

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. Nationwide, there are a total of approximately 29.6 million small businesses, according to the SBA.²³

9. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the new economic census category of “Wireless Telecommunications Carriers (except satellite).”²⁴ Under this new category, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. The data we present on the number of small entities is based on the information gathered in conjunction with the prior two broad economic census categories of “Paging”²⁵ and “Cellular and Other Wireless Telecommunications”²⁶ -- both of the small business size standards in effect prior to the adoption of the new size standard by the SBA in 2008. Since no new data has been acquired since the adoption of the new size standard, we provide the only data we have which is based on data collected before the new size standard went into effect. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.²⁷ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.²⁸ Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.²⁹ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.³⁰ Thus, under this second category and size

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.*

²³ See SBA, Office of Advocacy, “Frequently Asked Questions,” <http://web.sba.gov/faqs> (accessed Jan. 2009).

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

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

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

²⁷ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

²⁸ *Id.* 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 for firms with “1000 employees or more.”

²⁹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

³⁰ *Id.* 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 for firms with “1000 employees or more.”

standard, the majority of firms can, again, be considered small.

10. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses in the 2305-2320 MHz and 2345-2360 MHz bands. 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.³¹ The SBA has approved these definitions.³² The Commission 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.

11. *700 MHz Guard Bands Licenses.* In the *700 MHz Guard Bands Order*, the Commission 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.³³ 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.³⁴ 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.³⁵ SBA approval of these definitions is not required.³⁶ In 2000, the Commission conducted an auction of 52 Major Economic Area (“MEA”) licenses.³⁷ 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 and closed in 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.³⁸

12. *700 MHz Band Commercial Licenses.* There is 80 megahertz of non-Guard Band spectrum in the 700 MHz Band that is designated for commercial use: 698-757, 758-763, 776-787, and 788-793 MHz Bands. With one exception, the Commission adopted criteria for defining two groups of small businesses for purposes of determining their eligibility for bidding credits at auction. These two categories are: (1)

³¹ 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).

³² 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.

³³ 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). (“746-764 MHz Band Second Report and Order”).

³⁴ See *746-764 MHz Band Second Report and Order*, 15 FCC Rcd at 5343, para. 108.

³⁵ *Id.*

³⁶ *Id.*, 15 FCC Rcd 5299, 5343 ¶ 108 n.246 (for the 746-764 MHz and 776-704 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).

³⁷ See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 18026 (2000).

³⁸ See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 4590 (WTB 2001).

“small business,” which is defined as an entity that has attributed average annual gross revenues that do not exceed \$40 million during the preceding three years; and (2) “very small business,” which is defined as an entity with attributed average annual gross revenues that do not exceed \$15 million for the preceding three years.³⁹ In Block C of the Lower 700 MHz Band (710-716 MHz and 740-746 MHz), which was licensed on the basis of 734 Cellular Market Areas, the Commission adopted a third criterion for determining eligibility for bidding credits: an “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.⁴⁰ The SBA has approved these small size standards.⁴¹

13. An auction of 740 licenses for Blocks C (710-716 MHz and 740-746 MHz) and D (716-722 MHz) of the Lower 700 MHz Band 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.⁴² A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: five EAG licenses and 251 CMA licenses.⁴³ Seventeen winning bidders claimed small or very small business status and won 60 licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.⁴⁴

14. The auction for the remaining 62 megahertz of commercial spectrum began on January 24, 2008. A total of 214 applicants were found to be qualified bidders, of which 38 applicants claimed status as small businesses and 81 applicants claimed status as very small businesses. The auction concluded on March 18, 2008 with 101 bidders winning 1090 licenses.⁴⁵ The provisionally winning bids for the A, B, C, and E Block licenses exceeded the aggregate reserve prices for those blocks. The provisionally winning bid for the D Block license, however, did not meet the applicable reserve price and, thus, did not become a winning bid.

15. *Government Transfer Bands.* The Commission adopted small business size standards for the unpaired 1390-1392 MHz, 1670-1675 MHz, and the paired 1392-1395 MHz and 1432-1435 MHz bands.⁴⁶ Specifically, with respect to these bands, the Commission defined an entity with average annual

³⁹ See Auction of 700 MHz Band Licenses Scheduled for January 24, 2008, AU Docket No. 07-157, *Notice and Filing Requirements, Minimum Opening Bids, Reserve Prices, Upfront Payments, and Other Procedures for Auctions 73 and 76*, DA 07-4171 at ¶ 70 (WTB rel. Oct. 5, 2007); Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022, 1087-88 (2002).

⁴⁰ *Id.* at 1088.

⁴¹ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

⁴² See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

⁴³ See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

⁴⁴ *Id.*

⁴⁵ Auction of 700 MHz Band Licenses Closes, *Public Notice*, DA 08-595 (rel. Mar. 20, 2008), amended by *Erratum* (rel. Mar. 26, 2008).

⁴⁶ See Amendments to Parts 1, 2, 27 and 90 of the Commission’s Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, AND 2385-2390 MHz Government Transfer Bands, 17 FCC Rcd 9980 (2002) (*Government Transfer Bands Service Rules Report and Order*).

gross revenues for the three preceding years not exceeding \$40 million as a “small business,” and an entity with average annual gross revenues for the three preceding years not exceeding \$15 million as a “very small business.”⁴⁷ SBA has approved these small business size standards for the aforementioned bands.⁴⁸ Correspondingly, the Commission adopted a bidding credit of 15 percent for “small businesses” and a bidding credit of 25 percent for “very small businesses.”⁴⁹ This bidding credit structure was found to have been consistent with the Commission’s schedule of bidding credits, which may be found at Section 1.2110(f)(2) of the Commission’s rules.⁵⁰ The Commission found that these two definitions will provide a variety of businesses seeking to provide a variety of services with opportunities to participate in the auction of licenses for this spectrum and will afford such licensees, who may have varying capital costs, substantial flexibility for the provision of services.⁵¹ The Commission noted that it had long recognized that bidding preferences for qualifying bidders provide such bidders with an opportunity to compete successfully against large, well-financed entities.⁵² The Commission also noted that it had found that the use of tiered or graduated small business definitions is useful in furthering its mandate under Section 309(j) to promote opportunities for and disseminate licenses to a wide variety of applicants.⁵³ 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.

16. *Advanced Wireless Services.* In 2008, the Commission conducted the auction of Advanced

⁴⁷ See *Service Rules Notice*, 17 FCC Rcd at 2550-51 ¶¶ 144-146. To be consistent with the size standard of “very small business” proposed for the 1427-1432 MHz band for those entities with average gross revenues for the three preceding years not exceeding \$3 million, the *Service Rules Notice* proposed to use the terms “entrepreneur” and “small business” to define entities with average gross revenues for the three preceding years not exceeding \$40 million and \$15 million, respectively. Because the Commission is not adopting small business size standards for the 1427-1432 MHz band, it instead uses the terms “small business” and “very small business” to define entities with average gross revenues for the three preceding years not exceeding \$40 million and \$15 million, respectively.

⁴⁸ See Letter from Hector V. Barreto, Administrator, Small Business Administration, to Margaret W. Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, dated January 18, 2002.

⁴⁹ Such bidding credits are codified for the unpaired 1390-1392 MHz, paired 1392-1395 MHz, and the paired 1432-1435 MHz bands in 47 C.F.R. § 27.807. Such bidding credits are codified for the unpaired 1670-1675 MHz band in 47 C.F.R. § 27.906.

⁵⁰ In the *Part 1 Third Report and Order*, the Commission adopted a standard schedule of bidding credits, the levels of which were developed based on its auction experience. *Part 1 Third Report and Order*, 13 FCC Rcd at 403-04 ¶ 47. See also 47 C.F.R. § 1.2110(f)(2).

⁵¹ See *Service Rules Notice*, 17 FCC Rcd at 2550-51 ¶ 145.

⁵² See, e.g., Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems; Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, WT Docket No. 96-18, PR Docket No. 93-253, *Memorandum Opinion and Order on Reconsideration and Third Report and Order*, 14 FCC Rcd 10030, 10091 ¶ 112 (1999).

⁵³ 47 U.S.C. § 309(j)(3)(B), (4)(C)-(D). The Commission will also not adopt special preferences for entities owned by minorities or women, and rural telephone companies. The Commission did not receive any comments on this issue, and it does not have an adequate record to support such special provisions under the current standards of judicial review. See *Adarand Constructors v. Peña*, 515 U.S. 200 (1995) (requiring a strict scrutiny standard of review for government mandated race-conscious measures); *United States v. Virginia*, 518 U.S. 515 (1996) (applying an intermediate standard of review to a state program based on gender classification).

Wireless Services (“AWS”) licenses.⁵⁴ This auction, which as designated as Auction 78, offered 35 licenses in the AWS 1710-1755 MHz and 2110-2155 MHz bands (“AWS-1”). The AWS-1 licenses were licenses for which there were no winning bids in Auction 66. That same year, the Commission completed Auction 78. A bidder with attributed average annual gross revenues that exceeded \$15 million and did not exceed \$40 million for the preceding three years (“small business”) received a 15 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$15 million for the preceding three years (“very small business”) received a 25 percent discount on its winning bid. A bidder that had combined total assets of less than \$500 million and combined gross revenues of less than \$125 million in each of the last two years qualified for entrepreneur status.⁵⁵ Four winning bidders that identified themselves as very small businesses won 17 licenses.⁵⁶ Three of the winning bidders that identified themselves as a small business won five licenses. Additionally, one other winning bidder that qualified for entrepreneur status won 2 licenses.

17. *Cellular Licensees.* The SBA has developed a small business size standard for wireless firms within the new economic census category of “Wireless Telecommunications Carriers (except satellite).”⁵⁷ Under this new category, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. The data we present on the number of small entities is based on the information gathered in conjunction with the prior economic census category of “Cellular and Other Wireless Telecommunications.”⁵⁸ -- the small business size standard in effect prior to the adoption of the new size standard by the SBA in 2008. Since no new data has been acquired after the adoption of the new size standard, we provide the only data we have available which is based on data collected before the new size standard went into effect. For the census category of “Cellular and Other Wireless Telecommunications,” Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁵⁹ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁶⁰ Thus, under this category and size standard, the majority of firms can be considered small.

18. *Broadband Personal Communications Service.* The broadband Personal Communications Service (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

⁵⁴ See AWS-1 and Broadband PCS Procedures Public Notice, 23 FCC Rcd 7496. Auction 78 also included an auction of Broadband PCS licenses.

⁵⁵ *Id.* at 23 FCC Rcd at 7521-22.

⁵⁶ See “Auction of AWS-1 and Broadband PCS Licenses Closes, Winning Bidders Announced for Auction 78, Down Payments Due September 9, 2008, FCC Forms 601 and 602 Due September 9, 2008, Final Payments Due September 23, 2008, Ten-Day Petition to Deny Period”, *Public Notice*, 23 FCC Rcd 12749-65 (2008).

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

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

⁵⁹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

⁶⁰ *Id.* 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 for firms with “1000 employees or more.”

calendar years.⁶¹ 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.⁶² These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.⁶³ No small businesses within the SBA-approved small 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.⁶⁴ On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.⁶⁵ On January 26, 2001, the Commission completed the auction of 422 C and F PCS licenses in Auction 35.⁶⁶ Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available

19. *Narrowband Personal Communications Service.* In 1994, the Commission conducted an auction for Narrowband PCS licenses. A second auction was also conducted later in 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.⁶⁷ Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.⁶⁸ 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.⁶⁹ A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for

⁶¹ 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).

⁶² 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.

⁶³ 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.

⁶⁴ FCC News, “Broadband PCS, D, E and F Block Auction Closes,” No. 71744 (rel. January 14, 1997).

⁶⁵ See “C, D, E, and F Block Broadband PCS Auction Closes,” *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

⁶⁶ See “C and F Block Broadband PCS Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 2339 (2001).

⁶⁷ *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, para. 46 (1994).

⁶⁸ 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).

⁶⁹ *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, para. 40 (2000) (“*Narrowband PCS Second Report and Order*”).

the three preceding years of not more than \$40 million.⁷⁰ 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.⁷¹ The SBA has approved these small business size standards.⁷² A third auction was conducted in 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.⁷³ Three of these claimed status as a small or very small entity and won 311 licenses.

20. *Specialized Mobile Radio.* 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.⁷⁴ The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.⁷⁵ The SBA has approved these small business size standards for the 900 MHz Service.⁷⁶ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction was completed in 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 was conducted in 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.⁷⁷ A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.⁷⁸

21. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began was conducted in 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.⁷⁹ In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded.⁸⁰ Of the 22 winning bidders, 19 claimed “small

⁷⁰ *Narrowband PCS Second Report and Order*, 15 FCC Rcd at 10476, para. 40.

⁷¹ *Id.*

⁷² *See Alvarez Letter 1998.*

⁷³ *See* “Narrowband PCS Auction Closes,” *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

⁷⁴ 47 C.F.R. § 90.814(b)(1).

⁷⁵ *Id.*

⁷⁶ *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.

⁷⁷ *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).

⁷⁸ *See* “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

⁷⁹ *See* “800 MHz Specialized Mobile Radio (SMR) Service General Category (851-854 MHz) and Upper Band (861-865 MHz) Auction Closes; Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 17162 (2000).

⁸⁰ *See*, “800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 1736 (2000).

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.

22. 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. In addition, we do not know how many of these firms have 1500 or fewer employees.⁸¹ 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 approved by the SBA.

23. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.⁸² A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (“BETRS”).⁸³ In the present context, we will use the SBA’s small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons.⁸⁴ 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.

24. *Mobile Satellite Service Carriers.* Neither the Commission nor the U.S. Small Business Administration has developed a small business size standard specifically for mobile satellite service licensees. The appropriate size standard is therefore the SBA standard for Satellite Telecommunications, which provides that such entities are small if they have \$13.5 million or less in annual revenues.⁸⁵ Currently, the Commission’s records show that there are 31 entities authorized to provide voice and data MSS in the United States. The Commission does not have sufficient information to determine which, if any, of these parties are small entities. The Commission notes that small businesses are not likely to have the financial ability to become MSS system operators because of high implementation costs, including construction of satellite space stations and rocket launch, associated with satellite systems and services.

25. *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 Wireless Telecommunications Carriers (except Satellite).⁸⁶ This category provides that a small business is a wireless company employing no more than 1,500 persons.⁸⁷ The Commission

⁸¹ See generally 13 C.F.R. § 121.201, NAICS code 517210.

⁸² The service is defined in § 22.99 of the Commission’s Rules, 47 C.F.R. § 22.99.

⁸³ BETRS is defined in §§ 22.757 and 22.759 of the Commission’s Rules, 47 C.F.R. §§ 22.757 and 22.759.

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

⁸⁵ 13 C.F.R. § 121.201, North American Industry Classification System (“NAICS”) code 517410.

⁸⁶ *Id.*

⁸⁷ *Id.*

estimates that most such licensees are small businesses under the SBA's small business standard.

26. *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 a new service, and is subject to spectrum auctions. In the *220 MHz Third Report and Order*, the Commission 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.⁸⁸ 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.⁸⁹ 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.⁹⁰ The SBA has approved these small size standards.⁹¹ Auctions of Phase II licenses commenced on and closed in 1998.⁹² 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.⁹³ 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.⁹⁴ 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.⁹⁵ In 2007, the Commission conducted a fourth auction of the 220 MHz licenses.⁹⁶ Bidding credits were offered to small businesses. A bidder with attributed average annual gross revenues that exceeded \$3 million and did not exceed \$15 million for the preceding three years (“small business”) received a 25 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$3 million for the preceding three years received a 35 percent discount on its winning bid (“very small business”). Auction 72, which offered 94 Phase II 220 MHz Service licenses, concluded in 2007.⁹⁷ In this auction, five winning bidders won a total of 76 licenses. Two winning bidders identified themselves as very small businesses won 56 of the 76 licenses. One of the winning bidders that

⁸⁸ 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).

⁸⁹ *Id.* at 11068 ¶ 291.

⁹⁰ *Id.*

⁹¹ See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

⁹² See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

⁹³ 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).

⁹⁴ See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

⁹⁵ See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

⁹⁶ See “Auction of Phase II 220 MHz Service Spectrum Scheduled for June 20, 2007, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures for Auction 72,” *Public Notice*, 22 FCC Rcd 3404 (2007).

⁹⁷ See “Auction of Phase II 220 MHz Service Spectrum Licenses Closes, Winning Bidders Announced for Auction 72, Down Payments due July 18, 2007, FCC Forms 601 and 602 due July 18, 2007, Final Payments due August 1, 2007, Ten-Day Petition to Deny Period,” *Public Notice*, 22 FCC Rcd 11573 (2007).

identified themselves as a small business won 5 of the 76 licenses won.

27. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite).⁹⁸ Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁹⁹ According to *Trends in Telephone Service* data, 434 carriers reported that they were engaged in wireless telephony.¹⁰⁰ Of these, an estimated 222 have 1,500 or fewer employees and 212 have more than 1,500 employees.¹⁰¹ We have estimated that 222 of these are small under the SBA small business size standard.

28. *Air-Ground Radiotelephone Service.* The Commission has previously used the SBA's small business definition applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons.¹⁰² There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and under that definition, we estimate that almost all of them qualify as small entities under the SBA definition. For purposes of assigning Air-Ground Radiotelephone Service licenses through competitive bidding, 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 \$40 million.¹⁰³ 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 \$15 million.¹⁰⁴ These definitions were approved by the SBA.¹⁰⁵ In 2006, the Commission completed an auction of nationwide commercial Air-Ground Radiotelephone Service licenses in the 800 MHz band (Auction 65). Later in 2006, the auction closed with two winning bidders winning two Air-Ground Radiotelephone Services licenses. Neither of the winning bidders claimed small business status.

29. *Aviation and Marine Radio Services.* There are approximately 26,162 aviation, 34,555 marine (ship), and 3,296 marine (coast) licensees.¹⁰⁶ The Commission has not developed a small business size standard specifically applicable to all licensees. For purposes of this analysis, we will use the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite),

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

⁹⁹ *Id.*

¹⁰⁰ "Trends in Telephone Service" at Table 5.3.

¹⁰¹ "Trends in Telephone Service" at Table 5.3.

¹⁰² 13 C.F.R. § 121.201, NAICS codes 517210.

¹⁰³ Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review—Amendment of Parts 1, 22, and 90 of the Commission's Rules, Amendment of Parts 1 and 22 of the Commission's Rules to Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service, WT Docket Nos. 03-103, 05-42, *Order on Reconsideration and Report and Order*, 20 FCC Rcd 19663, paras. 28-42 (2005).

¹⁰⁴ *Id.*

¹⁰⁵ See Letter from Hector V. Barreto, Administrator, SBA, to Gary D. Michaels, Deputy Chief, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, FCC (filed Sept. 19, 2005).

¹⁰⁶ Vessels that are not required by law to carry a radio and do not make international voyages or communications are not required to obtain an individual license. See Amendment of Parts 80 and 87 of the Commission's Rules to Permit Operation of Certain Domestic Ship and Aircraft Radio Stations Without Individual Licenses, *Report and Order*, WT Docket No. 96-82, 11 FCC Rcd 14849 (1996).

which is 1,500 or fewer employees.¹⁰⁷ We are unable to determine how many of those licensed fall under this standard. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 62,969 licensees that are small businesses under the SBA standard.¹⁰⁸ In 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For this auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.¹⁰⁹ Further, the Commission made available Automated Maritime Telecommunications System (“AMTS”) licenses in Auctions 57 and 61.¹¹⁰ Winning bidders could claim status as a very small business or a very small business. A very small business for this service is defined as an entity with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years, and a small business is defined as an entity with attributed average annual gross revenues of more than \$3 million but less than \$15 million for the preceding three years.¹¹¹ Three of the winning bidders in Auction 57 qualified as small or very small businesses, while three winning entities in Auction 61 qualified as very small businesses.

30. *Fixed Microwave Services.* Fixed microwave services include common carrier,¹¹² private operational-fixed,¹¹³ and broadcast auxiliary radio services.¹¹⁴ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.¹¹⁵ The Commission does not have data specifying the number of these licensees that have no more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of fixed microwave service licensees that would

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

¹⁰⁸ A licensee may have a license in more than one category.

¹⁰⁹ Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853 (1998).

¹¹⁰ See “Automated Maritime Telecommunications System Spectrum Auction Scheduled for September 15, 2004, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Auction Procedures,” *Public Notice*, 19 FCC Rcd 9518 (WTB 2004); “Auction of Automated Maritime Telecommunications System Licenses Scheduled for August 3, 2005, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Auction Procedures for Auction No. 61,” *Public Notice*, 20 FCC Rcd 7811 (WTB 2005).

¹¹¹ 47 C.F.R. § 80.1252.

¹¹² See 47 C.F.R. Part 101, Subparts C and I.

¹¹³ See 47 C.F.R. Part 101, Subparts C and H.

¹¹⁴ 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.

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

qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer common carrier fixed licensees and 61,670 or fewer private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies proposed herein. We note, however, that the common carrier microwave fixed licensee category includes some large entities.

31. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.¹¹⁶ The auction of the 986 LMDS licenses began and closed in 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.¹¹⁷ An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹¹⁸ The SBA has approved these small business size standards in the context of LMDS auctions.¹¹⁹ 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. In 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small businesses winning that won 119 licenses.

32. *Offshore Radiotelephone Service.* This service operates on several ultra high frequencies ("UHF") television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.¹²⁰ There is presently 1 licensee in this service. We do not have information whether that licensee would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.¹²¹ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.¹²²

33. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.¹²³ An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹²⁴ The SBA has approved these small business size standards.¹²⁵ The auction of the 2,173 39 GHz licenses,

¹¹⁶ See *Local Multipoint Distribution Service, Second Report and Order*, 12 FCC Rcd 12545 (1997).

¹¹⁷ *Id.*

¹¹⁸ See *id.*

¹¹⁹ See Letter to Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998) (*Alvarez to Phythyon Letter 1998*).

¹²⁰ This service is governed by Subpart 1 of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-22.1037.

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

¹²² *Id.*

¹²³ See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183, *Report and Order*, 63 Fed. Reg. 6079 (Feb. 6, 1998).

¹²⁴ *Id.*

¹²⁵ See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

began and closed in 2000. The 18 bidders who claimed small business status won 849 licenses.

34. *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 Area ("MSAs").¹²⁶ Of the 594 licenses, 567 were won by 167 entities qualifying as a small business. For that auction, the Commission defined a small business 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.¹²⁷ 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.¹²⁸ 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.¹²⁹ The SBA has approved of these definitions.¹³⁰ A subsequent auction is not yet scheduled. 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 analysis that in future auctions, many, and perhaps most, of the licenses may be awarded to small businesses.

35. *Incumbent 24 GHz Licensees.* This analysis may 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 applicable SBA small business size standard is that of Wireless Telecommunications Carriers (except Satellite). This category provides that such a company is small if it employs no more than 1,500 persons.¹³¹ The broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent¹³² 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. There are approximately 122 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 122 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies proposed herein.

36. *Future 24 GHz Licensees.* With respect to new applicants in the 24 GHz band, we have

¹²⁶ See "Interactive Video and Data Service (IVDS) Applications Accepted for Filing," *Public Notice*, 9 FCC Rcd 6227 (1994).

¹²⁷ Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, *Fourth Report and Order*, 59 Fed. Reg. 24947 (May 13, 1994).

¹²⁸ Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, *Report and Order and Memorandum Opinion and Order*, 64 Fed. Reg. 59656 (Nov. 3, 1999).

¹²⁹ Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, *Report and Order and Memorandum Opinion and Order*, 64 Fed. Reg. 59656 (Nov. 3, 1999).

¹³⁰ See *Alvarez to Phythyon Letter 1998*.

¹³¹ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

¹³² Teligent acquired the 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.

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 of \$15 million.¹³³ “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.¹³⁴ The SBA has approved these definitions.¹³⁵ The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held.

37. *1670–1675 MHz Services.* An auction for one license in the 1670–1675 MHz band was conducted in 2003. One license was awarded. The winning bidder was not a small entity.

38. *3650–3700 MHz band.* In March 2005, the Commission released a *Report and Order and Memorandum Opinion and Order* that provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (*i.e.*, 3650–3700 MHz). As of September 2009, more than 1,080 licenses have been granted and more than 4,870 sites have been registered. The Commission has not developed a definition of small entities applicable to 3650–3700 MHz band nationwide, non-exclusive licensees. However, we estimate that the majority of these licensees are Internet Access Service Providers (ISPs) and that most of those licensees are small businesses.

39. *Satellite Telecommunications and All Other Telecommunications.* These two economic census categories address the satellite industry. The first category has a small business size standard of \$15 million or less in average annual receipts, under SBA rules.¹³⁶ The second has a size standard of \$25 million or less in annual receipts.¹³⁷ The most current Census Bureau data in this context, however, are from the (last) economic census of 2002, and we will use those figures to gauge the prevalence of small businesses in these categories.¹³⁸

40. The category of Satellite Telecommunications “comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”¹³⁹ For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.¹⁴⁰ Of this total, 307 firms had annual receipts

¹³³ 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 (2000); *see also* 47 C.F.R. § 101.538(a)(2).

¹³⁴ 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 (2000); *see also* 47 C.F.R. § 101.538(a)(1).

¹³⁵ *See* Letter from Gary M. Jackson, Assistant Administrator, SBA, to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, WTB, FCC (July 28, 2000).

¹³⁶ 13 C.F.R. § 121.201, NAICS code 517410.

¹³⁷ 13 C.F.R. § 121.201, NAICS code 517919.

¹³⁸ 13 C.F.R. § 121.201, NAICS codes 517410 and 517910 (2002).

¹³⁹ U.S. Census Bureau, 2007 NAICS Definitions, “517410 Satellite Telecommunications,” <http://www.census.gov/naics/2007/def/ND517410.HTM> (last visited Oct. 21, 2009).

¹⁴⁰ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” tbl. 4, NAICS code 517410 (rel. Nov. 2005).

of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.¹⁴¹ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

41. The second category of All Other Telecommunications comprises, *inter alia*, “establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.”¹⁴² For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.¹⁴³ Of this total, 303 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.¹⁴⁴ Consequently, we estimate that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

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

42. There are no proposed reporting or recordkeeping requirements for small entities. As noted, we are proposing to require a CMRS carrier receiving a reasonable request to provide automatic roaming on reasonable and not unreasonably discriminatory terms and conditions. The general presumption of reasonableness, however, is rebuttable, and parties may choose to bring roaming disputes to the Commission for resolution.

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

43. The RFA requires an agency to describe any significant alternatives that it has considered in developing its 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 and reporting requirements under the rule for such 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 such small entities.”¹⁴⁵

44. In the previous *2007 Report and Order*, the Commission clarified that automatic roaming is a common carrier obligation for CMRS carriers, requiring them to provide roaming services to other carriers upon reasonable request and on a just, reasonable, and non-discriminatory basis pursuant to Sections 201 and 202 of the Communications Act. In adopting this requirement and promulgating the

¹⁴¹ *Id.* An additional 38 firms had annual receipts of \$25 million or more.

¹⁴² U.S. Census Bureau, 2007 NAICS Definitions, “517919 All Other Telecommunications,” <http://www.census.gov/naics/2007/def/ND517919.HTM#N517919> (last visited Oct. 21, 2009).

¹⁴³ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” tbl. 4, NAICS code 517910 (issued Nov. 2005).

¹⁴⁴ *Id.* An additional 14 firms had annual receipts of \$25 million or more.

¹⁴⁵ 5 U.S.C. § 603(c)(1) – (c)(4).

related rule, the Commission determined that, when a reasonable request is made by a technologically compatible CMRS carrier, a host CMRS carrier is obligated under Sections 332(c)(1)(B) and 201(a) to provide automatic roaming on a just, reasonable, and non-discriminatory basis to the requesting carrier outside of the requesting carrier's home market.

45. As noted, in the Order on Reconsideration, we eliminate the home roaming exclusion adopted in 2007. Instead, we will treat requests for automatic roaming in home markets under the same framework as other requests for automatic roaming. Thus, we will generally presume that such a request is reasonable in the first instance if the requesting CMRS carrier's network is technologically compatible with the would-be host carrier's network, and we will require that a CMRS carrier receiving a reasonable request to provide automatic roaming to the requesting carrier on reasonable and not unreasonably discriminatory terms and conditions. Finally, this presumption of reasonableness is rebuttable, and parties may choose to bring roaming disputes to the Commission for resolution.

46. Every carrier, including small and nationwide carriers, relies on roaming to fill-in gaps in its network coverage. We find that the modifications above strike an appropriate balance between the interests of existing carriers with robust networks and those of other carriers, including new market entrants and smaller, regional or rural carriers by offering both groups the flexibility and sufficient time to plan their service roll out in their license areas. With this decision, we continue to strive to adopt policies that balance competing interests, including -- promoting competition among multiple carriers, ensuring that consumers have access to seamless coverage nationwide, and providing incentives for all carriers to invest and innovate by using available spectrum and constructing wireless network facilities on a widespread basis.

47. With respect to Sprint Nextel's petition for reconsideration, we reaffirm the decision to extend automatic roaming obligations to push-to-talk (PTT) services, and note the Commission has previously addressed the steps taken to minimize the impact on small businesses in this context in the FRFA adopted in conjunction with the *2007 Report and Order*.¹⁴⁶

48. **Report to Congress:** The Commission will send a copy of the Order on Reconsideration, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.¹⁴⁷ In addition, the Commission will send a copy of the Order on Reconsideration, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Order on Reconsideration and this FRFA (or summaries thereof) will also be published in the Federal Register.

¹⁴⁶ See *2007 Report and Order*, 22 FCC Rcd at 15854-864, Appendix C.

¹⁴⁷ See 5 U.S.C. 801(a)(1)(A).

APPENDIX D

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (the “RFA”),¹ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact of the policies and rules proposed in the Second Further Notice of Proposed Rulemaking (“Second Further Notice”) on a substantial number of small entities. Written public comments are requested on the IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadline for comments on the Second Further Notice provided in the item. The Commission will send a copy of the Second Further Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (“SBA”).² In addition, the Second Further Notice and IRFA (or summaries thereof) will be published in the Federal Register.³

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

2. In the Second Further Notice, the Commission invites interested parties to refresh the record pertaining to the *2007 Roaming Further Notice*. Since the *2007 Roaming Further Notice*, there have been advancements in technology and developments in the industry that may have affected parties’ positions on the issues raised in the *2007 Roaming Further Notice*. Accordingly, the Commission requests that parties refresh the record in this proceeding to reflect the effects of these developments. The Commission asks parties to include any new information that may be relevant to the Commission’s consideration of what action, if any, may be appropriate in this proceeding. In addition, as the *2007 Roaming Further Notice* was limited to seeking comment on the obligations of CMRS carriers that also provide non-CMRS data services, the Commission takes this opportunity to seek comment on whether to impose similar obligations on other mobile data service providers, whether they offer CMRS or not. For these reasons, the Commission seeks further comment on whether it would be in the public interest to extend roaming obligations to non-interconnected services, including broadband data.

B. Legal Basis

3. The authority for the actions taken in this Second Further Notice is contained in Sections 1, 4(i), 201, 202, 251(a), 253, 303(r), and 332(c)(1)(B) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201, 202, 251(a), 253, 303(r), and 332(c)(1)(B).

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

4. The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁴ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁵ A “small business

¹ 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 *See* 5 U.S.C. § 603(a).

³ *See* 5 U.S.C. § 603(a).

⁴ 5 U.S.C. § 601(6).

⁵ 5 U.S.C. § 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 (continued....)”

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).⁶

5. In the following paragraphs, the Commission further describes and estimates the number of small entity licensees that may be affected by the rules the Commission proposes in this Second Further Notice. The Commission’s extension of the automatic roaming obligation to non-interconnected services and features, including those that constitute information services, affects any CMRS carrier offering such services.

6. This IRFA analyzes the number of small entities affected on a service-by-service basis. When identifying small entities that could be affected by the Commission’s new rules, this IRFA provides information that describes auction results, including the number of small entities that were winning bidders. However, 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 licensees later provide business size information, except in the context of an assignment or a transfer of control application that involves unjust enrichment issues.

7. *Wireless Telecommunications Carriers (except Satellite)*. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.⁷ Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.”⁸ Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.⁹ Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year.¹⁰ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.¹¹ For the category of Cellular and Other Wireless Telecommunications, data for 2002 show that there were 1,397 firms that operated for the entire year.¹²

(Continued from previous page)

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.”

⁶ 15 U.S.C. § 632.

⁷ U.S. Census Bureau, 2007 NAICS Definitions, “517210 Wireless Telecommunications Categories (Except Satellite)”; <http://www.census.gov/naics/2007/def/NDEF517210.HTM#N517210>.

⁸ U.S. Census Bureau, 2002 NAICS Definitions, “517211 Paging”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

⁹ 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

¹⁰ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

¹¹ *Id.* 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 for firms with “1000 employees or more.”

¹² U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.¹³ Thus, we estimate that the majority of wireless firms are small.

8. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of "Paging"¹⁴ and "Cellular and Other Wireless Telecommunications."¹⁵ Under both categories, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.¹⁶ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.¹⁷ Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.¹⁸ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.¹⁹ Thus, under this second category and size standard, the majority of firms can, again, be considered small.

9. *Cellular Licensees.* The SBA has developed a small business size standard for small businesses in the category "Cellular and Other Wireless Telecommunications."²⁰ Under that SBA category, a business is small if it has 1,500 or fewer employees.²¹ For the census category of "Cellular and Other Wireless Telecommunications," Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.²² Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.²³ Thus, under this category and size standard, the majority of firms can be considered small.

10. *Broadband Personal Communications Service.* The broadband Personal Communications

¹³ *Id.* 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 for firms with "1000 employees or more."

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

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

¹⁶ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517211 (issued Nov. 2005).

¹⁷ *Id.* 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 for firms with "1000 employees or more."

¹⁸ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

¹⁹ *Id.* 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 for firms with "1000 employees or more."

²⁰ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517212.

²¹ *Id.*

²² U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

²³ *Id.* 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 for firms with "1000 employees or more."

Service (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.²⁴ 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.²⁵ These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.²⁶ No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the C Block 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.²⁷ In 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.²⁸

11. In 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction 35. Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In 2005, the Commission completed an auction of 188 C block licenses and 21 F block licenses in Auction 58. There were 24 winning bidders for 217 licenses.²⁹ Of the 24 winning bidders, 16 claimed small business status and won 156 licenses. In 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction 71.³⁰ Of the 14 winning bidders, six were designated entities.³¹ In 2008, the Commission completed an auction of 20 Broadband PCS licenses in the C, D, E and F block licenses in Auction 78.³²

12. *Narrowband Personal Communications Service.* In 1994, the Commission conducted an auction for Narrowband PCS licenses. A second auction was also conducted later in 1994. For purposes of the first two Narrowband PCS auctions, “small businesses” were entities with average gross revenues

²⁴ 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).

²⁵ 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.

²⁶ 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.

²⁷ FCC News, “Broadband PCS, D, E and F Block Auction Closes,” No. 71744 (rel. January 14, 1997).

²⁸ See “C, D, E, and F Block Broadband FCS Auction Closes,” *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

²⁹ See “Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58,” *Public Notice*, 20 FCC Rcd 3703 (2005).

³⁰ See “Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71,” *Public Notice*, 22 FCC Rcd 9247 (2007).

³¹ *Id.*

³² See Auction of AWS-1 and Broadband PCS Licenses Rescheduled For August 13, 3008, Notice of Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures For Auction 78, *Public Notice*, 23 FCC Rcd 7496 (2008) (“AWS-1 and Broadband PCS Procedures Public Notice”).

for the prior three calendar years of \$40 million or less.³³ Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.³⁴ 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.³⁵ 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.³⁶ 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.³⁷ The SBA has approved these small business size standards.³⁸ A third auction was conducted in 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.³⁹ Three of these claimed status as a small or very small entity and won 311 licenses.

13. *Specialized Mobile Radio.* 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.⁴⁰ The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.⁴¹ The SBA has approved these small business size standards for the 900 MHz Service.⁴² The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR was completed in 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 was conducted in 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million

³³ 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).

³⁴ 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).

³⁵ 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).

³⁶ *Id.*

³⁷ *Id.*

³⁸ 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.

³⁹ See “Narrowband PCS Auction Closes,” *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

⁴⁰ 47 C.F.R. § 90.814(b)(1).

⁴¹ *Id.*

⁴² See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.⁴³ A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.⁴⁴

14. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels was conducted in 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.⁴⁵ In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded⁴⁶. 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.

15. 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. In addition, we do not know how many of these firms have 1500 or fewer employees.⁴⁷ 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 approved by the SBA.

16. *AWS Services (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3))*. For the AWS-1 bands,⁴⁸ the Commission has defined a “small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a “very small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. For AWS-2 and AWS-3, although we do not know for certain which entities are likely to apply for these frequencies, we note that the AWS-1 bands are comparable to those used for cellular service and personal communications service. The Commission has not yet adopted size standards for the AWS-2 or AWS-3 bands but proposes to treat both AWS-2 and AWS-3 similarly to broadband PCS service and AWS-1 service due to the comparable capital requirements and other factors, such as issues involved in relocating incumbents and developing markets, technologies, and services.⁴⁹

⁴³ 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).

⁴⁴ See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

⁴⁵ See “800 MHz Specialized Mobile Radio (SMR) Service General Category (851-854 MHz) and Upper Band (861-865 MHz) Auction Closes; Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 17162 (2000).

⁴⁶ See, “800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 1736 (2000).

⁴⁷ See generally 13 C.F.R. § 121.201, NAICS code 517210.

⁴⁸ The service is defined in section 90.1301 *et seq.* of the Commission’s Rules, 47 C.F.R. § 90.1301 *et seq.*

⁴⁹ See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Report and Order*, 18 FCC Rcd 25162, App. B (2003), modified by Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, Order on Reconsideration, 20 FCC Rcd 14058, App. C (2005); Service Rules for Advanced Wireless Services in the 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz (continued....)

17. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.⁵⁰ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (“BETRS”).⁵¹ In the present context, we will use the SBA’s small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons.⁵² 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.

18. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses in the 2305-2320 MHz and 2345-2360 MHz bands. 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.⁵³ The SBA has approved these definitions.⁵⁴ The Commission 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.

19. *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 Wireless Telecommunications Carriers (except Satellite).⁵⁵ This category provides that a small business is a wireless company employing no more than 1,500 persons.⁵⁶ The Commission estimates that most such licensees are small businesses under the SBA’s small business standard.

20. *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 a new service, and is subject to spectrum auctions. In

(Continued from previous page)

and 2175–2180 MHz Bands; Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket Nos. 04-356, 02-353, *Notice of Proposed Rulemaking*, 19 FCC Rcd 19263, App. B (2005); Service Rules for Advanced Wireless Services in the 2155–2175 MHz Band, WT Docket No. 07-195, *Notice of Proposed Rulemaking*, 22 FCC Rcd 17035, App. (2007).

⁵⁰ The service is defined in § 22.99 of the Commission’s Rules, 47 C.F.R. § 22.99.

⁵¹ BETRS is defined in §§ 22.757 and 22.759 of the Commission’s Rules, 47 C.F.R. §§ 22.757 and 22.759.

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

⁵³ 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).

⁵⁴ 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.

⁵⁵ *Id.*

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

the 220 MHz *Third Report and Order*, the Commission 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.⁵⁷ 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.⁵⁸ 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.⁵⁹ The SBA has approved these small size standards.⁶⁰ Auctions of Phase II licenses commenced on and closed in 1998.⁶¹ 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.⁶² 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.⁶³ 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.⁶⁴ In 2007, the Commission conducted a fourth auction of the 220 MHz licenses.⁶⁵ Bidding credits were offered to small businesses. A bidder with attributed average annual gross revenues that exceeded \$3 million and did not exceed \$15 million for the preceding three years (“small business”) received a 25 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$3 million for the preceding three years received a 35 percent discount on its winning bid (“very small business”). Auction 72, which offered 94 Phase II 220 MHz Service licenses, concluded in 2007.⁶⁶ In this auction, five winning bidders won a total of 76 licenses. Two winning bidders identified themselves as very small businesses won 56 of the 76 licenses. One of the winning bidders that identified themselves as a small business won 5 of the 76 licenses won.

21. *700 MHz Guard Band Licenses.* In the *700 MHz Guard Band Order*, the Commission

⁵⁷ 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).

⁵⁸ *Id.* at 11068 ¶ 291.

⁵⁹ *Id.*

⁶⁰ See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998 (*Alvarez to Phythyon Letter 1998*).

⁶¹ See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

⁶² 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).

⁶³ See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

⁶⁴ See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

⁶⁵ See “Auction of Phase II 220 MHz Service Spectrum Scheduled for June 20, 2007, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures for Auction 72,” *Public Notice*, 22 FCC Rcd 3404 (2007).

⁶⁶ See “Auction of Phase II 220 MHz Service Spectrum Licenses Closes, Winning Bidders Announced for Auction 72, Down Payments due July 18, 2007, FCC Forms 601 and 602 due July 18, 2007, Final Payments due August 1, 2007, Ten-Day Petition to Deny Period,” *Public Notice*, 22 FCC Rcd 11573 (2007).