the comprehension of persons that need language translation in public venues while lowering the ambient noise level for all listeners, thereby enhancing the auditory experience of all listeners.³⁸

15. We are not persuaded by Keir Milan's assertion that allowing Part 15 auditory assistance devices to be used for simultaneous language interpretation would penalize entities that provide translation services via higher-cost infrared technology equipment.³⁹ Instead, we believe that the marketplace provides the best measure for determining which technology is optimal for addressing the translation needs of users. This approach permits each interpreter to analyze customers' needs in its market area and employ the technology that best meets their needs. For example, some customers may prefer the inherent security and privacy of infrared technology over the capabilities of RF technology. We also reject Michael Held's assertion that Part 15 auditory assistance devices' use of the 72-76 MHz bands should be limited only to providing assistance to persons with disabilities under the ADA.⁴⁰ Although Part 15 auditory assistance devices have previously been restricted under the Commission's rules to solely providing aural assistance to persons with disabilities, unlicensed use of the 72-76 MHz bands is not restricted under the ADA or the Communications Act of 1934 to only uses covered by the ADA.⁴¹

16. We also conclude that permitting Part 15 auditory assistance devices to be used for simultaneous language interpretation will not, *per se*, increase the potential for harmful interference (*i.e.*,

³⁵ See Mr. Keir Milan reply comments at 1-3; Reply Comments of Michael Held, Ph.D. at 1.

³⁶ See Bridge comments at 1-2; Infinity comments at 1-3; and Williams Sound Aug. 14, 2012 *Ex Parte* Letter Attachment at 2.

³⁷ See Infinity comments at 1; Williams Sound comments at 4; Williams Sound Aug. 14, 2012 *Ex Parte* Letter at 2.

³⁸ See Infinity comments at 1; Williams Sound comments at 2, 4.

³⁹ See Mr. Keir Milan reply comments at 1-3.

⁴⁰ See Michael Held, Ph.D. reply comments at 1.

⁴¹ We note that in an early phase of this proceeding, Hearing Loss Association of America (HLAA), Deaf and Hard of Hearing Consumer Advocacy Network (DHHCAN), National Association of the Deaf (NAD), and Telecommunications for the Deaf and Hard of Hearing (TDI) filed comments supporting Williams Sound's proposal. See HLAA, DHHCAN, NAD, and TDI reply comments filed March 15, 2010.

interference that seriously degrades, obstructs, or repeatedly interrupts a radicommsunication service)⁴² to authorized services in the 72-76 MHz and adjacent bands. No commenter expressed concern that increased use of Part 15 auditory assistance devices for simultaneous interpretation would cause harmful interference to authorized services. As the Commission noted in the *Auditory Assistance Device NPRM*, the interference potential of a Part 15 auditory assistance device is generally unrelated to the number of users or type of use.⁴³ Rather, the interference potential is a function of the device's operating characteristics and parameters. There is no difference in the interference potential of a Part 15 auditory assistance device whether it is used for auditory assistance or simultaneous translation.

17. Bridge submits that given the low power of Part 15 auditory assistance devices' fundamental emissions, increased use of Part 15 auditory assistance devices is unlikely to cause harmful interference to any authorized services.⁴⁴ Infinity argues that based on the lack of any reports of harmful interference to authorized services, the existing limit for Part 15 auditory assistance devices' fundamental emissions is already sufficient to prevent increased use of these devices for simultaneous translation from causing harmful interference to authorized services.⁴⁵ Bridge and Infinity argue that increasing the number of users and uses of Part 15 auditory assistance devices in operation in the 72-76 MHz bands will not increase the potential for harmful interference to authorized services since the locations of such use should be similar to those where these devices are already used to provide auditory assistance.⁴⁶ They also state that in their experience, licensed users in the 72-76 MHz and adjacent bands and over-the-air reception of VHF TV channels are unlikely to be located near where Part 15 auditory assistance devices are used or most events requiring translation occur.⁴⁷ They assert that as a result, the low-powered fundamental signals from increased use of Part 15 auditory assistance devices for simultaneous translation are unlikely to cause harmful interference to authorized services in the 72-76 MHz and adjacent bands or to the reception of VHF TV channels 2-6.⁴⁸ In opposition, Michael Held asserts that increased use of Part 15 auditory assistance devices for simultaneous translation could cause harmful interference to other Part 15 auditory assistance devices that are providing auditory assistance by "crowding" the frequencies.⁴⁹

⁴² See n.14, *supra*.

⁴³ See *Auditory Assistance Device NPRM*, 26 FCC Rcd at 13605 para. 15.

⁴⁴ See Bridge comments at 1.

⁴⁵ See Infinity comments at 1-2.

⁴⁶ See Bridge comments at 1-2; Infinity comments at 1-2.

⁴⁷ See *id.* Bridge and Infinity also assert that most events requiring translation services will most likely occur indoors in urban locations where Part 15 auditory assistance devices' fundamental signals are significantly attenuated by the walls of the building (*e.g.*, hotels, convention centers, stadiums, houses of worship, schools, and court houses) and, when used indoors, the range of the devices' signals outdoors is severely limited (*e.g.*, to less than 100 feet) or may not even be discernible. They state that although some Part 15 auditory assistance devices' fundamental signals have a theoretical range of 1,000 feet without obstructions, such devices are rarely used outdoors where this range might be attainable and that most Part 15 auditory assistance devices used for language interpretation have a range of only 150 feet without obstructions. See Bridge comments at 1; Infinity comments at 1.

⁴⁸ See Bridge comments at 1; Infinity comments at 1-2. We disagree with Keir Milan's assertion that commenters did not adequately address whether increased use of Part 15 auditory assistance devices for simultaneous language interpretation would increase the potential for harmful interference to authorized services. See Mr. Keir Milan reply comments at 3-4.

⁴⁹ See Michael Held, Ph.D. reply comments at 1.

18. We agree with Bridge and Infinity that the existing limit for Part 15 auditory assistance devices' fundamental emissions is already sufficient to prevent increased use of these devices for simultaneous translation from causing harmful interference to authorized services. This conclusion is supported by the absence of any reports of harmful interference to date. We note that although the locations and channels where Part 15 auditory assistance devices are operated may increase by expanding their permissible uses to include simultaneous translation, the market for and use of these devices should remain limited and they will not be ubiquitously deployed. We expect that this outcome, coupled with their relatively low fundamental emissions limit,⁵⁰ will help prevent increased use of Part 15 auditory assistance devices for simultaneous translation from causing harmful interference to authorized services.

19. We are not persuaded by Michael Held's assertion that increased use of Part 15 auditory assistance devices for simultaneous translation will interfere with other Part 15 auditory assistance devices providing auditory assistance by "crowding" the frequencies. As noted above, these devices' fundamental signals may transmit in bandwidths up to 200 kilohertz wide in the 72-73 MHz, 74.6-74.8 MHz, and 75.2-76 MHz bands, so ample spectrum is available for multiple applications.⁵¹ Further, Part 15 auditory assistance devices' low power levels will enable other parties to re-use their frequencies at nearby locations.

20. With respect to Part 15 auditory assistance devices' unwanted emissions (*i.e.*, emissions outside of the 200 kilohertz necessary bandwidths), comments are mixed on whether we should modify the limit for these emissions. In the *Auditory Assistance Device NPRM*, we proposed that Part 15 auditory assistance devices' out-of-band emissions limit be lowered to the general emissions limits for other unlicensed devices that are specified in rule Section 15.209. We noted that expanding the permissible use of these devices at any location could increase their use at locations where they are not also used to provide auditory assistance to disabled individuals as well as increase the number of channels operated at any given location to provide both auditory assistance and simultaneous translation.⁵² Infinity argues that based on the lack of any reports of harmful interference, the existing limit for Part 15 auditory assistance devices' out-of-band emissions is already sufficient to prevent increased use of these devices for simultaneous translation from causing harmful interference to authorized services.⁵³ Bridge and Infinity argue that the out-of-band emissions are unlikely to be problematic since much of the increased use of Part 15 auditory assistance devices would occur in areas where the VHF TV bands are not used (*e.g.*, hotels, convention centers, and stadiums).⁵⁴

21. Bridge and Infinity both recommend that if the Commission lowers the existing out-of-band emissions limit for these devices, it should grandfather Part 15 auditory assistance devices that are already installed or in use for the life of the equipment.⁵⁵ Williams Sound asserts that the Section 15.209 emissions limits are appropriate for Part 15 auditory assistance devices' out-of-band emissions because they have proven effective in limiting interference from millions of Part 15 intentional radiators.

⁵⁰ See para. 8 and n.18, *supra*.

⁵¹ See para. 8, *supra*. For example, Williams Sound's PPA 377 PRO Personal PA FM Listening System features 17 pre-set 75 kilohertz wideband channels (selectable) and 77 pre-set 5 kilohertz narrowband channels (selectable) in the 72-73 MHz, 74.6-74.8 MHz, and 75.2-76 MHz bands. See http://www.williamssound.com/resources/products/web/ppa/ppa_377pro_specs_en.pdf (last visited Feb. 26, 2013).

⁵² See *Auditory Assistance Device NPRM*, 26 FCC Rcd at 13605 para. 17

⁵³ See Infinity comments at 1-2.

⁵⁴ See Bridge comments at 1-2; Infinity comments at 2.

⁵⁵ See Bridge comments at 2; Infinity comments at 2.

Williams Sound also asserts that the Section 15.209 emissions limits are identical to the general limits that are applicable to millions of Part 15 unintentional radiators that operate above 30 MHz, and are currently achievable in Part 15 auditory assistance devices at a small additional cost of 1 to 2 percent per device using industry standard components employing relatively straight-forward designs.⁵⁶ Williams Sound further asserts that reduced out-of-band emissions limits for Part 15 auditory assistance devices would address any potential for possible harmful interference to adjacent users that may arise from increased use of these devices for simultaneous interpretation and, with a reasonable transition period, should not be unduly burdensome.⁵⁷

22. We are concerned that the unwanted emissions from increased use of Part 15 auditory assistance devices for simultaneous interpretation could degrade the reception of particularly sensitive VHF TV channels 2-6. The current allowed unwanted emissions limit of 1,500 $\mu\text{V}/\text{m}$ at 3 meters for Part 15 auditory assistance devices that operate in the 72-76 MHz bands is 15 times higher (23.5 dB more power) than the Section 15.209 emissions limit of 100 $\mu\text{V}/\text{m}$ at 3 meters that applies to most other Part 15 devices' unwanted emissions in the 72-76 MHz and adjacent bands. It is also 18 times higher (25 dB more power) than the unwanted emissions limit of 84 $\mu\text{V}/\text{m}$ at 3 meters that applies to Part 15 personal/portable TV bands devices that operate in bands adjacent to occupied TV channels.⁵⁸ Accordingly, as we discuss below, we will require that Part 15 auditory assistance devices' unwanted emissions be lowered to the general emission limits for other unlicensed devices that are specified in rule Section 15.209. Although Part 15 auditory assistance devices do not have a history of causing harmful interference to authorized services under the current rules, this approach will reduce the likelihood of harmful interference as their use increases and help improve the reception of VHF TV channels 2-6 and accordingly is in the public interest.

23. As the Commission noted in the *Auditory Assistance Device NPRM*, since the time the Commission adopted the rules for Part 15 auditory assistance device transmitters in 1972, all full-service TV stations have converted from analog to digital transmissions.⁵⁹ We note that the Commission has sought comment on measures to improve digital TV reception for consumers on VHF channels and encourage broadcasters to use these channels in the future.⁶⁰ The Commission noted that one of the problems with indoor VHF TV reception is the high levels of noise on those channels from nearby consumer electronics equipment.⁶¹ The Commission stated that it would be desirable to reduce that noise and sought comment on what actions it might take to reduce such noise in the VHF TV bands.⁶²

⁵⁶ See Williams Sound comments at 3.

⁵⁷ See Williams Sound Aug. 14, 2012 *Ex Parte* Letter at 2.

⁵⁸ See 47 C.F.R. § 15.709(c)(1)(ii).

⁵⁹ See *Auditory Assistance Device NPRM*, 26 FCC Rcd at 13607 para. 20.

⁶⁰ In 2010, the Commission sought comment on measures it could take to improve TV reception for consumers on VHF TV channels and encourage broadcasters to use these channels in the future. See *Innovation in the Broadcast Television Bands: Allocations, Channel Sharing and Improvements to VHF*, ET Docket No. 10-235, *Notice of Proposed Rule Making*, 25 FCC Rcd 16498 (2010) ("*Channel Sharing NPRM*"). The Commission did not adopt any rules to address this issue when it concluded this docket in 2012 but stated that it may revisit this issue at a later time. See *Innovation in the Broadcast Television Bands: Allocations, Channel Sharing and Improvements to VHF*, ET Docket No. 10-235, *Report and Order*, 27 FCC Rcd 4616, 4621 para. 10 (2012) ("*Channel Sharing R&O*").

⁶¹ See *Channel Sharing NPRM*, 25 FCC Rcd at 16512 para. 43.

⁶² See *Channel Sharing NPRM*, 25 FCC Rcd at 16513 para. 47.

24. Since the Commission adopted the *Auditory Assistance Device NPRM*, the “Middle Class Tax Relief and Job Creation Act of 2012” was enacted to enable the Commission to make more efficient use of the TV bands spectrum by freeing up broadcast TV spectrum for wireless broadband services.⁶³ Section 6403(a)(2) of the Spectrum Act directs the Commission to conduct a reverse auction of broadcast television spectrum that includes, *inter alia*, a bid option for participants’ voluntary relinquishment of “all usage rights with respect to an ultra high frequency television channel in return for receiving usage rights with respect to a very high frequency television channel...” (UHF to VHF bid).⁶⁴ In the incentive auction proceeding, the Commission sought comment on whether to permit eligible licensees to participate in the auction by agreeing to relinquish a high VHF channel in exchange for a low VHF channel.⁶⁵ The Commission again recognized that increased signal interference caused by the higher levels of ambient noise from other electronic devices operating on or near the low VHF frequency range can make the use of the low VHF channels difficult and could deter reverse auction participation.⁶⁶

25. Commenters’ contention that most increased use of Part 15 auditory assistance devices for simultaneous translation would not be proximate to VHF TV reception areas is not compelling – it is not self-evident, it disregards the consequences of harmful interference where it could occur, and it disregards locations at which these frequencies could be used post-auction. In light of the Commission’s efforts to make the VHF channels more useful to broadcasters by improving the reception of VHF digital TV and consistent with the objectives in the Spectrum Act, we conclude that it is in the public interest and sound public policy to require Part 15 auditory assistance devices’ unwanted emissions to comply with the Section 15.209 emissions limits.⁶⁷ We will provide a transition period to implement this requirement, and we will grandfather all devices installed prior to the end of the transition period, as we further explain below.

26. We are persuaded by the record that reducing the unwanted emissions limit of Part 15 auditory assistance devices to the Section 15.209 emissions limits can be accomplished using current technology at minimal cost. Williams Sound asserts that the Section 15.209 emissions limits are currently achievable in Part 15 auditory assistance devices using industry standard components employing relatively straight-forward designs at a small additional cost of 1 to 2 percent per device.⁶⁸ Williams Sound recommends that the Commission provide a 3-year transition period to allow manufacturers to design new Part 15 auditory assistance device transmitters with out-of-band emissions that comply with the Section 15.209 emissions limits, complete the needed testing, obtain regulatory approvals, and plan the transition for manufacturing devices that incorporate the new design. It also recommends that the domestic manufacture and importation for domestic sale of Part 15 auditory assistance devices with out-of-band emissions that do not meet the Section 15.209 emissions limits cease after 3 years.

27. Williams Sound further recommends that devices manufactured in the United States or imported before the 3-year transition date should continue to be permitted to be installed or sold

⁶³ See “Middle Class Tax Relief and Job Creation Act of 2012,” Pub. L. No. 112-96 (2012) (“Spectrum Act”).

⁶⁴ Spectrum Act at Sec. 6403(a)(2).

⁶⁵ See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, Docket No. 12-268, *Notice of Proposed Rulemaking*, 27 FCC Rcd 12357, 12385 para. 86 (2012) (“*Incentive Auctions NPRM*”).

⁶⁶ See *Incentive Auctions NPRM* 27 FCC Rcd at 12385 para. 85.

⁶⁷ See 47 C.F.R. § 15.209(a).

⁶⁸ See Williams Sound comments at 3.

indefinitely. In addition, it recommends that any Part 15 auditory assistance device equipment authorizations granted 18 months or more after the effective date of the new rules should comply with the new rules. Williams Sound argues that due to the time needed to develop transmitters with out-of-band emissions that comply with the Section 15.209 emissions limits, complete the needed testing, obtain regulatory approvals, and plan the transition for manufacturing transmitters, allowing transmitters manufactured in the United States or imported before the transition date to continue to be permitted to be installed or sold would facilitate the transition to tighter out-of-band emissions limits for Part 15 auditory assistance devices without creating shortages that could impair the availability or cost of these devices.⁶⁹

28. For these reasons, we establish an 18-month timetable after the effective date of the new rules in this proceeding for manufacturers to produce Part 15 auditory assistance devices with unwanted emissions that comply with the Section 15.209 emissions limits. We also establish a 3-year timetable after the effective date of the new rules for requiring that any Part 15 auditory assistance devices manufactured in or imported into the United States for sale comply with the revised unwanted emissions limits. We agree with Williams Sound that an 18-month transition period should provide sufficient time for manufacturers to design equipment that complies with the new rules and to obtain equipment certification.⁷⁰ Therefore, we will provide transitional provisions in our rules to allow for the certification of Part 15 auditory assistance devices under the current rules for up to 18 months after the publication of a summary of this Report and Order in the Federal Register.

29. Beginning 18 months after the effective date of the new rules, equipment certification may no longer be obtained for Part 15 auditory assistance devices with unwanted emissions that do not meet the Section 15.209 emissions limits. However, until the end of the 3-year transition period, we will permit Class II permissive changes for equipment certified prior to the 18-month transition date,⁷¹ as well as their continued manufacture, marketing, installation, and importation. After the end of the 3-year transition period, Class II permissive changes for such devices will not be permitted nor will their manufacture, marketing, installation, or importation. We find that these requirements will facilitate the transition to tighter unwanted emissions limits without unduly impairing the availability or cost of Part 15 auditory assistance devices or imposing undue burdens on manufacturers, translation services providers, or the public.

30. We agree with Bridge and Infinity that Part 15 auditory assistance devices that are already installed or in use should be grandfathered for the life of the equipment.⁷² Requiring the upgrade or replacement of existing Part 15 auditory assistance devices with units having unwanted emissions that comply with the Section 15.209 emissions limits would be an unnecessary financial burden on operators of these devices and could inhibit the ability of operators of public venues to provide auditory assistance to persons with disabilities as required by the ADA. Grandfathering existing equipment will ensure that

⁶⁹ See Williams Sound comments at 3-4.

⁷⁰ Under Section 15.201(b), Part 15 auditory assistance devices must be certificated by the Commission pursuant to the equipment authorization procedures in Subpart J of Part 2 of the Commission's rules prior to marketing. 47 C.F.R. § 15.201(b).

⁷¹ See 47 C.F.R. § 2.1043(b)(2).

⁷² Bridge and Infinity state that if existing Part 15 auditory assistance devices are not grandfathered, numerous houses of worship, museums, schools, theaters, non-profit community organizations, and other organizations that operate Part 15 auditory assistance devices would be required to upgrade or replace their existing devices at considerable cost. See Bridge comments at 2; Infinity comments at 2. Infinity further states that entities that could not afford to upgrade or replace their existing devices would be forced to cease providing auditory assistance. See Infinity comments at 2.

entities will be permitted to operate their existing Part 15 auditory assistance devices until replacement is necessary or desired due to age, malfunction, or other concerns, and will facilitate continued compliance with the ADA.

31. In light of the foregoing considerations, we amend the definition of “auditory assistance device” in Part 15 of the rules to expand the permissible uses of these devices to include simultaneous language interpretation for anyone at any location. We also amend Section 15.237 to require that Part 15 auditory assistance devices’ unwanted emissions comply with the Section 15.209 emissions limits. In addition, we establish a 3-year transition period after the effective date of the rules adopted in this proceeding for manufacturers to cease the domestic manufacture or importation for domestic sale of Part 15 auditory assistance devices that do not comply with the revised unwanted emissions limits. We also establish a cutoff date of 18 months after the effective date of the new rules after which unwanted emissions from new Part 15 auditory assistance devices must comply with the Section 15.209 emissions limits in order to order to receive an equipment authorization.

32. Except for the tighter unwanted emissions limits, the other administrative and technical requirements for operation of Part 15 auditory assistance devices in the 72-73 MHz, 74.6-74.8 MHz, and 75.2-76 MHz bands remain unchanged. The specific rule amendments are shown in Appendix A.

IV. PROCEDURAL MATTERS

A. Final Regulatory Flexibility Analysis

33. As required by the Regulatory Flexibility Act (RFA),⁷³ an Initial Regulatory Flexibility Analysis (IRFA) for ET Docket No. 10-26 was incorporated into the *Auditory Assistance Device NPRM*.⁷⁴ The Commission sought written public comment on the possible significant economic impact of the proposed rules on small entities in the *Auditory Assistance Device NPRM*, including comments on the IRFA. No parties commented specifically on the IRFA. Pursuant to the RFA,⁷⁵ a Final Regulatory Flexibility Analysis is contained in Appendix B.

B. Paperwork Reduction Analysis

34. This Report and Order contains no new and modified information collections subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13.

C. Congressional Review Act

35. The Commission will send a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

V. ORDERING CLAUSES

36. Accordingly, IT IS ORDERED that, pursuant to Sections 2, 4(i), 302(a), 303(f), and 303(r) of the Communications Act of 1934, 47 U.S.C. §§ 152, 154(i), 302(a), 303(f), and 303(r), this Report and Order in ET Docket No. 10-26 is hereby ADOPTED.

⁷³ *See* 5 U.S.C. § 603.

⁷⁴ *See Auditory Assistance Device NPRM*, 26 FCC Rcd at 13612 (Appendix B).

⁷⁵ *See* 5 U.S.C. § 604.

37. IT IS FURTHER ORDERED that Part 15 of the Commission's rules IS AMENDED as set forth in Appendix A. These rule revisions will take effect 30 days after a summary of the Report and Order is published in the Federal Register.

38. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

39. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends Part 15 of Title 47 of the Code of Federal Regulations to read as follows:

PART 15 – RADIO FREQUENCY DEVICES

1. The authority citation for Part 15 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, 304, 307, 336, and 544a.

2. Section 15.3 is amended by revising paragraph (a) to read as follows:

§ 15.3 Definitions.

(a) *Auditory assistance device.* An intentional radiator used to provide auditory assistance communications (including but not limited to applications such as assistive listening, auricular training, audio description for the blind, and simultaneous language translation) for:

(1) Persons with disabilities. In the context of the Part 15 rules, the term “disability,” with respect to the individual, has the meaning given to it by section 3(2)(A) of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102(2)(A)), *i.e.*, a physical or mental impairment that substantially limits one or more of the major life activities of such individuals;

(2) Persons who require language translation; or

(3) Persons who may otherwise benefit from auditory assistance communications in places of public gatherings, such as a church, theater, auditorium, or educational institution.

* * * * *

3. Section 15.37 is amended by adding paragraph (g) as follows:

§ 15.37 Transition provisions for compliance with the rules.

* * * * *

(g) The manufacture or importation of auditory assistance devices that operate in the 72.0-73.0 MHz, 74.6-74.8 MHz, and 75.2-76.0 MHz bands that do not comply with the requirements of § 15.237(c) shall cease on or before **[insert date 3 years after effective date of rules]**. Effective **[insert date 18 months after effective date of rules]**, equipment approval will not be granted for auditory assistance devices that operate in the 72.0-73.0 MHz, 74.6-74.8 MHz, and 75.2-76.0 MHz bands that do not comply with the requirements of § 15.237(c). These rules do not prohibit the sale or use of authorized auditory assistance devices that operate in the 72.0-73.0 MHz, 74.6-74.8 MHz, and 75.2-76.0 MHz bands manufactured in the United States, or imported into the United States, prior to **[insert date 3 years after effective date of rules]**.

4. Section 15.237 is amended by revising paragraph (c) to read as follows:

§ 15.237 Operation in the bands 72.0-73.0 MHz, 74.6-74.8 MHz and 75.2-76.0 MHz.

* * * * *

(c) The field strength within the permitted 200 kHz band shall not exceed 80 millivolts/meter at 3 meters. The field strength of any emissions radiated on any frequency outside of the specified 200 kHz band shall not exceed the general radiated emissions limits specified in §15.209. The emission limits in this paragraph are based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply.

APPENDIX B

Final Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rulemaking (Auditory Assistance Device NPRM)* in ET Docket No. 10-26.² The Commission sought written public comment on the proposals in the *Auditory Assistance Devices NPRM*, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objective of, the Report and Order

In this Report and Order, the Commission expands the permissible uses of Part 15 auditory assistance devices that operate in the 72.0-73.0 MHz, 74.6-74.8 MHz, and 75.2-76 MHz bands (72-76 MHz bands) beyond solely aural assistance for persons with disabilities to include simultaneous language interpretation (simultaneous translation) for anyone at any location. It also reduces the limits for Part 15 auditory assistance devices' unwanted emissions to the radiated emissions limits specified in Section 15.209 to help prevent the unwanted emissions from increased use of these devices for simultaneous translation from degrading the reception of VHF TV channels 2-6. The objectives of the Commission in this Report and Order are to allow Part 15 auditory assistance devices to be used for simultaneous translation by anyone at any location, remove barriers to communications, provide greater flexibility and enhanced benefits for persons wishing to use auditory assistance technologies, expand the opportunities to deploy auditory assistance devices, and improve the reception of VHF TV channels 2-6.

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

No comments were filed in direct response to the IRFA. However, in general comments on the *Auditory Assistance Device NPRM*, some commenters raised issues that might affect small entities. In particular, one commenter argued that allowing Part 15 auditory assistance devices to be used for simultaneous translation would penalize entities that have purchased higher-cost infrared technology equipment to provide simultaneous translation. One commenter also argued that use of Part 15 auditory assistance devices for simultaneous translation is not an Americans with Disabilities Act (ADA) of 1990 use and would interfere or disrupt other Part 15 auditory assistance devices by crowding the frequencies. Commenters also requested that if the Commission imposes stricter out-of-band emissions limits on Part 15 auditory assistance devices, then a transition period for compliance with the new limits should be established and existing Part 15 auditory assistance devices should be grandfathered for the life of the equipment. The Commission carefully considered each of these comments in reaching the decisions set forth in this Report and Order.

¹ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996), and the Small Business Jobs Act of 2010, Public Law No. 111-240, 124 Stat. 2504 (2010).

² See Amendment of Part 15 of the Commission's Rules to Amend the Definition of Auditory Assistance Device in Support of Simultaneous Language Interpretation, ET Docket No. 10-26, *Order and Notice of Proposed Rulemaking*, 26 FCC Rcd 13600 (2011) ("*Auditory Assistance Device NPRM*").

³ See 5 U.S.C. § 604.

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

Pursuant to the Small Business Jobs Act of 2010, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

D. Description and Estimate of the Number of Small Entities to Which the Proposed Rule Will Apply

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.⁴ 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.⁵ A small business concern is one which: 1) is independently owned and operated; 2) is not dominant in its field of operation; and 3) satisfies any additional criteria established by the SBA.⁶

Small Businesses, Small Organizations, and Small Governmental Jurisdictions. Our action may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive, statutory small entity size standards that encompass entities that could be directly affected by the proposals under consideration.⁷ As of 2009, small businesses represented 99.9 percent of the 27.5 million businesses in the United States, according to the SBA.⁸ Additionally, a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."⁹ Nationwide, as of 2007, there were approximately 1,621,315 small organizations.¹⁰ Finally, the term "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."¹¹ Census Bureau data for 2007 indicate that there were 89,527 governmental jurisdictions in the United States.¹² We estimate that, of this total, as many as 88,761

⁴ *Id.* at § 603(b)(3).

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

⁶ Small Business Act, 15 U.S.C. § 632 (1996).

⁷ *See* 5 U.S.C. § 601(3)–(6).

⁸ *See* SBA, Office of Advocacy, "Frequently Asked Questions," available at <http://web.sba.gov/faqs/faqindex.cfm?areaID=24> (last visited Aug. 31, 2012).

⁹ 5 U.S.C. § 601(4).

¹⁰ INDEPENDENT SECTOR, THE NEW NONPROFIT ALMANAC & DESK REFERENCE (2010).

¹¹ 5 U.S.C. § 601(5).

¹² U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2011, Table 427 (2007).

entities may qualify as “small governmental jurisdictions.”¹³ Thus, we estimate that most governmental jurisdictions are small.

Fixed Microwave Services. Fixed microwave services include common carrier,¹⁴ private operational-fixed,¹⁵ and broadcast auxiliary radio services.¹⁶ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.¹⁷ The Commission does not have data specifying the number of these licensees that have no more than 1,500 employees, and thus we are unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA’s small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer common carrier fixed licensees and 61,670 or fewer private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies proposed herein. We note, however, that the common carrier microwave fixed licensee category includes some large entities.

Wireless Equipment Manufacturers. This industry is comprised of businesses primarily engaged in manufacturing radio, television broadcast, and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, cordless phones, global positioning system (GPS) equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting

¹³ The 2007 U.S Census data for small governmental organizations are not presented based on the size of the population in each such organization. There were 89,476 local governmental organizations in 2007. If we assume that county, municipal, township, and school district organizations are more likely than larger governmental organizations to have populations of 50,000 or less, the total of these organizations is 52,095. If we make the same population assumption about special districts, specifically that they are likely to have a population of 50,000 or less, and also assume that special districts are different from county, municipal, township, and school districts, in 2007 there were 37,381 such special districts. Therefore, there are a total of 89,476 local government organizations. As a basis of estimating how many of these 89,476 local government organizations were small, in 2011, we note that there were a total of 715 cities and towns (incorporated places and minor civil divisions) with populations over 50,000. CITY AND TOWNS TOTALS: VINTAGE 2011 – U.S. Census Bureau, *available at* <http://www.census.gov/popest/data/cities/totals/2011/index.html>. If we subtract the 715 cities and towns that meet or exceed the 50,000 population threshold, we conclude that approximately 88,761 are small. U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES 2011, Tables 427, 426 (Data cited therein are from 2007).

¹⁴ See 47 C.F.R. §§ 101 *et seq.* for common carrier fixed microwave services (except Multipoint Distribution Service).

¹⁵ Persons eligible under Parts 80 and 90 of the Commission’s Rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station and only for communications related to the licensee’s commercial, industrial, or safety operations.

¹⁶ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission’s Rules. See 47 C.F.R. Part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

¹⁷ 13 C.F.R. § 121.201, NAICS code 517210.

equipment.¹⁸ In this category, the SBA has deemed a business manufacturing radio and television broadcasting equipment, wireless telecommunications equipment, or both, to be small if it has fewer than 750 employees.¹⁹ For this category of manufacturing, Census data for 2007 show that there were 919 firms that operated that year. Of those establishments, 531 had between 1 and 19 employees; 240 had between 20 and 99 employees; and 148 had more than 100 employees.²⁰ Since 771 establishments had fewer than 100 employees, and since only 148 had more than 100 employees, the vast majority of manufacturers in this category would be considered small under applicable standards. The rules adopted in this Report and Order will apply to small businesses that choose to use, manufacture, design, import, or sell Part 15 auditory assistance devices. There is no requirement, however, for any entity to use, market, or produce these types of products.

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

This Report and Order expands the permissible uses of Part 15 auditory assistance devices to include simultaneous language interpretation for anyone at any location and reduces the permitted level of Part 15 auditory assistance devices' unwanted emissions to the Section 15.209 emissions limits. This item does not contain any new reporting or recordkeeping requirements.

After 18 months after the effective date of the new rules in this proceeding, the unwanted emissions of Part 15 auditory assistance devices submitted for equipment authorization must comply with the Section 15.209 emissions limits. After 3 years of the effective date of the new rules, the unwanted emissions of Part 15 auditory assistance devices manufactured or imported for sale in the U.S. must comply with the emissions limits in Section 15.209. Manufacturers will incur engineering services and production costs to design and produce Part 15 auditory assistance devices whose unwanted emission comply with the Section 15.209 emissions limits. The Section 15.209 emissions limits are currently achievable for Part 15 auditory assistance devices' unwanted emissions at an estimated additional cost of 1 to 2 percent per device using industry standard components employing relatively straight-forward designs.²¹ We expect that these costs will be comparable for large and small entities.

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

The RFA requires an agency to describe any significant 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 small entities; 3) the use of performance, rather than design, standards; and 4) an exemption from coverage of the rule, or any part thereof, for small entities.²²

To reduce the burdens on small entities, we have provided a 3-year transition period after the effective date of the new rules for manufacturers to produce new Part 15 auditory assistance devices with

¹⁸ <http://www.census.gov/econ/industry/def/d334220.htm>.

¹⁹ See 13 C.F.R. § 121.201, NAICS code 334220.

²⁰ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=300&-ds_name+EC073111&-_lang=en.

²¹ See Williams Sound comments at 3.

²² 5 U.S.C. § 603(c).

unwanted emissions that comply with the Section 15.209 emissions limits, after which the domestic manufacture and importation for domestic sale of Part 15 auditory assistance devices with unwanted emissions that do not meet these lower emissions limits must cease. However, there is no limit on the marketing of Part 15 auditory assistance devices manufactured or imported prior to the end of this 3-year transition period. In addition, we have provided 18 months after the effective date of the new rules in this proceeding for manufacturers to produce Part 15 auditory assistance devices with unwanted emissions that comply with the Section 15.209 emissions limits in order to receive an equipment authorization. This should provide sufficient time for manufacturers to obtain equipment authorization from the Commission for any Part 15 auditory assistance devices currently under development under the current rules, design such devices whose unwanted emissions comply with the Section 15.209 limits, and submit to the Commission equipment authorization applications for these devices. This approach will facilitate the lowering of Part 15 auditory assistance devices' unwanted emissions to the Section 15.209 emissions limits without unduly impairing the availability or cost of these devices. To avoid imposing unnecessary financial burdens on entities that produce, market, or operate Part 15 auditory assistance devices, we are permitting Part 15 auditory assistance devices that have already been installed or are in use prior to the end of the 3-year transition period to be operated without a cutoff date without having to meet the Section 15.209 emissions limits.

Report to Congress: The Commission will send a copy of the Report and Order, including this FRFA, in a report to Congress pursuant to the Congressional Review Act.²³ In addition, the Commission will send a copy of the Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register.

²³ See 5 U.S.C. § 801(a)(1)(A).