

exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

9. When identifying small entities that could be affected by our new rules, we provide information describing auctions results, including the number of small entities that are winning bidders. We note, however, that the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily reflect the total number of small entities currently in a particular service. The Commission does not generally require that applicants provide business size information, except in the context of an assignment or transfer of control application where unjust enrichment issues are implicated. Consequently, to assist the Commission in analyzing the total number of potentially affected small entities, we request commenters to estimate the number of small entities that may be affected by any rule changes resulting from this *Further Notice*.

10. The potential rules on which comment is sought in this *Further Notice*, if adopted, would possibly affect small entity licensees of the services identified below.

Wireless Radio Services

11. **Cellular Licensees.** The SBA has developed a small business size standard for wireless firms within the broad economic census category "Cellular and Other Wireless Telecommunications."¹⁵ Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category Cellular and Other Wireless Telecommunications firms, Census Bureau data for 1997 show that there were 977 firms in this category, total, that operated for the entire year.¹⁶ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.¹⁷ Thus, under this category and size standard, the great majority of firms can be considered small. According to the most recent Trends in Telephone Service data, 719 carriers reported that they were engaged in the provision of cellular service, personal communications service, or specialized mobile radio telephony services, which are placed together in the data.¹⁸ We have estimated that 294 of these are small, under the SBA small business size standard.¹⁹

(Continued from previous page) _____

1999). The Small Business Act contains a definition of "small-business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. See 13 CFR § 121.102(b).

¹⁵ 13 CFR § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

¹⁶ U.S. Census Bureau, 1997 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513322 (issued October 2000).

¹⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513322 (issued October 2000). The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1000 employees or more."

¹⁸ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" at Table 5.3, page 5-5 (August 2003). This source uses data that are current as of December 31, 2001.

¹⁹ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" at Table 5.3, page 5-5 (August 2003). This source uses data that are current as of December 31, 2001.

12. **220 MHz Radio Service – Phase I Licensees.** The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to “Cellular and Other Wireless Telecommunications” companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.²⁰ According to the Census Bureau data for 1997, only twelve firms out of a total of 977 such firms that operated for the entire year in 1997, had 1,000 or more employees.²¹ If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA’s small business standard.

13. **220 MHz Radio Service – Phase II Licensees.** The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for defining “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.²² This small business standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.²³ A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.²⁴ The SBA has approved these small size standards.²⁵ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.²⁶ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.²⁷ Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.²⁸ A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.²⁹

²⁰ 13 C.F.R. § 121.201, NAICS code 517212.

²¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 513322 (October 2000).

²² Amendment of Part 90 of the Commission’s Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶¶ 291-295 (1997).

²³ *Id.* at 11068 ¶ 291.

²⁴ *Id.*

²⁵ See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

²⁶ See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

²⁷ See “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” *Public Notice*, 14 FCC Rcd 1085 (WTB 1999).

²⁸ See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

²⁹ See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

14. **Lower 700 MHz Band Licenses.** We adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.³⁰ We have defined a small business as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.³¹ A very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.³² Additionally, the lower 700 MHz Service has a third category of small business status that may be claimed for Metropolitan/Rural Service Area (MSA/RSA) licenses. The third category is entrepreneur, which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.³³ The SBA has approved these small size standards.³⁴ An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.³⁵ A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 CMA licenses.³⁶ Seventeen winning bidders claimed small or very small business status and won sixty licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.³⁷

15. **Upper 700 MHz Band Licenses.** The Commission released a *Report and Order*, authorizing service in the upper 700 MHz band.³⁸ This auction, previously scheduled for January 13, 2003, has been postponed.³⁹

16. **Paging.** In the *Paging Second Report and Order*, we adopted a size standard for “small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁴⁰ A small business is an entity that, together with its affiliates and controlling

³⁰ See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022 (2002).

³¹ *Id.* at 1087-88 ¶ 172.

³² *Id.*

³³ *Id.* at 1088 ¶ 173.

³⁴ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

³⁵ See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

³⁶ See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

³⁷ *Id.*

³⁸ Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, *Second Memorandum Opinion and Order*, 16 FCC Rcd 1239 (2001).

³⁹ See “Auction of Licenses for 747-762 and 777-792 MHz Bands (Auction No. 31) Is Rescheduled,” *Public Notice*, 16 FCC Rcd 13079 (WTB 2003).

⁴⁰ Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Second Report and Order*, 12 FCC Rcd 2732, 2811-2812 ¶¶ 178-181 (*Paging Second Report and Order*); see also Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, (continued....)

principals, has average gross revenues not exceeding \$15 million for the preceding three years.⁴¹ The SBA has approved this definition.⁴² An auction of Metropolitan Economic Area (MEA) licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold.⁴³ Fifty-seven companies claiming small business status won 440 licenses.⁴⁴ An auction of Metropolitan Economic Area (MEA) and Economic Area (EA) licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.⁴⁵ 132 companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.⁴⁶ Currently, there are approximately 24,000 Private Paging site-specific licenses and 74,000 Common Carrier Paging licenses. According to the most recent *Trends in Telephone Service*, 608 private and common carriers reported that they were engaged in the provision of either paging or "other mobile" services.⁴⁷ Of these, we estimate that 589 are small, under the SBA-approved small business size standard.⁴⁸ We estimate that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

17. **Broadband Personal Communications Service (PCS).** The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁴⁹ For Block F, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁵⁰ These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.⁵¹ No small businesses within the SBA-approved small

(Continued from previous page)

Memorandum Opinion and Order on Reconsideration, 14 FCC Rcd 10030, 10085-10088 ¶¶ 98-107 (1999).

⁴¹ *Paging Second Report and Order*, 12 FCC Rcd at 2811 ¶ 179.

⁴² See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

⁴³ See "929 and 931 MHz Paging Auction Closes," *Public Notice*, 15 FCC Rcd 4858 (WTB 2000).

⁴⁴ See *id.*

⁴⁵ See "Lower and Upper Paging Band Auction Closes," *Public Notice*, 16 FCC Rcd 21821 (WTB 2002).

⁴⁶ See "Lower and Upper Paging Bands Auction Closes," *Public Notice*, 18 FCC Rcd 11154 (WTB 2003).

⁴⁷ See *Trends in Telephone Service*, Industry Analysis Division, Wireline Competition Bureau, Table 5.3 (Number of Telecommunications Service Providers that are Small Businesses) (May 2002).

⁴⁸ 13 C.F.R. § 121.201, NAICS code 517211.

⁴⁹ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

⁵⁰ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶ 60.

⁵¹ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 "small" and "very small" business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁵² On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.⁵³

18. **Narrowband PCS.** The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less.⁵⁴ Through these auctions, the Commission awarded a total of forty-one licenses, 11 of which were obtained by four small businesses.⁵⁵ To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁵⁶ A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.⁵⁷ A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.⁵⁸ The SBA has approved these small business size standards.⁵⁹ A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (MTA and nationwide) licenses.⁶⁰ Three of these claimed status as a small or very small entity and won 311 licenses.

19. **Specialized Mobile Radio (SMR).** The Commission awards "small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.⁶¹ The Commission awards "very small entity" bidding credits to firms that had revenues of no

⁵² FCC News, "Broadband PCS, D, E and F Block Auction Closes," No. 71744 (rel. January 14, 1997).

⁵³ See "C, D, E, and F Block Broadband PCS Auction Closes," *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

⁵⁴ Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, *Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 175, 196 ¶ 46 (1994).

⁵⁵ See "Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674," *Public Notice*, PNWL 94-004 (rel. Aug. 2, 1994); "Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787," *Public Notice*, PNWL 94-27 (rel. Nov. 9, 1994).

⁵⁶ Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, *Second Report and Order and Second Further Notice of Proposed Rule Making*, 15 FCC Rcd 10456, 10476 ¶ 40 (2000).

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

⁶⁰ See "Narrowband PCS Auction Closes," *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

⁶¹ 47 C.F.R. § 90.814(b)(1).

more than \$3 million in each of the three previous calendar years.⁶² The SBA has approved these small business size standards for the 900 MHz Service.⁶³ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.⁶⁴ A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.⁶⁵

20. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed "small business" status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

21. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is established by the SBA.

22. **Private Land Mobile Radio (PLMR).** PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories, and are often used in support of the licensee's primary (non-telecommunications) business operations. For the purpose of determining whether a licensee of a PLMR system is a small business as defined by the SBA, we could use the definition for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any such entity employing no more than 1,500 persons.⁶⁶ The Commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under

⁶² *Id.*

⁶³ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999. We note that, although a request was also sent to the SBA requesting approval for the small business size standard for 800 MHz, approval is still pending.

⁶⁴ See "Correction to Public Notice DA 96-586 'FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,'" *Public Notice*, 18 FCC Rcd 18367 (WTB 1996).

⁶⁵ See "Multi-Radio Service Auction Closes," *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

⁶⁶ See 13 C.F.R. § 121.201, NAICS code 517212.

this definition. We also note that PMLR licensees generally are not in the business of providing cellular or other wireless telecommunications services but instead use the licensed facilities in support of other business activities. According to the Bureau of the Census, only twelve firms out of a total of 977 cellular and other wireless telecommunications firms that operated for the entire year in 1997 had 1,000 or more employees.⁶⁷ Therefore, even if all twelve of these firms were cellular telephone companies, nearly all carriers are small businesses under the SBA's definition.

23. **Public Safety Radio Services.** Public Safety radio services include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services.⁶⁸ There are a total of approximately 127,540 licensees in these services. Governmental entities⁶⁹ as well as private businesses comprise the licensees for these services. All governmental entities with populations of less than 50,000 fall within the definition of a small entity.⁷⁰

24. **Fixed Microwave Services.** Fixed microwave services include common carrier,⁷¹ private-operational fixed,⁷² and broadcast auxiliary radio services.⁷³ Currently, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast

⁶⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 513322 (October 2000).

⁶⁸ With the exception of the special emergency service, these services are governed by Subpart B of part 90 of the Commission's Rules, 47 C.F.R. §§ 90.15-90.27. The police service includes approximately 27,000 licensees that serve state, county, and municipal enforcement through telephony (voice), telegraphy (code) and teletype and facsimile (printed material). The fire radio service includes approximately 23,000 licensees comprised of private volunteer or professional fire companies as well as units under governmental control. The local government service that is presently comprised of approximately 41,000 licensees that are state, county, or municipal entities that use the radio for official purposes not covered by other public safety services. There are approximately 7,000 licensees within the forestry service which is comprised of licensees from state departments of conservation and private forest organizations who set up communications networks among fire lookout towers and ground crews. The approximately 9,000 state and local governments are licensed to highway maintenance service provide emergency and routine communications to aid other public safety services to keep main roads safe for vehicular traffic. The approximately 1,000 licensees in the Emergency Medical Radio Service (EMRS) use the 39 channels allocated to this service for emergency medical service communications related to the delivery of emergency medical treatment. 47 C.F.R. §§ 90.15-90.27. The approximately 20,000 licensees in the special emergency service include medical services, rescue organizations, veterinarians, handicapped persons, disaster relief organizations, school buses, beach patrols, establishments in isolated areas, communications standby facilities, and emergency repair of public communications facilities. 47 C.F.R. §§ 90.33-90.55.

⁶⁹ 47 C.F.R. § 1.1162.

⁷⁰ 5 U.S.C. § 601(5).

⁷¹ 47 C.F.R. §§ 101 *et seq.* (formerly, part 21 of the Commission's Rules).

⁷² Persons eligible under parts 80 and 90 of the Commission's rules can use Private Operational-Fixed Microwave services. See generally 47 C.F.R. parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

⁷³ Auxiliary Microwave Service is governed by part 74 of Title 47 of the Commission's Rules. See 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of this IRFA, we will use the SBA's definition applicable to "Cellular and Other Wireless Telecommunications" companies—that is, an entity with no more than 1,500 persons.⁷⁴ The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer small common carrier fixed licensees and 61,670 or fewer small private operational-fixed licensees and small broadcast auxiliary radio licensees in the microwave services that may be affected by the rules and policies adopted herein. The Commission notes, however, that the common carrier microwave fixed licensee category includes some large entities.

25. **Wireless Communications Services.** This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years.⁷⁵ The SBA has approved these definitions.⁷⁶ The FCC auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity. An auction for one license in the 1670-1674 MHz band commenced on April 30, 2003 and closed the same day. One license was awarded. The winning bidder was not a small entity.

26. **39 GHz Service.** The Commission defines "small entity" for 39 GHz licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁷⁷ "Very small business" is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁷⁸ The SBA has approved these definitions.⁷⁹ The auction of the 2,173 39 GHz licenses began on April 12, 2000, and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses.

27. **Local Multipoint Distribution Service.** An auction of the 986 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined "small entity" for LMDS licenses as an entity that has average gross revenues of less

⁷⁴ 13 C.F.R. § 121.201, NAICS code 517212.

⁷⁵ Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

⁷⁶ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

⁷⁷ See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Band, *Report and Order*, 12 FCC Rcd 18600 (1997).

⁷⁸ *Id.*

⁷⁹ See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Hector Barreto, Administrator, Small Business Administration, dated January 18, 2002.

than \$40 million in the three previous calendar years.⁸⁰ An additional classification for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁸¹ These regulations defining “small entity” in the context of LMDS auctions have been approved by the SBA.⁸² There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small business winning bidders that won 119 licenses.

28. **218-219 MHz Service.** The first auction of 218-219 MHz (previously referred to as the Interactive and Video Data Service or IVDS) spectrum resulted in 178 entities winning licenses for 594 Metropolitan Statistical Areas (MSAs).⁸³ Of the 594 licenses, 567 were won by 167 entities qualifying as a small business. For that auction, we defined a small business as an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.⁸⁴ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not exceeding \$15 million for the preceding three years.⁸⁵ A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not exceeding \$3 million for the preceding three years.⁸⁶ The SBA has approved of these definitions.⁸⁷ At this time, we cannot estimate the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this IRFA that in future auctions, many, and perhaps all, of the licenses may be awarded to small businesses.

29. **Location and Monitoring Service (LMS).** Multilateration LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning

⁸⁰ See Rulemaking to Amend Parts 1, 2, 21, 25, of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, Reallocate the 29.5-30.5 Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making*, 12 FCC Rcd 12545, 12689-90 ¶ 348 (1997).

⁸¹ *Id.*

⁸² See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

⁸³ See “Interactive Video and Data Service (IVDS) Applications Accepted for Filing,” *Public Notice*, 9 FCC Rcd 6227 (1994).

⁸⁴ Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Fourth Report and Order*, 9 FCC Rcd 2330 (1994).

⁸⁵ Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Report and Order and Memorandum Opinion and Order*, 15 FCC Rcd 1497 (1999).

⁸⁶ *Id.*

⁸⁷ See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

LMS licenses, the Commission has defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.⁸⁸ A “very small business” is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$3 million.⁸⁹ These definitions have been approved by the SBA.⁹⁰ An auction for LMS licenses commenced on February 23, 1999, and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses. We cannot accurately predict the number of remaining licenses that could be awarded to small entities in future LMS auctions.

30. **Rural Radiotelephone Service.** We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.⁹¹ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

31. **Air-Ground Radiotelephone Service.** We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.⁹² There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and the Commission estimates that almost all of them qualify as small entities under the SBA definition.

32. **Offshore Radiotelephone Service.** This service operates on several ultra high frequency (UHF) TV broadcast channels that are not used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico. At present, there are approximately 55 licensees in this service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.⁹³ The Commission is unable at this time to estimate the number of licensees that would qualify as small entities under the SBA definition. The Commission assumes, for purposes of this IRFA, that all of the 55 licensees are small entities, as that term is defined by the SBA.

33. **Multiple Address Systems (MAS).** Entities using MAS spectrum, in general, fall into two categories: (1) those using the spectrum for profit-based uses, and (2) those using the spectrum for private internal uses. With respect to the first category, the Commission defines “small entity” for MAS licenses as an entity that has average gross revenues of less than \$15 million in the three previous calendar years.⁹⁴ “Very small business” is defined as an entity that, together with its affiliates, has

⁸⁸ Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Second Report and Order*, 13 FCC Rcd 15182, 15192 ¶ 20 (1998); *see also* 47 C.F.R. § 90.1103.

⁸⁹ Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Second Report and Order*, 13 FCC Rcd at 15192 ¶ 20; *see also* 47 C.F.R. § 90.1103.

⁹⁰ *See* Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated February 22, 1999.

⁹¹ 13 C.F.R. § 121.201, NAICS code 517212.

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *See* Amendment of the Commission’s Rules Regarding Multiple Address Systems, *Report and Order*, 15 FCC Rcd 11956, 12008 ¶ 123 (2000).

average gross revenues of not more than \$3 million for the preceding three calendar years.⁹⁵ The SBA has approved of these definitions.⁹⁶ The majority of these entities will most likely be licensed in bands where the Commission has implemented a geographic area licensing approach that would require the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission's licensing database indicates that, as of January 20, 1999, there were a total of 8,670 MAS station authorizations. Of these, 260 authorizations were associated with common carrier service. In addition, an auction for 5,104 MAS licenses in 176 EAs began November 14, 2001, and closed on November 27, 2001.⁹⁷ Seven winning bidders claimed status as small or very small businesses and won 611 licenses.

34. With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, we note that MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definitions developed by the SBA would be more appropriate. The applicable definition of small entity in this instance appears to be the "Cellular and Other Wireless Telecommunications" definition under the SBA rules. This definition provides that a small entity is any entity employing no more than 1,500 persons.⁹⁸ The Commission's licensing database indicates that, as of January 20, 1999, of the 8,670 total MAS station authorizations, 8,410 authorizations were for private radio service, and of these, 1,433 were for private land mobile radio service.

35. **Incumbent 24 GHz Licensees.** The rules that we adopt could affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The Commission did not develop a definition of small entities applicable to existing licensees in the 24 GHz band. Therefore, the applicable definition of small entity is the definition under the SBA rules for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any entity employing no more than 1,500 persons.⁹⁹ We believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent¹⁰⁰ and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

⁹⁵ *Id.*

⁹⁶ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated June 4, 1999.

⁹⁷ See "Multiple Address Systems Spectrum Auction Closes," *Public Notice*, 16 FCC Rcd 21011 (2001).

⁹⁸ See 13 C.F.R. § 121.201, NAICS code 517212.

⁹⁹ See *id.* According to Census Bureau data for 1997, in this category, there were a total of 977 firms that operated for the entire year. U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 513322 (October 2000). Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more. *Id.* The census data do not provide a more precise estimate of the number of firms that have 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

¹⁰⁰ Teligent acquired the Digital Electronic Message Service (DEMS) licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

36. **Future 24 GHz Licensees.** With respect to new applicants in the 24 GHz band, we have defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not exceeding \$15 million.¹⁰¹ "Very small business" in the 24 GHz band is defined as an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.¹⁰² The SBA has approved these definitions.¹⁰³ The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held.

37. **700 MHz Guard Band Licenses.** In the *700 MHz Guard Band Order*, we adopted size standards for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁰⁴ A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.¹⁰⁵ Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.¹⁰⁶ SBA approval of these definitions is not required.¹⁰⁷ An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.¹⁰⁸ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.¹⁰⁹

38. **Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and Instructional Television Fixed Service.** Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).¹¹⁰ In connection with the 1996 MDS auction, the Commission defined "small business"

¹⁰¹ Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules To License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16967 ¶ 77 (2000) (*24 GHz Report and Order*); see also 47 C.F.R. § 101.538(a)(2).

¹⁰² *24 GHz Report and Order*, 15 FCC Rcd at 16967 ¶ 77; see also 47 C.F.R. § 101.538(a)(1).

¹⁰³ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Gary M. Jackson, Assistant Administrator, Small Business Administration, dated July 28, 2000.

¹⁰⁴ See Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *Second Report and Order*, 15 FCC Rcd 5299 (2000).

¹⁰⁵ *Id.* at 5343 ¶ 108.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 5343 ¶ 108 n.246 (for the 746-764 MHz and 776-794 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain Small Business Administration approval before adopting small business size standards).

¹⁰⁸ See "700 MHz Guard Bands Auction Closes: Winning Bidders Announced," *Public Notice*, 15 FCC Rcd 18026 (2000).

¹⁰⁹ See "700 MHz Guard Bands Auction Closes: Winning Bidders Announced," *Public Notice*, 16 FCC Rcd 4590 (WTB 2001).

¹¹⁰ Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint (continued....)

as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years.¹¹¹ The SBA has approved of this standard.¹¹² The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs).¹¹³ Of the 67 auction winners, 61 claimed status as a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are not more than \$40 million and are thus considered small entities.¹¹⁴

39. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution,¹¹⁵ which includes all such companies generating \$12.5 million or less in annual receipts.¹¹⁶ According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.¹¹⁷ Of this total, 1,180 firms had annual receipts of under \$10 million, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.¹¹⁸ Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies proposed in the *Further Notice*.

40. Finally, while SBA approval for a Commission-defined small business size standard applicable to ITFS is pending, educational institutions are included in this analysis as small entities.¹¹⁹ There are currently 2,032 ITFS licensees, and all but 100 of these licenses are held by educational institutions. Thus, we tentatively conclude that at least 1,932 ITFS licensees are small businesses.

41. **Cable Television Relay Service.** This service includes transmitters generally used to relay cable programming within cable television system distribution systems. The SBA has defined a small business size standard for Cable and other Program Distribution, consisting of all such companies (Continued from previous page) _____

Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Report and Order*, 10 FCC Rcd 9589, 9593 ¶ 7 (1995) (*MDS Auction R&O*).

¹¹¹ 47 C.F.R. § 21.961(b)(1).

¹¹² See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Bureau, from Gary Jackson, Assistant Administrator for Size Standards, Small Business Administration, dated March 20, 2003 (noting approval of \$40 million size standard for MDS auction).

¹¹³ Basic Trading Areas (BTAs) were designed by Rand McNally and are the geographic areas by which MDS was auctioned and authorized. See *MDS Auction R&O*, 10 FCC Rcd at 9608 ¶ 34.

¹¹⁴ 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard for "other telecommunications" (annual receipts of \$12.5 million or less). See 13 C.F.R. § 121.201, NAICS code 517910.

¹¹⁵ 13 C.F.R. § 121.201, NAICS code 517510.

¹¹⁶ *Id.*

¹¹⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4 (issued October 2000).

¹¹⁸ *Id.*

¹¹⁹ In addition, the term "small entity" under SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

having annual receipts of no more than \$12.5 million.¹²⁰ According to Census Bureau data for 1997, there were 1,311 firms in the industry category Cable and Other Program Distribution, total, that operated for the entire year.¹²¹ Of this total, 1,180 firms had annual receipts of \$10 million or less, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.¹²² Thus, under this standard, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies proposed in the *Further Notice*.

42. **Multichannel Video Distribution and Data Service.** MVDDS is a terrestrial fixed microwave service operating in the 12.2-12.7 GHz band. No auction has yet been held in this service, although an action has been scheduled for January 14, 2004.¹²³ Accordingly, there are no licensees in this service.

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

43. The policy proposals in this *Further Notice* could apply to a significant number of Commission licensees of wireless services. Specifically, the *Further Notice* seeks comment on possible changes to the broadband PCS radiated power limits including the introduction of power spectral density limits and specifying average radiated power in addition to peak radiated power in measuring emissions. We recognize that if we were to increase radiated power levels, it may be necessary to enhance coordination efforts between licensees,¹²⁴ which will assist licensees in minimizing instances of interference. Also, we seek comment on possible methods to improve information sharing among licensees and the level of burden increase such information sharing might entail.¹²⁵ We also note that we have discussed possible changes to the likelihood of needing environmental evaluations as a result of our proposed actions in Section E of this IRFA, *infra*.

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

44. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities."¹²⁶

¹²⁰ 13 C.F.R. § 121.201, NAICS code 517510.

¹²¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4 (issued October 2000).

¹²² *Id.*

¹²³ "Auctions of Licenses in the Multichannel Video Distribution and Data Service Rescheduled for January 14, 2004," *Public Notice*, DA 03-2354 (August 28, 2003).

¹²⁴ See *Further Notice* at para. 60, *supra*.

¹²⁵ *Id.*

¹²⁶ 5 U.S.C. §§ 603(c)(1)-(c)(4).

45. In addition to our discussion of compliance burdens, *supra*, we have noted in the *Further Notice* that radiated power limit increases may impact licensee's administrative burden in making filings required for proper evaluation of transmission sites in regard to environmental compliance. We have sought comment on this issue. We note that wireless systems, including broadband PCS systems, are subject to environmental evaluation with respect to human exposure of RF radiation for non-building mounted antennas when the antenna height above ground level is less than 10 meters and the total power of all channels is greater than 2000 watts ERP and for building mounted antennas when the total power from all channels is greater than 2000 watts ERP. Otherwise, these systems are categorically excluded from such environmental evaluation.¹²⁷ Although we are not proposing any change to RF exposure standards, we seek comment as to whether adoption of higher radiated power limits would increase the number of facilities requiring full environmental evaluation rather than being categorically excluded, and whether adoption of higher radiated power limits would outweigh any possible increased administrative burden.

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

46. None.

¹²⁷ See 47 C.F.R. § 1.1307.

APPENDIX C**List of Commenters****COMMENTS**

1. American Automobile Association (AAA)
2. American Mobile Telecommunications Association, Inc. (AMTA)
3. American Petroleum Institute (API)
4. Cellular Telecommunications & Internet Association (CTIA)
5. Cingular Wireless, LLC (Cingular)
6. Ericsson, Inc. (Ericsson)
7. Lucent Technologies, Inc. (Lucent)
8. Motorola, Inc. (Motorola)
9. National Association of Manufacturers and MRFAC, Inc. (NAM/MRFAC)
10. Nextel Communications, Inc. (Nextel)
11. PCIA, the Wireless Infrastructure Association (PCIA) (Personal Communications Industry Association)
12. Powerwave Technologies, Inc. (Powerwave)
13. QUALCOMM Incorporated (QUALCOMM)

REPLY COMMENTS

1. American Mobile Telecommunications Association, Inc. (AMTA)
2. Ericsson, Inc. (Ericsson)
3. Industrial Telecommunications Association, Inc. (ITA)
4. Motorola, Inc. (Motorola)
5. Powerwave Technologies, Inc. (Powerwave)
6. Qualcomm, Inc. (Qualcomm)

EX PARTE FILINGS

1. Cellular Telecommunications & Internet Association (CTIA)
2. Ericsson, Inc. (Ericsson)
3. National Public Safety Telecommunications Council
4. Powerwave Technologies, Inc. (Powerwave)
5. Qualcomm, Inc. (Qualcomm)
6. Crown Castle International Corp. (Crown Castle)

**STATEMENT OF COMMISSIONER
MICHAEL J. COPPS
Approving in part, dissenting in Part**

RE: Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services.

I support the vast majority of today's Order and NPRM. But I must dissent from one important part of this item. Today the FCC alters the sliding-scale relationship between tower height and permissible power. This change increases the permissible height of full-power communications towers in suburban areas of our Country for the 800 MHz and 900 MHz bands. We should have analyzed the environmental impact of this change before taking final action.

Towers in many of our communities are already enormous. But because of this FCC Order we may well see more full-power 1,000 foot towers in suburban areas. A 1,000 foot tower is twice as high as the Washington Monument. While we all would like to find ways to improve wireless quality, we should study the impact on our communities before making a change that could dot the suburban landscape with more potentially intrusive structures. We therefore should have studied how many more high towers are likely to be constructed because of our actions and how these towers will affect the environment, aviation safety, and other issues important to communities around the Nation. We did not do so.

The assertion that we can review these issues when individual towers are erected does not allay my concern. The FCC itself does not usually investigate when towers are built, and our history on these matters suggests that ad hoc reviews will inadequately protect our communities. The assertion that high towers already exist in many communities also does not solve this problem. That is because this change potentially will allow companies to build more of these towers without the FCC even asking what the impact of these towers will be. Because I believe that we should at a minimum examine whether our action will negatively impact the environment, safety, and other community concerns, I must dissent to this part of the Order.