

transmission of audio material to the public switched telephone network and private and commercial wireless systems and networks to prevent Wireless Audio Devices from being used for applications such as wireless headsets for use with cellular phones, cordless phones and similar devices. Devices that transmit data or operate as telephones can operate under the Part 15 TV band device rules or other rule parts, e.g., Section 15.247 or 15.249. We seek comment on our definition and the proposals. In particular we seek comment on whether our proposed definition of Wireless Audio Devices is overly broad and could enable a proliferation of devices in the TV bands that already have suitable provisions to operate in other bands. If so, we seek comment on whether we should specifically limit the applicability of the rules to wireless microphones and how precisely they should be defined. Additionally, we seek comment on whether any other specifications or restrictions are needed, such as limiting devices to one-way operation.

113. We are not proposing to allow operation under the Part 15 rules of unlicensed video devices similar in fashion to those used by motion picture and television producers as an aid in composing camera shots under the Part 74 Wireless Assist Video Devices rules. No party has indicated that there is a need to permit the operation of similar devices by parties other than those eligible for licensing under Part 74. Further, Part 15 already allows devices to operate with sufficient bandwidth to transmit video in a number of bands, albeit at a lower power level or with different technical requirements from Part 74, including the 902-928 MHz and 2400-2483.5 MHz bands.²⁸⁷ In addition, Part 15 allows devices to operate in the TV bands under the TV Band Device rules.²⁸⁸ We invite comment.

114. The technical rules we are proposing for unlicensed Wireless Audio Devices are in many respects similar to the technical rules applicable to wireless microphones licensed under Part 74 as low power auxiliary stations. We are making this proposal because these Part 74 rules have been used in the development of a wide variety of wireless microphones that consumers have found useful and that apparently are capable of operating in the TV bands without interference. Further, by modeling the proposed Part 15 rules after the technical features of the Part 74 rules, we expect that most manufacturers will be able to obtain approval for equipment with few or no modifications from currently available designs. We are proposing to place the technical requirements for Wireless Audio Devices in a new section in Part 15, Subpart C, which contains the rules for intentional radiators (*see* Appendix E).

115. We propose to allow Wireless Audio Devices to operate in the core TV bands spectrum on channels 2-51 (excluding channel 37, which is allocated for non-broadcast purposes nationwide). We propose to prohibit operation of Wireless Audio Devices on channel 17 in Hawaii, which is allocated for non-broadcast purposes. To prevent interference to co-channel TV stations, we propose to prohibit operation of Wireless Audio Devices co-channel to operating TV stations at the following distances, which are the same separation distances required for Part 74 wireless microphones.²⁸⁹

- Channels 2-4 (54-72 MHz) and 5-6 (76-88 MHz)
 - Zone I: 105 km (65 miles)
 - Zones II and III: 129 km (80 miles)
- Channels 7-13 (174-216 MHz)
 - Zone I: 97 km (60 miles)
 - Zones II and III: 129 km (80 miles)

²⁸⁷ See 47 C.F.R. §§ 15.247 and 15.249. Section 15.247 allows operation with a power level up to 1 watt, but the device must employ frequency hopping or digitally modulated transmissions. Section 15.249 permits any type of transmissions, but the operating power under this section is significantly lower than what Part 74 permits for Wireless Assist Video Devices.

²⁸⁸ See 47 C.F.R. Part 15, subpart H.

²⁸⁹ See *id.*

- Channels 14-36 (470-608 MHz) and 38-51 (614-698 MHz)
 - All zones: 113 km (70 miles)

116. We propose to permit Wireless Audio Devices to operate with a power level to the antenna of up to 50 milliwatts in both the VHF and UHF TV bands. We note that the Part 74 rules permit wireless microphones to operate on VHF TV channels with a power level to the antenna of 50 milliwatts and on UHF channels with a power level of 250 milliwatts.²⁹⁰ However, most wireless microphones currently operate at a lower power level to increase battery life and because higher power is not necessary for most applications. For example, Shure has indicated that the majority of wireless microphones operate with a power level between 10 and 50 milliwatts.²⁹¹ Therefore, our proposed power level may be appropriate for most users, particularly because we expect that parties using Part 15 wireless microphones will typically be entities operating in smaller venues that do not require the longer range operation that higher power allows. In this regard, we note that devices authorized under Part 74 as low power auxiliary stations are “intended to transmit over distances of approximately 100 meters”²⁹² and may operate with a power level of 250 milliwatts. We anticipate that wireless microphones operating up to 50 milliwatts would transmit over a shorter distance. We seek comment on this proposal. We also seek comment on whether the equipment certification rules should prevent component parts such as amplifiers from being attached after market to a microphone and whether the rules should specify a maximum field strength or other emission limits for equipment.

117. We propose to require Wireless Audio Devices to comply with the same channelization, frequency stability, and bandwidth requirements as permitted under the technical rules for Part 74 wireless microphones.²⁹³ Specifically, we propose to require that operation be offset from the upper or lower channel edge by 25 kHz or an integral multiple thereof and that the operating frequency tolerance be 0.005%. We also propose to specify that one or more adjacent 25 kHz segments within a TV channel may be combined to form an operating channel with a maximum bandwidth not to exceed 200 kHz. Consistent with the measurement requirements for other Part 15 transmitters, we further propose to require that the frequency tolerance be maintained over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, for a variation in the supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C, and that battery operated equipment be tested using a new battery.²⁹⁴ We expect that the proposed 25 kHz offset requirement would prevent wireless microphones from operating at the edge of a TV channel where they could interfere with TV stations on adjacent channels, and the proposed frequency tolerance requirement would ensure that devices do not drift from the designated frequencies. The limit on the bandwidth that a wireless microphone may occupy will leave room for multiple microphones within a channel. We seek comment on these proposals.

118. We propose to require that out-of-band emissions from Wireless Audio Devices comply with the same emission limits that apply to Part 74 wireless microphones.²⁹⁵ Specifically, we propose to require that the mean power of out-of-band emissions comply with the following:

²⁹⁰ See *id.* § 74.861(e)(1).

²⁹¹ See Shure Incorporated Comments to the *Notice of Proposed Rule Making* in ET Docket Nos. 04-186 and 02-380 (filed Nov. 30, 2004) at 8.

²⁹² Transmit distance, *i.e.*, service range, would be affected by a number of conditions, but we expect that the transmit distance would typically extend to about 50 meters.

²⁹³ See 47 C.F.R. § 74.802(c).

²⁹⁴ See *id.* §§ 15.225(e), 15.229(d) and 15.231(d).

²⁹⁵ See *id.* § 74.861(e)(6).

- On any frequency removed from the operating frequency by more than 50% and up to 100% of the authorized bandwidth: at least 25 dB;
- On any frequency removed from the operating frequency by more than 100% and up to 250% of the authorized bandwidth: at least 35 dB;
- On any frequency removed from the operating frequency by more than 250% of the authorized bandwidth: $43+10 \log P$ dB where P is the mean output power in watts.

We seek comment on whether these out-of-band emission levels are appropriate. We also seek comment on whether we should apply the Section 15.209 limits outside the TV channel where a wireless microphone operates. Furthermore, we seek comment on whether these out-of-band emissions are adequate to protect both land mobile systems operating in the TV bands and new services operating on or within TV channel 52, 698 – 704 MHz, and on other frequencies in the 700 MHz Band.

119. We seek comment on whether we should prohibit Wireless Audio Devices from operating on co-channel basis with land mobile stations.²⁹⁶ We also seek comment on whether we should adopt any other technical rules to prevent interference to land mobile systems operating in the TV bands. In addition, we seek comment on whether we need to adopt isolation distances from the land mobile operations, similar to those proposed to protect TV stations. In addition, we seek comment on whether we need to adopt similar rules to protect new services operating on or within Channel 52 (698-704 MHz), or on other frequencies in the 700 MHz Band.

120. We seek comment on our assessment that the rules adopted for TV Band Devices are not likely to be suitable for Wireless Audio Devices. For example, TV Band Devices are required to have geolocation capability and the ability to connect to the Internet to register with a central data base. If wireless microphone “features” were to be added to these devices, it might result in a substantial increase in costs for these devices. Certain features currently required for TV Band Devices, such as periodic sensing of the airwaves for other devices, may also be incompatible with the operation of a real-time always-on device such as a wireless microphone. In addition, we observe that there are similarities between the rules we are proposing for wireless audio devices and the rules that were adopted for TV Band Devices. For example, the Commission allowed TV band personal/portable devices operating on an adjacent TV channel to use a power of up to 40 mW, whereas we are proposing to allow wireless audio devices to use a power of up to 50 mW. These similarities mean that, from a power and spectrum sharing standpoint, one type of device should not have a significant advantage over the other.²⁹⁷ We invite comment on this assessment.

121. We propose to require devices that have already been certificated under the procedures established for Part 74 devices and that will be marketed for operation under Part 15 to obtain a new equipment authorization to ensure compliance with whatever rules we may adopt in this proceeding. The nature of the filings, such as whether new test data may need to be submitted, will depend on whether the technical rules we adopt are identical to or different from Part 74.

122. If the Commission were to adopt technical rules for operation under Part 15 that are different from the existing Part 74 rules, we propose to allow a transition period where the existing equipment could be marketed and operated under Part 15 before obtaining a new equipment authorization. Typically design and manufacturing cycles take 1 to 2 years. We invite comment on whether there should be a transition period and, if so, what should be the length of the transition period?

²⁹⁶ See *id.* § 74.709.

²⁹⁷ In the White Spaces proceeding, some parties requested that the Commission reconsider certain protection requirements for wireless microphones, including the requirement for TV Band Devices to sense for wireless microphones. These issues will be addressed in the White Spaces proceeding and will not be addressed herein.

We also seek comment on whether we should apply the transition to the date after which a product is marketed, a date after which the product is manufactured or imported, or some other measure.

123. Finally, we seek comment on whether any other technical requirements need to be specified for Wireless Audio Devices. For example, the Part 74 rules for low power auxiliary stations have additional requirements for wireless microphones including a maximum frequency deviation specification when frequency modulation is used.²⁹⁸ Additionally, Part 74 states that a transmitter may be either frequency synthesized or crystal controlled.²⁹⁹ We seek comment on whether these or any other requirements should be incorporated into the Part 15 rules for Wireless Audio Devices.

2. Licensed Operation under Part 74

124. **Background.** Operation of Part 74 low power auxiliary stations is permitted by licensed entities on the TV bands.³⁰⁰ Only entities that fall within the following categories are eligible for a Part 74 license: (1) licensees of AM, FM, TV, or International broadcast stations or low power TV stations; (2) broadcast network entities; (3) certain cable television system operators; (4) motion picture and television program producers as defined in the rules; and (5) certain entities with specified interests in Broadband Radio Service (BRS) and Educational Broadcast Service (EBS) licenses, *i.e.*, BRS licensees, or entities that hold an executed lease agreement with a BRS licensee or conditional licensee or entities that hold an executed lease agreement with an Educational Broadcast Service licensee or permittee.³⁰¹ When two or more low power auxiliary service licensees need to operate in the same area, they must endeavor to select frequencies or schedule operation in such manner as to avoid mutual interference.³⁰²

125. Use of the TV bands for wireless low power auxiliary stations, including wireless microphones, by AM, FM, and TV broadcasters has long been recognized by the Commission as necessary and beneficial to broadcast productions. The Commission has occasionally expanded the list of entities eligible for a Part 74 license over time, most notably in 1977 when it modified its rules to include motion picture and television producers and certain cable television operators.³⁰³ The Commission reasoned that these entities had requirements similar to those of broadcast licensees, and it stated that it would consider on a case-by-case basis license applications by “other groups such as live entertainment program producers, etc.” whose needs are similar to those of broadcast licensees.³⁰⁴ Consistent with the decision to limit license eligibility to certain types of users, the Part 74 rules for low power auxiliary stations limit the scope of service and permissible transmissions to broadcasting, filming, and recording activity.³⁰⁵

²⁹⁸ See *id.* § 74.861(e)(3).

²⁹⁹ See *id.* § 74.861(e)(2).

³⁰⁰ See *id.* § 74.802. Operation is not permitted on channel 17 in Hawaii because that channel is assigned for non-broadcast purposes there.

³⁰¹ See *id.* § 74.832(a)(1)-(6).

³⁰² See 47 C.F.R. § 74.803(a).

³⁰³ Amendment of Part 2 and Subpart D, Part 74 of the Commission’s Rules and Regulations with Respect to the Use of Wireless Microphones, *Report, Memorandum Opinion and Order*, 63 FCC 2d 535 (1977).

³⁰⁴ *Id.* at ¶ 31.

³⁰⁵ 47 C.F.R. § 74.831 (“The license for a low power auxiliary station authorizes the transmission of cues and orders to production personnel and participants in broadcast programs and motion pictures and to the preparation therefore, the transmission of program material by means of a wireless microphone worn by a performer and other participants (continued....)”).

126. As discussed above, several commenters have argued for the need to expand eligibility for Part 74 low power auxiliary station licenses in the TV bands for certain operators, which would include producers of live performing arts (e.g., theater, opera, symphonies), cultural presentations (including religious presentations), professional or amateur sporting events, conventions or trade shows, owners or operators of venues where such events take place, or governmental or educational entities.³⁰⁶ Other commenters, however, strongly oppose expansion of eligibility under Part 74, contending that the interference protections afforded licensees of wireless microphones, including the protections associated with the database, would undermine the promise of unlicensed TV Band Devices in the TV bands.³⁰⁷

127. Discussion. Certain users of wireless microphones that are not currently eligible for a low power auxiliary station license under Part 74 may have needs that are similar to existing eligible licensees and may have a need for the interference protection that a license affords. In this section, we seek comment on whether to revise our rules and provide for a limited expansion of eligibility that would permit such users to hold a Part 74 license in the TV bands. We also seek comment on whether license eligibility should be expanded to permit the use of low power auxiliary stations inside nuclear power plants. In examining whether to expand licensee eligibility, we must balance the needs of the different users of the TV band spectrum.

128. We seek comment on the extent to which Part 74 eligibility for licensing should be expanded, if we decide to do so. For example, should such eligibility be limited to include large theaters, entertainment complexes, sporting arenas, and religious facilities, because these large venues may require multiple vacant TV channels to accommodate all of the wireless microphones needed and they may need the additional protections afforded Part 74, Subpart H licensees in the TV bands?³⁰⁸ We seek comment on whether to revise our rules in this manner, and how best to specify which particular entities, and under what circumstances, they should be eligible for a license. As discussed above, a number of commenters and other parties have urged the Commission to expand eligibility for Part 74 licenses to varying degrees, and we seek comment as well on those expanded eligibility proposals.³⁰⁹

129. Some wireless microphone operators, such as certain producers of live professional arts, entertainment, and sporting events, may require multiple vacant TV channels to accommodate all of the wireless microphones needed.³¹⁰ Many of these events are broadcast or recorded, and thus producers of

(Continued from previous page) _____

in a program or motion picture during rehearsal and during the actual broadcast, filming or recording, or the transmission of comments, interviews and reports from the scene of a remote broadcast.”).

³⁰⁶ See, e.g., CWMU Feb. 13 *Ex Parte*; CWMU Apr. 16 *Ex Parte*; see generally Sec. III.D., *supra*.

³⁰⁷ See Dell and Microsoft May 6 *Ex Parte* at 1-3.

³⁰⁸ This is in contrast to the current rules, under which applicants may specify a metropolitan area in which the broadcast licensee serves or the usual area within which motion picture and television producers are operating. See 47 C.F.R. § 74.832(f).

³⁰⁹ See, e.g., MSTV/NAB Comments at 9; Letter from Andrea Snyder, Chair, Performing Arts Alliance, to Marlene H. Dortch, Secretary, FCC, *Ex Parte* in WT Docket Nos. 88-166, 88-167 (filed Apr. 8, 2009) (“Performing Arts Alliance Apr. 8 *Ex Parte*”) at 1-2; CWMU Feb. 13 *Ex Parte* at 3; AMEC June 10 *Ex Parte*; Actors’ Equity Association June 24 *Ex Parte*; MSTV Sept. 25 *Ex Parte* at 2; Motorola Aug. 6 *Ex Parte*, Attachment.

³¹⁰ For example, see Letter from Charlotte St. Martin, Executive Director, The Broadway League, to Chairman Kevin J. Martin, *Ex Parte* in ET Docket No. 04-186 (filed June 10, 2008); Letter from Sports Technology Alliance to Chairman Kevin J. Martin, *Ex Parte* in ET Docket Nos. 04-186, 02-380 (filed Aug. 21, 2008). The Sports Technology Alliance consists of Major League Baseball, the National Basketball Association, the National Collegiate Athletic Association, the National Football League, the National Hockey League, the PGA Tour and ESPN.

these events may already be eligible for a Part 74 license. On the other hand, some of these events that rely on numerous wireless microphones are live programs that will not be broadcast or recorded, and thus producers of these live events are not currently eligible for a Part 74 license, but yet may have the same wireless microphone requirements. Live programs of professional arts, entertainment, and sporting events that require multiple vacant TV channels to accommodate numerous wireless microphones may be sufficiently analogous to the uses now permitted by Part 74 as to be a reasonable basis for expanding licensee eligibility. Moreover, such operations may warrant the interference protection that can only be assured under a license. For example, our provisions for TV Band Devices provide for licensed low power auxiliary stations to be registered in a data base to assure protection against harmful interference. We recognize, however, that some of these live arts, entertainment, and sporting events may only require the use of a few wireless microphones and thus have greater flexibility to select TV band channels that are free of interference. Events that use only a few wireless microphones may not require the assurance of interference protection afforded by a license.

130. Certain other wireless microphone uses, such as those at services conducted by religious organizations, may also warrant provisions for licensed operation under Part 74 because they bear important similarities to the uses now permitted by Part 74. For example, some events at venues used for religious purposes also may require multiple vacant TV channels to accommodate all of the wireless microphones needed. While it is not clear from the record currently before us, in some cases religious organizations may already be eligible for a Part 74 license if they broadcast or record events at religious venues and they hold a recognized broadcast license or qualify as television or motion picture producers under the rules. In other cases, as with theatrical productions and sporting events, some events at religious facilities are live programs that will not be broadcast or recorded, and thus producers of these live events are not currently eligible for a Part 74 license, but yet have the same wireless microphone requirements. In contrast, it may be that at many religious facilities services are conducted using only a few wireless microphones and may have greater flexibility to select TV channels that are free of interference. These religious facilities may not require the assurance of interference protection afforded by a license.

131. We seek comment on whether to authorize licensed wireless microphone use by the entities discussed above, at large theaters, entertainment complexes, sporting arenas, and religious facilities, and whether there is a need by these entities for the additional protections afforded Part 74, Subpart H licensees in the TV bands. In this regard, we seek comment on how the Commission could more completely and precisely define the types of additional entities eligible for licensing so that we can easily implement the licensing criteria that we adopt for entities that merit licensee status while also ensuring that such status is limited to only eligible entities. For example, how should we define professional arts, entertainment, or sporting events or eligible religious facilities? Should we, for instance, base the eligibility on the size of the venue, such as specifying a minimum seating capacity? Should we base eligibility on a minimum number of wireless microphones that the entities use on a regular basis, and if so, what should that number be? Should we establish criteria for determining which specific users are eligible for a license and simply leave it, for example, to the religious organization or producer of live events to determine whether they need the interference protection of a license? What other characteristics of the entities that potentially could be licensed if eligibility is expanded should be specified in the rules? Should licensing be limited to the owner or operator of a theater or stadium or religious facility or should we allow a performing group or sports team or religious organization to hold the license for a specific venue at a specific time? Should it make a difference if the use is permanently housed at the venue (*e.g.*, the home team at a specific stadium)? If we were to expand license eligibility, we also seek comment on what modifications we should make to the rules regarding scope of service and permissible transmissions.

132. We also invite comment on the impact of expanding Part 74 licensing to include additional entities on the availability of spectrum for use by TV Band Devices. Would limiting these new

licensees' use to certain venues—such as large theaters, entertainment complexes, sporting arenas, and religious facilities—protect microphone use only at locations that can easily be identified and included in the TV Band Device database and only for particular dates/times and frequencies coinciding with actual use? We ask that commenters address the practicability of producers of live arts, sporting events, and religious organizations providing up-to-date information on venues and times of operation to the TV Band Device database on an ongoing basis, and how best to ensure that they do so. We are particularly concerned that licensees may find it impractical to maintain the database with up-to-date information and instead may call for interference protection on all channels on a continuous basis, which could completely block access by TV Band Devices and therefore may lead to less efficient use of the spectrum. We invite comment on this analysis.

133. We also seek comment on whether we should modify the eligibility requirements for a Part 74 license to include other entities that use wireless microphones, such as those operating at convention or trade shows, certain other cultural events, or governmental or educational institutions. Do these or other additional entities need interference protection from TV Band Devices that is afforded to Part 74, Subpart H licensees? Or would, instead, the operation of wireless microphones by these and other users effectively be accommodated were they to operate on an unlicensed basis under Part 15, similar to the TV Band Devices? To the extent that commenters propose that these or other entities be eligible for Part 74 licensing, we seek comment on which particular entities merit protection. We also seek comment on how, precisely, the Commission should define any additional class of entity that should be eligible to hold a license and the protections afforded by the database. As discussed above, we seek comment on whether wireless microphone use would be protected at locations that can easily be identified and included in the TV Band Device database and only for particular dates/times and frequencies coinciding with actual use. Commenters should address the practicality of whether any additional entities would provide up-to-date information on venues and times of operation to the TV Band Device database on an ongoing basis, such that they would only have database protection at times of use and not otherwise block access to the spectrum for use by TV Band Devices, which could lead to inefficient use of the TV bands spectrum.

134. We seek to balance the needs of potential new classes of wireless microphone licensees with other users of the TV bands. We note that, while some commenters have advocated for changes in the eligibility requirements to allow particular groups of users to operate wireless microphones in the TV bands, no commenter has advocated allowing anyone who desires to operate a wireless microphone to apply for or obtain a Part 74 license and associated terms and conditions.³¹¹ If we were to expand Part 74, Subpart H to include all of the existing users and applications, the eligibility would be expanded so extensively that virtually anyone would be eligible for a license. We are concerned that such an approach may not be viable. Because Part 74 licensees have protection against interference from unlicensed Part 15 devices, such a broad expansion of eligibility could seriously reduce the amount of spectrum available for unlicensed TV Band Devices. This could be particularly true in heavily populated places, where there might be significant demand for operation of TV Band Devices as well. This expansion would significantly increase the number of Part 74 licensees submitting information for inclusion in the TV Band Device database, thus increasing the cost and complexity of operating the database. We invite comment on this analysis and the impact of expanding eligibility on the viability of TV Band Devices.

135. We note that any expansion of the Part 74 license eligibility will have an impact on the primary users of the TV bands (*e.g.*, TV broadcasting stations) as well as on unlicensed wireless microphones and TV Band Devices that will be introduced in the future. Is it practical for newly eligible users to comply with all of the Part 74 requirements that apply to existing eligibles, such as the requirement to coordinate frequencies? How might an expansion of eligibility affect the viability of

³¹¹ See, *e.g.*, MSTV/NAB Comments at 2; White Spaces Coalition Comments at 6; Shure Comments at 23.

frequency coordination for all of the existing eligible users? Should we place any additional requirements or limitations, for example, on the amount of spectrum that can be used in a given location by the newly eligible users? Consistent with the current Section 74.832(d) rule, which limits operation of low power auxiliary stations by non-broadcast entities to frequencies in the TV bands, we seek comment on whether any expanded Part 74 eligibility cover operations in only the TV bands and not the non-TV band frequencies listed in Section 74.802(a).³¹²

136. We underscore that irrespective of whether we revise the eligibility requirements under Part 74, entities that use wireless microphones would be permitted to operate wireless microphones under our proposed Part 15 rules, and also under Part 90 which is discussed below. In short, even if we do not significantly expand eligibility under Part 74, we note that users would still be able to operate wireless microphones under our proposed Part 15 rules or under the Part 90 rules.

137. *License Terms.* We seek comment on the length of initial and renewal license terms for authorizations issued to entities that obtain licenses under any expanded eligibility categories that we adopt under Part 74 of the Commission's rules. Under Section 74.15 of the rules, low power auxiliary station licensees have license terms that either run concurrently with the license of the associated broadcast station, or for a period running concurrently with the normal licensing period for broadcast stations located in the same area of operation.³¹³ Broadcast or low power TV station licensees are issued low power auxiliary station licenses with a term that runs concurrently with the license term of the associated broadcast station. Broadcast network entities, cable television system operators, motion picture producers, and television program producers have license terms that run concurrently with the normal licensing period for broadcast stations located in the same area of operation.³¹⁴ This results in an initial term that is no more than eight years but may be substantially less than eight years, because low power auxiliary station licenses may be obtained in the middle of the license terms of broadcast stations located in the same area of operation.

138. In this Further Notice, we are seeking comment on a limited expansion of the eligibility provisions for Part 74, Subpart H licenses. In the event that there is an expansion in eligibility, we seek comment on whether the license terms for any new classes of eligible users of low power auxiliary stations should be the same as the license terms that currently apply to Part 74, Subpart H licensees, as discussed above. We also seek comment on whether some other license term should apply to these new eligible users in the event that we revise the eligibility categories. We note that if we were to apply the existing rules governing license terms for low power auxiliary stations, their license terms would run concurrently with the normal licensing period for their local broadcast stations. In some cases, this would result in a license term that would be substantially less than the local broadcaster's term of eight years, because some low power auxiliary station licensees may obtain their licenses in the middle of their local broadcaster's license term. We invite comment on whether some other license term should apply to parties that would be eligible under revised rules. For example, should licenses obtained by a newly eligible person or organization be issued for a term not to exceed ten years from the date of initial

³¹² See 47 C.F.R. § 74.802(a). In addition to the TV bands, this section specifies the frequency bands 26.100-26.480 MHz, 161.625-161.775 MHz (except in Puerto Rico or the Virgin Islands), 450.000-451.000 MHz, 455.000-456.000 MHz, and 944.000-952.000 MHz.

³¹³ See 47 C.F.R. § 74.15(b).

³¹⁴ Section 307(c)(1) of the Communications Act provides that licenses granted for operating broadcast stations "shall be for a term not to exceed 8 years." Under Part 73, initial licenses for broadcast stations were ordinarily issued for a period running until a specified date which may differ based on the state or territory in which the station is located. See 47 C.F.R. § 73.1020(a). Licenses for broadcast stations will ordinarily be renewed for eight year periods, unless the Commission determines that a lesser term should apply.

issuance or renewal or should some other period be adopted and, if so, what should be the length of the license term? We note that the Commission's rules generally provide for a license term of ten years for wireless licenses.³¹⁵

139. *Nuclear Energy Institute and Utilities Telecom Council Petition for Waiver.* We note that the Nuclear Energy Institute and Utilities Telecom Council (NEI/UTC) has recently petitioned the Commission for a waiver of the "allocation and licensing provisions" of the Part 2 and 90 rules to permit "Power Licensees" as defined in Section 90.7 of the Commission's rules to obtain licenses under Part 90 for the use of certain equipment certificated for use under Subpart H of Part 74 of the rules, inside nuclear power plants.³¹⁶ We seek comment on whether it would serve the public interest to extend the license eligibility under Subpart H of Part 74 of the rules to permit the use of low power auxiliary stations inside nuclear power plants. How should we define eligibility for such licenses? Are there any specific concerns associated with permitting operations under Subpart H of Part 74 inside commercial nuclear power plants or any special conditions that should apply to any license for such use? To the extent we may decide to expand license eligibility to include users in commercial nuclear power plants, we seek comment on the spectrum bands that should be made available for this category of users. We also seek comment on whether any other modification to the Part 74 rules would be necessary to accommodate such use inside commercial nuclear power plants.³¹⁷

3. Marketing and Labeling Issues for Part 74 Low Power Auxiliary Stations

140. Background. The Commission's rules require that Part 74 low power auxiliary stations and Part 15 intentional radiators be authorized under the certification procedure and labeled with an FCC identification number before they can be legally marketed within the United States.³¹⁸ Part 15 intentional radiators must also be labeled with a statement indicating that they may not cause harmful interference and must accept any interference received.³¹⁹ In addition, the user manual for a Part 15 intentional radiator must contain a statement advising the user that unauthorized modifications could void the user's authority to operate the device.³²⁰ The Commission's rules, however, do not require any additional labeling or any user manual information for Part 74 low power auxiliary stations and have no additional marketing requirements specific to these devices.³²¹

141. Discussion. We seek comment on issues related to the marketing of Part 74 low power

³¹⁵ See e.g., 47 C.F.R. §§ 24.15, 27.13.

³¹⁶ See Wireless Telecommunications Bureau Seeks Comment on Request by Nuclear Energy Institute and Utilities Telecom Council for Waiver to Permit the Use of Part 74 Two-Way Wireless Headsets and Intercom Devices Inside Nuclear Power Plants, WT Docket No. 09-176, *Public Notice*, 24 FCC Rcd 12387 (2009); Petition for Waiver (Expedited Action Requested), Nuclear Energy Institute and Utilities Telecom Council (filed Sept. 23, 2009) (NEI/UTC Petition).

³¹⁷ We note that NEI/UTC's waiver sought authority to operate in frequency bands 174-216 MHz, 470-608 MHz, and 614-806 MHz. In the Report and Order, however, we are revising Section 74.802(a) of the rules to provide that frequency band 614-698 MHz, and not 614-806 MHz, will be available for operations under Part 74, Subpart H of the rules. See *infra* Appendix B.

³¹⁸ See 47 C.F.R. §§ 74.851, 15.201(b), 2.925 and 2.803.

³¹⁹ *Id.* § 15.19(a)(3).

³²⁰ See *id.* § 15.21.

³²¹ In the *Report and Order*, we are adopting marketing and labeling requirements designed to prevent the continued sale and distribution of low power auxiliary devices, including wireless microphones, that operate in the 700 MHz Band. See *supra* Report and Order, Section III.B.

auxiliary stations that could help ensure that entities that are not eligible to operate these devices do not purchase them. We expect that some devices will be certificated to operate under only Part 74 of the rules, either because the output power level exceeds the Part 15 limits or simply because the manufacturer chose not to obtain a Part 15 certification. In seeking comment, we recognize that, under our proposed dual regulatory approach for operating wireless microphones in the TV bands, it is possible that some devices could meet the technical requirements in both Parts 15 and 74 of the rules and be certificated to operate under both of those parts. Such devices could be operated by any party without a license, and by eligible parties that have obtained a Part 74 license.

142. We seek comment on whether a marketing restriction should be imposed on manufacturers with respect to equipment that is certificated for use by Part 74 licensees. For example, we seek comment on whether we should adopt a rule requiring that the marketing of equipment certificated under Part 74, Subpart H of our rules be directed solely to parties eligible to operate the equipment. We also seek comment on whether, as a part of such a rule, that we provide that marketing of such equipment in any other manner may be considered grounds for revocation of the grant of certification issued for the equipment.³²² In addition, we seek comment on whether some other restriction, or additional restrictions, should be adopted, including record keeping requirements for manufacturers to track to whom their products are marketed, or to ensure that these devices are marketed in a manner that is consistent with the restrictions on their use.

143. We seek further comment on whether any rules are necessary to ensure that purchasers of low power auxiliary stations that are certificated under only Part 74 of the rules are made aware of the Part 74 licensing requirements. For example, should manufacturers be required to provide a label visible at the time of purchase advising of the requirement to obtain a license? Should there be a label on the device itself indicating that a license is required? Should the instruction manual contain advisory information about the licensing requirements? What labeling or advisory information should be required?

144. Similarly, we seek comment on any responsibility that manufacturers, retailers, and distributors should have to notify customers about the licensing requirements or steps they could take ensure that low power auxiliary stations are not marketed to ineligible users. Should there be some form of responsibility or accountability placed upon one or more of these entities at the point of sale and, if so, what should it be? We seek comment, for example, on whether we should prohibit manufactures, retailers and distributors from selling or distributing low power auxiliary stations, including wireless microphones unless such sale is to a party that has committed in writing that the party is a bona fide reseller or a party eligible to be a low power auxiliary station licensee pursuant to Part 74 of the Commission's rules. We also seek comment on whether manufacturers, importers, and retailers should be required to retain records of such written commitments for at least two years from the date of sale of the device. We also seek comment on whether manufacturers, retailers, or distributors could require a facility identification number associated with a Commission license, or some other form of identification which shows that the purchaser is a licensee. Another alternative would be for the manufacturer, retailer, or distributor to cross-check a purchaser against information, perhaps in a database provided by the Commission, to determine whether a purchaser is an eligible user. We seek comment on whether any of these alternatives should be adopted in order to provide a sufficient level of responsibility or accountability at the point of sale, or whether some variation or some other method should be adopted instead.

4. Possible Longer-term Solutions

145. Background. As the Commission seeks to address the operation of wireless microphones

³²² See 47 C.F.R. §§ 15.507, 2.909 (rule concerning marketing of ultra-wideband (UWB) equipment; rule defining "responsible party" with respect to UWB rule).

in the core TV bands, we face tradeoffs and difficult choices concerning the competing uses of different devices that consumers will employ in this spectrum. As indicated above, the issues raised include which entities are eligible to operate wireless microphones, how to balance the spectrum needs of wireless microphone users with other spectrum users of the TV bands, and what interference protection rights, if any, different users of the TV bands should have.

146. Discussion. We invite comment on additional changes we should consider that could help ensure that a variety of wireless microphone uses can best be accommodated with other uses in the bands over the longer term, and that spectrum is used efficiently and effectively by wireless microphones. Efficient wireless microphone operations should increase spectrum availability for other uses, including the continued development of wireless broadband. In this Further Notice we propose to allow wireless microphones to operate on an unlicensed basis in the TV bands under Part 15 of the rules. Under this proposal, wireless microphones would share spectrum with TV band devices, and we seek comment on the extent to which wireless microphones can operate more efficiently in order to make spectrum available for other uses.

147. We note that the majority of wireless microphones currently in use are frequency modulated analog devices that operate with a bandwidth of up to 200 kHz. For various reasons, such as the need to avoid intermodulation interference among the devices, the maximum number of wireless microphones that operate simultaneously in a 6 megahertz TV channel may be as few as six or eight. In other words, only 1.2 – 1.6 megahertz of the 6 megahertz TV channel may only be used while the remainder is effectively left fallow. In locations where many wireless microphones are being used simultaneously, this can result in inefficient use of valuable spectrum. We seek comment on this use of spectrum by wireless microphones, and on what steps the Commission can take to ensure that wireless microphones are using spectrum more efficiently.

148. We note that most other radio communications services have shifted from analog to digital technology to improve spectrum efficiency and resistance to interference. We seek comment on the state of technological developments that could similarly enable wireless microphones to operate more efficiently and/or improve their immunity to harmful interference, which could make more spectrum available for other users. What steps could the Commission take that would encourage the use of new digital technology or other equipment that would allow more microphones to be used in a single channel? We also seek comment on whether there are devices currently available that would provide for such operations, on the length of time it may take to transition to such technology, and on what incentives the Commission could adopt to facilitate this transition.

149. Finally, we seek comment on any other steps that the Commission should take in the long term to encourage technological improvements with the goal of ensuring that the core TV spectrum, which is shared by many users, is more efficiently used and thus more available to a range of users for new and innovative products and services.³²³ Are there approaches to spectrum management, such as authorizing a band manager, that would achieve the efficient use of spectrum by these devices?³²⁴

B. Licensed Operation Under Part 90

³²³ See *National Broadband Plan NOI; NBP Public Notice #26*.

³²⁴ We note that in the United Kingdom, the Office of Communications (OfCom), which is in the process of transitioning wireless microphones out of the 800 MHz Band, decided to award most of the spectrum for wireless microphones to a single licensee, who will act as a band manager. The band manager will allow wireless microphone users to access the spectrum on a market-based approach, so long as the band manager meets reasonable demand from such users on fair, reasonable, and non-discriminatory terms. See <http://www.ofcom.org.uk/consult/condocs/800mhz/statement/clearing.pdf>; <http://www.ofcom.org.uk/consult/condocs/bandmanager09/bandmanager09.pdf>.

150. **Background.** Entities holding an Industrial/Business Pool license may operate a Part 90 wireless microphone. The Part 90 rules permit wireless microphones to be operated on the following eight frequencies: 169.445 MHz, 170.245 MHz, 171.045 MHz, 171.845 MHz, 169.505 MHz, 170.305 MHz, 171.105 MHz and 171.905 MHz.³²⁵ Operation on these frequencies is permitted at a power level of 50 milliwatts, with an emission bandwidth not to exceed 54 kilohertz. The entities eligible for such licenses include users not authorized to obtain a Part 74 license, including commercial entities in general; educational, philanthropic or ecclesiastical institutions; clergy and hospitals, clinics or medical associations. While the eligibility for licensing is broader under Part 90 than it is for Part 74, it appears that relatively few parties operate wireless microphones under the Part 90 rules. Wireless microphone licensees are not protected from interference from other licensed operations in the band.³²⁶

151. **Discussion.** We seek comment on steps the Commission should take to revise the Part 90 wireless microphone rules to make them more useful to wireless microphone users. In particular, we seek comment on why relatively few entities operate under the current Part 90 rules. For example, are too few frequencies available under Part 90? Does the narrower bandwidth permitted under Part 90 (54 kHz) as compared to Part 74 (200 kHz) affect the audio quality of Part 90 wireless microphones? Does the Part 90 eligibility or licensing requirements discourage use of Part 90 wireless microphones by some parties? Are Part 90 wireless microphones readily available to entities that wish to purchase them? What rule Parts other than Part 90 and Part 74 should we consider for licensing wireless microphones?

V. PROCEDURAL MATTERS

A. Final Regulatory Flexibility Analysis

152. As required by the Regulatory Flexibility Act of 1980 ("RFA"),³²⁷ the Commission has prepared a Final Regulatory Flexibility Analysis ("FRFA") relating to this Report and Order. The FRFA is set forth in Appendix C. Although Section 213 of the Consolidated Appropriations Act 2000 provides that the RFA shall not apply to the rules and competitive bidding procedures for frequencies in the 746-806 MHz Band,³²⁸ we nevertheless believe that it would serve the public interest to analyze the possible significant economic impact of the policy and rule changes in this band on small entities. Accordingly, the FRFA in Appendix C of this Report and Order includes an analysis of this impact in connection with all spectrum that falls within the scope of the Report and Order, including spectrum in the 746-806 MHz Band.

B. Final Paperwork Reduction Analysis

153. The Report and Order contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, pursuant to the Small Business Paperwork Relief

³²⁵ See 47 C.F.R. § 90.265(b).

³²⁶ *Id.* § 90.265(b)(4).

³²⁷ See 5 U.S.C. § 604. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 ("CWAAA").

³²⁸ In particular, this exemption extends to the requirements imposed by Chapter 6 of Title 5, United States Code, Section 3 of the Small Business Act (15 U.S.C. 632) and Section 3507 and 3512 of Title 44, United States Code. Consolidated Appropriations Act 2000, Pub. L. No. 106-113, 113 Stat. 2502, Appendix E, Sec. 213(a)(4)(A)-(B); see 145 Cong. Rec. H12493-94 (Nov. 17, 1999); 47 U.S.C.A. 337 note at Sec. 213(a)(4)(A)-(B).

Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”

154. We find that there is good cause to seek emergency OMB approval in order that the new information collections adopted in this Report and Order may take effect as soon as possible. The procedures under which public safety and commercial licensees may provide notice of their intention to initiate wireless operations constitute a new information collection under the PRA. The labeling requirements for 700 MHz Band equipment destined for non-U.S. markets also constitute a new information collection under the PRA. In addition, the consumer disclosure requirements for anyone selling, leasing, or offering for sale or lease low power auxiliary stations that operate in the core TV bands constitute a new information collection under the PRA. We are submitting a request to OMB for approval of these rules under the emergency clearance provisions of the PRA. Accordingly, the information collections adopted in this Report and Order will become effective as follows. The information collections associated with the procedures for early clearing of the 700 MHz Band will become effective upon publication of a summary of this Report and Order in the Federal Register or upon OMB approval, whichever is later. The labeling requirements for 700 MHz Band equipment destined for export will become effective 90 days after release of this Report and Order (*i.e.*, April 15, 2010), subject to OMB approval, and the consumer disclosure requirements will become effective on February 28, 2010, subject to OMB approval.

C. Initial Regulatory Flexibility Analysis

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

D. Initial Paperwork Reduction Act Analysis

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

E. Congressional Review Act

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

F. Other Procedural Matters

1. *Ex Parte* Presentations

158. The rulemaking shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.³²⁹ Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations

³²⁹ 47 C.F.R. §§ 1.200 *et. seq.*

and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented generally is required.³³⁰ Other requirements pertaining to oral and written presentations are set forth in Section 1.1206(b) of the Commission's rules.³³¹

2. Comment Filing Procedures

159. Pursuant to sections 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 on the first page of this document. Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies. See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/> or the Federal eRulemaking Portal: <http://www.regulations.gov>.
- Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, 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.

- Effective December 28, 2009, all hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

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

161. For further information regarding the Further Notice of Proposed Rule Making, contact Hugh L. Van Tuyl, Office of Engineering and Technology, (202) 418-7506, e-mail Hugh.VanTuyl@fcc.gov or Paul D'Ari, Wireless Telecommunications Bureau, (202) 418-1550, e-mail Paul.Dari@fcc.gov.

VI. ORDERING CLAUSES

162. Accordingly, IT IS ORDERED, pursuant to Sections 1, 2, 4(i), 4(j), 301, 302, 303, 304, 307, 308, 309, 316, 332, 336, and 337 of the Communications Act of 1934, as amended, 47 U.S.C. §§

³³⁰ See 47 C.F.R. § 1.1206(b)(2).

³³¹ 47 C.F.R. § 1.1206(b).

151, 152, 154(i), 154(j), 301, 302a, 303, 304, 307, 308, 309, 316, 332, 336, and 337, that this REPORT AND ORDER in WT Docket No. 08-166 and WT Docket No. 08-167 IS ADOPTED, that Parts 2, 15, and 74 of the Commission's rules, 47 C.F.R. Parts 2, 15, and 74 ARE AMENDED as set forth in Appendix B, and that the requirements of this REPORT AND ORDER and the amended rules SHALL BECOME EFFECTIVE upon the publication of a summary of the REPORT AND ORDER in the Federal Register, except as follows with respect to the information collections: § 74.802(e) in Appendix B shall become effective upon publication of a summary of the REPORT AND ORDER in the Federal Register; § 15.216 in Appendix B shall become effective on February 28, 2010; § 74.851(h) in Appendix B shall become effective 90 days after release of this REPORT AND ORDER (*i.e.*, April 15, 2010), and these information collections are subject to OMB approval.³³² With respect to information collections subject to OMB approval, the Commission will issue a public notice announcing the date upon which these provisions shall become effective following receipt of such approval.

163. IT IS FURTHER ORDERED that, pursuant to authority in Section 1.3 of the Commission's rules, 47 C.F.R. § 1.3, and Sections 4(i), 302, 303(e), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 302, 303(e), and 303(r), Sections 15.201(b) and 15.209(a) of the Commission's rules, 47 C.F.R. §§ 15.201(b), 15.209(a), ARE WAIVED, consistent with the terms of this Report and Order. This action is effective upon release of this Report and Order.

164. IT IS FURTHER ORDERED that, pursuant to Section 5(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 155(c), the Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and Consumer and Governmental Affairs Bureau ARE GRANTED DELEGATED AUTHORITY to implement the policies set forth in this REPORT AND ORDER and the rules, as revised, set forth in Appendix B hereto.

165. IT IS FURTHER ORDERED that, pursuant to Section 5(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 155(c), the Wireless Telecommunications Bureau and Consumer and Governmental Affairs Bureau ARE GRANTED DELEGATED AUTHORITY to prepare the specific language that must be used in the Consumer Disclosure, as set forth in this REPORT AND ORDER and the rules in Appendix B, and publish it in the Federal Register.

166. IT IS FURTHER ORDERED that, pursuant to Section 5(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 155(c), the Office of Engineering and Technology and the Wireless Telecommunications Bureau ARE GRANTED DELEGATED AUTHORITY to address requests to modify the limited waiver of Sections 15.201(b) and 15.209(a) of the Commission's rules, 47 C.F.R. §§ 15.201(b), 15.209(a), as set forth in this REPORT AND ORDER, on a case-by-case basis to permit entities that are operating without a license authorization to operate low power auxiliary stations at power levels higher than 50 milliwatts.

167. 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.

168. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this REPORT AND ORDER and FURTHER NOTICE OF PROPOSED RULEMAKING in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

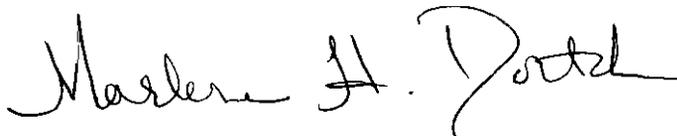
³³² *See* 5 U.S.C. § 553(d)(3) (“[t]he required publication or service of a substantive rule shall be made not less than 30 days before its effective date, except . . . as otherwise provided by the agency for good cause found and published with the rule”); *see also* 47 C.F.R. §§ 1.103(a), 1.427(b).

169. IT IS FURTHER ORDERED pursuant to Sections 4(i), 302, 303(e), 303(f), 303(r) and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 302, 303(e), 303(f), 303(r) and 307 that this FURTHER NOTICE OF PROPOSED RULEMAKING in WT Docket No. 08-166, WT Docket No. 08-167 and ET Docket No. 10-24 IS ADOPTED.

170. IT IS FURTHER ORDERED that pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on the FURTHER NOTICE OF PROPOSED RULEMAKING on or before 30 days after publication in the Federal Register and reply comments on or before 51 days after publication in the Federal Register.

171. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this FURTHER NOTICE OF PROPOSED RULEMAKING, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Marlene H. Dortch
Secretary

APPENDIX A

Comments and Reply Comments

Comments:

Association of Public-Safety Communications Officials-International, Inc. ("APCO")
Association for Maximum Service Television, Inc. and the National Association of Broadcasters ("MSTV/NAB")
Audio-Technica U.S., Inc. ("Audio-Technica")
Association of Performing Arts Presenters, Dance/USA, League of American Orchestras, OPERA America, Theatre Communications Group, Chorus America, and National Alliance for Musical Theatre ("Performing Arts Alliance")*
Emergency Telephone Systems Board of St. Clair County, Illinois ("St. Clair")
MetroPCS Communications, Inc. ("MetroPCS")
Motorola, Inc. ("Motorola")
Nady Systems, Inc. ("Nady")
National Public Safety Telecommunications Council ("NPSTC")
New ICO Satellite Services G.P. ("ICO")
Sennheiser Electronic Corporation ("Sennheiser")
Shure Incorporated ("Shure")
Society of Broadcast Engineers, Incorporated ("SBE")
State of California, Department of General Services, Telecommunications Division ("State of California")
Thomas C. Smith ("Thomas Smith")
V-COMM, L.L.C. ("V-COMM")
Verizon Wireless ("Verizon Wireless")
White Spaces Coalition ("White Spaces Coalition")
Wireless Communications Association International, Inc. ("WCA")

Reply Comments:

MSTV/NAB
AT&T Inc. ("AT&T")
Audio-Technica
CTIA – The Wireless Association ("CTIA")
Dane E. Ericksen, P.E., CSRTE, CBNT, Broadcast Engineer ("Dane Ericksen")
Fox Television Stations, Inc. and Fox Television Stations of Philadelphia, Inc. ("Fox Television Stations")
MetroPCS
Public Interest Spectrum Coalition ("PISC")
Sennheiser
Shure
White Spaces Coalition

* Comments filed in WT Docket No. 08-167 only.

APPENDIX B

Final Rules

Parts 2, 15, and 74 of Title 47 of the Code of Federal Regulations are amended as follows:

1. The authority citation for Part 2 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

2. Section 2.106, Table of Frequency Allocations, is amended by revising footnotes NG115 and NG159 to read as follows:

§ 2.106 Table of Frequency Allocations.

* * * * *

NON-FEDERAL GOVERNMENT (NG) FOOTNOTES

* * * * *

NG115 In the bands 54–72 MHz, 76–88 MHz, 174–216 MHz, 470–608 MHz, and 614–698 MHz, wireless microphones and wireless assist video devices may be authorized on a non-interference basis, subject to the terms and conditions set forth in 47 CFR part 74, subpart H.

* * * * *

NG159 Any full-power television licensee that holds a television broadcast license to operate between 698 and 806 megahertz (TV channels 52–69) shall be entitled to protection from harmful interference through June 12, 2009, and may not operate at that frequency after June 12, 2009. Auxiliary broadcast stations other than low power auxiliary stations (i.e., low-power TV stations, translator stations, booster stations, and TV auxiliary (backup) facilities) may continue to operate indefinitely in the band 698–806 MHz on a secondary basis to all other stations operating in that band.

* * * * *

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

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

4. Part 15 is amended by adding a new Section 15.216 to read as follows:

§ 15.216 Disclosure Requirements for wireless microphones and other low power auxiliary stations capable of operating in the core TV bands.

(a) Any person who manufactures, sells, leases, or offers for sale or lease, low power auxiliary stations capable of operating in the core TV bands (channels 2-51, excluding channel 37) is subject to the following disclosure requirements:

(1) Such persons must display the consumer disclosure text, as specified by the Wireless Telecommunications Bureau and the Consumer and Governmental Affairs Bureau, at the point of sale or lease of each such low power auxiliary station. The text must be displayed in a clear, conspicuous, and readily legible manner. One way to fulfill the requirement in this section is to display the consumer disclosure text in a prominent manner on the product box by using a label (either printed onto the box or otherwise affixed to the box), a sticker, or other means. Another way to fulfill this requirement is to display the text immediately adjacent to each low power auxiliary station offered for sale or lease and clearly associated with the model to which it pertains.

(2) If such persons offer such low power auxiliary stations via direct mail, catalog, or electronic means, they shall prominently display the consumer disclosure text in close proximity to the images and descriptions of each such low power auxiliary station. The text should be in a size large enough to be clear, conspicuous, and readily legible, consistent with the dimensions of the advertisement or description.

(3) If such persons have websites pertaining to these low power auxiliary stations, the consumer disclosure text must be displayed there in a clear, conspicuous, and readily legible manner (even in the event such persons do not sell low power auxiliary stations directly to the public).

* * * * *

5. The authority citation for Part 74 is revised to read as follows:
AUTHORITY: 47 U.S.C. 154, 302a, 303, 307, 336(f), 336(h) and 554.
6. Section 74.802 is amended by revising paragraphs (a) and (b)(3), and by adding new paragraph (e), to read as follows:

§ 74.802 Frequency assignment.

(a) * * *

614.000 – 698.000 MHz

944.000 – 952.000 MHz

* * *

(b) * * *

(3) 470.000 – 608.000 MHz and 614.000 – 698.000 MHz.

All zones 113 km (70 miles)

* * *

(e) *Clearing mechanisms for the 700 MHz Band.* This subsection sets forth provisions relating to the transition of low power auxiliary stations operating at 698-806 MHz (700 MHz band).

(1) Any low power auxiliary station that operates at frequencies in the 700 MHz band while transitioning its operations out of that band must not cause harmful interference and must accept interference from any commercial or public safety wireless licensees in the 700 MHz band.

(2) Any low power auxiliary station that operates at frequencies in the 700 MHz band will have until no later than June 12, 2010 to transition its operations completely out of the 700 MHz band, subject to the following. During this transition period, any commercial or public safety licensee in the 700 MHz band may choose one or both of the following voluntary methods to notify low power auxiliary stations:

(i) Any commercial or public safety licensee in the 700 MHz band may notify the Commission that it has initiated or will be initiating operations on specified frequencies in a particular market(s) in the 700 MHz band. The wireless operations initiated by the commercial or public safety 700 MHz licensees may include system testing or trials. Following receipt of the notification, the Commission will issue a public notice providing that operators of low power auxiliary stations, including wireless microphones, in the 700 MHz band in those market(s) will be required to cease operations within 60 days after the Commission's notice is released.

(ii) Any commercial or public safety licensee in the 700 MHz band may notify any low power auxiliary station users operating in the 700 MHz band that it has initiated or will be initiating operations on specified frequencies in the market in which the low power auxiliary station is operating. The wireless operations initiated by the commercial or public safety 700 MHz licensees may include system testing or trials. Upon receipt of such notice, the low power auxiliary station in the affected market area must cease operation within 60 days.

(iii) In the event that both of these notice provisions in subsections (2)(i) and (ii) are used with respect to a particular low power auxiliary station, the low power auxiliary station will have to cease operations in the market(s) in accordance with whichever notice provides for earlier termination of its operations.

(3) Notwithstanding this 60 day notice requirement, any low power auxiliary station that causes harmful interference to any commercial or public safety 700 MHz licensee must cease operations immediately, consistent with the rules for secondary use.

7. Section 74.851 is amended by revising the heading and adding new paragraph (g), (h), and (i) to read as follows:

§ 74.851 Certification of equipment; prohibition on manufacture, import, sale, lease, offer for sale or lease, or shipment of devices that operate in the 700 MHz Band; labeling for 700 MHz band equipment destined for non-U.S. markets; disclosure for the core TV bands.

* * * * *

(g) No person shall manufacture, import, sell, lease, offer for sale or lease, or ship low power auxiliary stations that are capable of operating in the 700 MHz band (698-806 MHz). This prohibition does not apply to devices manufactured solely for export.

(h) Any person who manufactures, sells, leases, or offers for sale or lease low power auxiliary stations, including wireless microphones, that are destined for non-U.S. markets and that are

capable of operating in the 700 MHz band shall include labeling and make clear in all sales, marketing, and packaging materials, including online materials, relating to such devices that the devices cannot be operated in the U.S.

(i) Any person, whether such person is a wholesaler or a retailer, who manufactures, sells, leases, or offers for sale or lease low power auxiliary stations that operate in the core TV bands (channels 2-51, excluding channel 37) is subject to the disclosure requirements in § 15.216 of this chapter.

* * * * *

8. Section 74.861 is amended by revising paragraph (e)(1)(ii) to read as follows:

§ 74.861 Technical requirements.

* * * * *

(e) * * *

(1) * * *

(i) * * *

(ii) 470 – 608 and 614 – 698 MHz bands—250 mW

* * * * *

APPENDIX C

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Federal Communications Commission (Commission) included an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities of the policies and rules considered in the *Notice* in WT Docket No. 08-166 and WT Docket No. 08-167.² The Commission sought written public comment on the *Notice*, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

2. Although Section 213 of the Consolidated Appropriations Act of 2000 provides that the RFA shall not apply to the rules and competitive bidding procedures for frequencies in the 746-806 MHz Band,³ the Commission believes that it would serve the public interest to analyze the possible significant economic impact of the proposed policy and rule changes in this band on small entities. Accordingly, this FRFA contains an analysis of this impact in connection with all spectrum that falls within the scope of the *Report and Order*, including spectrum in the 746-806 MHz Band.

A. Need for, and Objectives of, the Rules

3. As noted in the *Report and Order*, the DTV Act set a firm date by which the 700 MHz Band (698-806 MHz), currently occupied by television broadcasters in TV Channels 52-69, must be vacated to allow for use of the spectrum by public safety and commercial wireless services. In the DTV Delay Act, which was enacted on February 11, 2009, Congress extended the DTV transition deadline from February 17, 2009, to June 12, 2009.⁴ In the *Report and Order*, the Commission takes several actions relating to the operation of low power auxiliary stations, including wireless microphones, in the 700 MHz Band, that are designed to ensure that these devices are cleared from the 700 MHz Band in order that, consistent with the Commission's long-standing goals,⁵ this spectrum is made fully available

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

² Revisions to Rules Authorizing the Operation of Low Power Auxiliary Stations in the 698-806 MHz Band, WT Docket No. 08-166, Public Interest Spectrum Coalition, Petition for Rulemaking Regarding Low Power Auxiliary Stations, Including Wireless Microphones, and the Digital Television Transition, WT Docket No. 08-167, *Notice of Proposed Rulemaking and Order*, 23 FCC Rcd 13106 (2008) (“*Notice*” and “*Order*,” respectively).

³ In particular, this exemption extends to the requirements imposed by Chapter 6 of Title 5, United States Code, Section 3 of the Small Business Act (15 U.S.C. § 632) and Sections 3507 and 3512 of Title 44, United States Code, Consolidated Appropriations Act of 2000, Pub. L. No. 106-113, 113 Stat. 2502, App. E, Sec. 213(a)(4)(A)-(B); see 145 Cong. Rec. H12493-94 (Nov. 17, 1999); 47 U.S.C.A. § 337 note at Sec. 213(a)(4)(A)-(B).

⁴ DTV Delay Act, Pub. L. No. 111-4, 123 Stat. 112 (2009) (“DTV Delay Act”).

⁵ The Commission has stated that “[i]t is incumbent . . . to take all the steps necessary to make . . . [the 700 MHz] spectrum effectively available to both public safety as well as commercial licensees as of the end of the DTV transition.” See Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules, WT Docket No. (continued...)

for use by the public safety and commercial licensees, and the customers that they serve, in the band following the DTV transition.

4. In the *Report and Order*, the Commission determines that entities currently operating Part 74 low power auxiliary stations, including wireless microphones, in the 700 MHz Band will not have the right to operate on those frequencies except pursuant to certain specified conditions and only for a limited transition period of no more than one year from end of the DTV transition (June 12, 2010). In adopting this transition period, the Commission seeks to balance the needs of public safety and commercial licensees to operate without interference in the 700 MHz Band with the concern that entities currently operating low power auxiliary stations in the 700 MHz Band have sufficient time to remove their operations from the band and relocate to other bands. Furthermore, in certain areas, it may be necessary to end the transitional operations of low power auxiliary stations in the 700 MHz Band prior to that time, where public safety and commercial licensees are entering the 700 MHz Band. Specifically, to the extent that a 700 MHz public safety or commercial licensee chooses to notify the Commission that it will be initiating operations on specified frequencies in particular market(s), the Commission will issue a public notice to inform users of low power auxiliary stations in the 700 MHz Band in those market(s) that they will be required to cease operations within 60 days after such notice is issued. Alternatively, any 700 MHz public safety or commercial licensee may, at its option, notify any user of low power auxiliary stations of its intention to initiate operations on specified frequencies in the market in which the low power auxiliary station user is operating. Upon receipt of such notice, the entity operating low power auxiliary stations in the affected market area must cease operation within 60 days. Finally, the *Report and Order* underscores that if, at any time during this transition period, users of low power auxiliary stations cause harmful interference to a 700 MHz public safety or commercial licensee, those users must cease operations in the band immediately.

5. Through this determination in the *Report and Order*, the Commission is acting to ensure that these low power auxiliary stations are cleared from the 700 MHz Band in order to make this spectrum fully available for use by the public safety and commercial licensees.⁶ This determination respecting operation of wireless microphones in the 700 MHz Band also is consistent with the Commission's previous concerns about the potential for interference in the band because low power auxiliary stations could interfere with public safety and commercial base and mobile receivers. Such interference raises the potential for a disruption of vital public safety services and commercial services.

6. Consistent with the Commission's goal of ensuring that 700 MHz Band spectrum is available for public safety and commercial users following the DTV transition, the *Report and Order* prohibits the manufacture, import, sale, offer for sale, or shipment of low power auxiliary stations designed to operate in the 700 MHz Band in the United States at any time following the publication of a summary of the *Report and Order* in the *Federal Register*. The *Report and Order* adopts additional marketing and labeling requirements designed to prevent the continued sale and distribution of low power auxiliary stations that operate in the 700 MHz Band. This prohibition is not applicable to devices manufactured solely for export.⁷ The prohibition on manufacture, import, sale, and shipment of low

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06-169, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 8064, 8066 ¶ 2 (2007) (*700 MHz First Report and Order*).

⁶ See *Report and Order*, para. 1.

⁷ See 47 U.S.C. § 302a(c); see also Review of Part 15 and other Parts of the Commission's Rules, ET Docket No. 01-278, *First Report and Order*, 17 FCC Rcd 14063, 14068-69 n.45 (2002) (noting that equipment manufactured in this country solely for export is exempt from compliance with the requirements promulgated under Section 302 of (continued....))

power auxiliary stations designed to operate in the 700 MHz Band in the United States serves the public interest by providing greater assurance that the 700 MHz Band will be made available to public safety and new commercial licensees. The Commission finds that good cause exists to have this prohibition take effect on less than 30 days notice in order to expedite the availability of unencumbered spectrum for public safety and new commercial licensees consistent with the statutory directive that the DTV transition end as of June 12, 2009.⁸

7. The *Report and Order* also modifies the licenses of all low power auxiliary station licensees that currently are authorized to operate in the 700 MHz Band, removing any part of the authorization pertaining to the band, subject to the condition that if a licensee is unable to cease operations in the band by that date, it may continue to operate under its existing authorization within the transition limitations adopted in the *Report and Order*. The Commission takes this action to ensure that the effective use of the 700 MHz Band by public safety and commercial licensees after the end of the DTV transition is not compromised, and that these new licensees will be able to operate free from interference by low power auxiliary stations operating in the 700 MHz Band. The Commission also adopts procedures whereby existing low power auxiliary station licensees currently operating in the 700 MHz Band can have their licenses modified should it be necessary to add to their authorizations other spectrum bands that are available for low power auxiliary station operations under the rules.

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

8. Nady Systems, Inc. (Nady) indicates that its comments also address the IRFA. In its comments, Nady addresses the suggestion by PISC that the Commission should order all wireless microphone manufacturers that engaged in illegal marketing to pay the cost of replacing microphone systems for those wireless microphone operators required to cease operation in the 700 MHz Band after the end of the DTV transition.⁹ Nady comments that a gradual migration of wireless microphone users out of the 700 MHz Band strikes a reasonable balance that protects competing interests, and comments that the Commission should provide a transition that includes voluntary negotiations between parties.¹⁰ According to Nady, the majority of wireless microphone manufacturers are “small entities” which “would go bankrupt if they had to finance migration of all wireless microphones operating in the 700 MHz Band.”¹¹ Nady also comments that wireless microphones will be migrating to the “white spaces” below the 700 MHz Band, and that these microphones require protection from interference by emerging technologies in the white spaces. A number of commenters, including Nady, argue that a delay in the effective date of the ban is needed to prevent unnecessary disruption of operations and costs,¹² and the Commission has adopted a short time period for low power auxiliary station users to transition their operations out of the 700 MHz Band. Many commenters addressed issues regarding the use of wireless microphones without the required license.

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the Communications Act); 47 C.F.R. § 2.807 (exempting radiofrequency devices manufactured “solely for export” from the provisions of 47 C.F.R. § 2.803).

⁸ See 5 U.S.C. § 553(d)(3); see also 47 C.F.R. §§ 1.103(a), 1.427(b).

⁹ Nady Comments at 9-10.

¹⁰ Nady Comments at 7-10.

¹¹ *Id.* at 9. Audio-Technica also claimed in comments to the *Notice* that PISC’s proposal for enforcement proceedings against manufacturers and to impose relocation costs on small manufacturing companies would have “serious negative financial consequences for small companies like A-T.” Audio-Technica Comments at 21; see also Audio-Technica Reply Comments at 7 n.3.

¹² See, e.g., MSTV/NAB Comments at 3-7; Fox Television Stations Reply Comments at 1; Shure Comments at 7-10; Shure Reply Comments at 2-7; Audio-Technica Comments at 6-8; Nady Comments at 8-9.

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

9. 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.¹³ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁴ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁵ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).¹⁶

10. When identifying small entities that could be affected by the Commission’s new rules, this FRFA provides information describing the number of small entities that currently hold low power auxiliary station licenses, as well as estimates of the number of small entities that currently manufacture low power auxiliary stations. In order to analyze the total number of potentially affected small entities, the Commission estimates the number of small entities that may be affected by the rule changes adopted in the *Report and Order*.

11. Nationwide, there are a total of approximately 29.6 million small businesses, according to the SBA.¹⁷ A “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹⁸ Nationwide, as of 2002, there were approximately 1.6 million small organizations.¹⁹ The term “small governmental jurisdiction” is defined generally as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”²⁰ Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.²¹ We estimate that, of this total, 84,377 entities were “small governmental jurisdictions.”²² Thus, we estimate that most governmental jurisdictions are small.

12. In the *Report and Order*, the Commission concludes that low power auxiliary stations

¹³ 5 U.S.C. § 603(b)(3).

¹⁴ *Id.* § 601(6).

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

¹⁶ 15 U.S.C. § 632.

¹⁷ See SBA, Office of Advocacy, “Frequently Asked Questions,” <http://web.sba.gov/faqs/faqindex.cfm?areaID=24> (revised Sept. 2009).

¹⁸ 5 U.S.C. § 601(4).

¹⁹ Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

²⁰ 5 U.S.C. § 601(5).

²¹ U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, Section 8, page 272, Table 415.

²² We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

authorized under Part 74 of our rules – including wireless microphones – will not be permitted to operate in the 700 MHz Band after the DTV transition. The Commission also concludes to prohibit the manufacture, import, sale, offer for sale, or shipment of devices that operate as low power auxiliary stations in the 700 MHz Band, effective upon the publication of a summary of the *Report and Order* in the Federal Register. Under Section 74.832 of the Commission’s rules, only certain entities may be issued licenses authorizing the use of low power auxiliary stations. In particular, these entities fall within the following categories: (1) licensees of AM, FM, TV, or International broadcast stations or low power TV stations; (2) broadcast network entities; (3) certain cable television system operators; (4) motion picture and television program producers as defined in the rules; and (5) certain entities with specified interests in Broadband Radio Service (BRS) Educational Broadcast Service (EBS) licenses, i.e., BRS licensees (formerly licensees and conditional licensees of stations in the Multipoint Distribution Service and Multi-channel Multipoint Distribution Service), or entities that hold an executed lease agreement with a BRS licensee or conditional licensee or entities that hold an executed lease agreement with an Educational Broadcast Service (formerly Instructional Television Fixed Service)²³ licensee or permittee.²⁴

13. **Radio Stations.** This Economic Census category “comprises establishments primarily engaged in broadcasting aural programs by radio to the public. Programming may originate in their own studio, from an affiliated network, or from external sources.”²⁵ The SBA has established a small business size standard for this category, which is: such firms having \$7.0 million or less in annual receipts.²⁶ According to Commission staff review of BIA Publications, Inc.’s *Master Access Radio Analyzer Database* on March 31, 2005, about 10,840 (95%) of 11,410 commercial radio stations had revenues of \$6 million or less. Therefore, the majority of such entities are small entities.

14. We note, however, that in assessing whether a business concern qualifies as small under the above size standard, business affiliations must be included.²⁷ In addition, to be determined to be a “small business,” the entity may not be dominant in its field of operation.²⁸ We note that it is difficult at times to assess these criteria in the context of media entities, and our estimate of small businesses may therefore be over-inclusive.

15. **Television Broadcasting.** The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in broadcasting images together with sound. These establishments operate television broadcasting studios and facilities for the programming and

²³ In July 2004, the Commission renamed Multipoint Distribution Service as the Broadband Radio Service and renamed Instructional Television Fixed Service as the Educational Broadcast Service. See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, WT Docket No. 03-66, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165, 14169 ¶6 (2004) (*BRS/EBS Report and Order*).

²⁴ See 47 C.F.R. § 74.832(a)(1)-(6).

²⁵ U.S. Census Bureau, 2002 NAICS Definitions, “515112 Radio Stations”; <http://www.census.gov/epcd/naics02/def/NDEF515.HTM>. A separate census category for “Radio Networks” “comprises establishments primarily engaged in assembling and transmitting aural programming to their affiliates or subscribers via over-the-air broadcasts, cable, or satellite. The programming covers a wide variety of material, such as news services, religious programming, weather, sports, or music.” *Id.* (NAICS code 515111).

²⁶ 13 C.F.R. § 121.201, NAICS code 515112.

²⁷ “Concerns and entities are affiliates of each other when one controls or has the power to control the other, or a third party or parties controls or has the power to control both. It does not matter whether control is exercised, so long as the power to control exists.” 13 C.F.R. § 121.103(a)(1) (an SBA regulation).

²⁸ 13 C.F.R. § 121.102(b) (an SBA regulation).