business is small if it has 1,500 or fewer employees.[32] According to Commission data,[33] 23 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 22 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our action.

17. *Prepaid Calling Card Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[34] According to Commission data,[35] 104 carriers have reported that they are engaged in the provision of prepaid calling cards. Of these, 102 are estimated to have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that all or the majority of prepaid calling card providers are small entities that may be affected by our action.

18. *800 and 800-Like Service Subscribers.*[36] These toll-free services fall within the broad economic census category of Telecommunications Resellers. This category "comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure."[37] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.[38] Census Bureau data for 2002 show that there were 1,646 firms in this category that operated for the entire year.[39] Of this total, 1,642 firms had employment of 999 or fewer employees, and four firms had employment of 1,000 employees or more.[40] Thus, the majority of these firms can be considered small. Additionally, it may be helpful to know the total numbers of telephone numbers assigned in these services. Commission data show that, as of June 2006, the total number of 800 numbers assigned was 7,647,941, the total number of 888 numbers assigned was 5,318,667, the total number of 877 numbers assigned was 4,431,162, and the total number of 866 numbers assigned was 6,008,976.[41]

b. International Service Providers

19. The Commission has not developed a small business size standard specifically for providers of international service. The appropriate size standards under SBA rules are for the two broad

[32] 13 C.F.R. § 121.201, NAICS code 517110.

[33] *Trends in Telephone Service* at Table 5.3.

[34] 13 C.F.R. § 121.201, NAICS code 517310.

[35] *Trends in Telephone Service* at Table 5.3.

[36] We include all toll-free number subscribers in this category, including those for 888 numbers.

[37] U.S. Census Bureau, 2007 NAICS Definitions, "517911 Telecommunications Resellers" (partial definition); http://www.census.gov/naics/2007/def/ND517911.HTM#N517911.

[38] 13 C.F.R. § 121.201, NAICS code 517911.

[39] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization," Table 5, NAICS code 517310 (issued Nov. 2005). Prior to 2007, the subject category was numbered 517310.

[40] *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."

[41] *Trends in Telephone Service* at Tables 18.4-18.8.

census categories of "Satellite Telecommunications" and "Other Telecommunications." Under both categories, such a business is small if it has $13.5 million or less in average annual receipts.[42]

20. The first category of Satellite Telecommunications "comprises establishments primarily engaged in providing point-to-point 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."[43] For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.[44] Of this total, 307 firms had annual receipts of under $10 million, and 26 firms had receipts of $10 million to $24,999,999.[45] Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

21. The second category of Other Telecommunications "comprises establishments primarily engaged in (1) providing specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations; or (2) providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems."[46] For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.[47] Of this total, 259 firms had annual receipts of under $10 million and 15 firms had annual receipts of $10 million to $24,999,999.[48] Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

c. Wireless Telecommunications Service Providers

22. Below, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

23. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of "Paging"[49] and "Cellular and Other Wireless Telecommunications."[50] Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there

[42] 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

[43] U.S. Census Bureau, "2002 NAICS Definitions: 517410 Satellite Telecommunications," *available at* http://www.census.gov/epcd/naics02/def/ND517410.HTM (visited Oct. 16, 2007).

[44] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 517410 (issued Nov. 2005).

[45] *Id.* An additional 38 firms had annual receipts of $25 million or more.

[46] U.S. Census Bureau, "2002 NAICS Definitions: 517910 Other Telecommunications," *available at* http://www.census.gov/epcd/naics02/def/ND517910.HTM (visited Oct. 16, 2007).

[47] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 517910 (issued Nov. 2005).

[48] *Id.* An additional 14 firms had annual receipts of $25 million or more.

[49] 13 C.F.R. § 121.201, NAICS code 517211 (changed from 513321 in Oct. 2002).

[50] 13 C.F.R. § 121.201, NAICS code 517212 (changed from 513322 in Oct. 2002).

were 807 firms in this category that operated for the entire year.[51] Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.[52] 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.[53] Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.[54] Thus, under this second category and size standard, the majority of firms can, again, be considered small.

24. *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."[55] Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. 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.[56] Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.[57] Thus, under this category and size standard, the majority of firms can be considered small. Also, according to Commission data, 437 carriers reported that they were engaged in the provision of cellular service, Personal Communications Service (PCS), or Specialized Mobile Radio (SMR) Telephony services, which are placed together in the data.[58] We have estimated that 260 of these are small under the SBA small business size standard.[59]

25. *Paging.* The SBA has developed a small business size standard for the broad economic census category of "Paging."[60] Under this category, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.[61] Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.[62] In addition, according to

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[51] 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).

[52] *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 firms with "1000 employees or more."

[53] 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).

[54] *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 firms with "1000 employees or more."

[55] 13 C.F.R. § 121.201, NAICS code 517212.

[56] 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).

[57] *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 firms with "1000 employees or more."

[58] *Trends in Telephone Service* at Table 5.3.

[59] *Id.*

[60] 13 C.F.R. § 121.201, NAICS code 517211.

[61] 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).

[62] *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."

Commission data,[63] 365 carriers have reported that they are engaged in the provision of "Paging and Messaging Service." Of this total, we estimate that 360 have 1,500 or fewer employees, and five have more than 1,500 employees. Thus, in this category the majority of firms can be considered small.

26. We also note that, in the *Paging Second Report and Order*, the Commission adopted a size standard for "small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[64] In this context, 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.[65] The SBA has approved this definition.[66] 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.[67] Fifty-seven companies claiming small business status won 440 licenses.[68] An auction of 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.[69] One hundred thirty-two 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.[70] We also note that, currently, there are approximately 74,000 Common Carrier Paging licenses.

27. *Wireless Communications Services*. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission established small business size standards for the wireless communications services (WCS) auction. A "small business" is an entity with average gross revenues of $40 million or less for each of the three preceding years, and a "very small business" is an entity with average gross revenues of $15 million or less for each of the three preceding years. The SBA has approved these small business size standards.[71] The Commission auctioned geographic area licenses in the WCS service. In the auction, there were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity.

28. *Wireless Telephony*. Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted earlier, the SBA has developed a small business size standard for "Cellular and Other Wireless Telecommunications" services.[72] Under that SBA small business size standard, a business is small if it has 1,500 or fewer

[63] *Trends in Telephone Service*, Table 5.3.

[64] *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, PP Docket No. 93-235, Second Report and Order, 12 FCC Rcd 2732, 2811-2812, paras. 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*, WT Docket No. 96-18, PP Docket No. 93-235, Memorandum Opinion and Order on Reconsideration, 14 FCC Rcd 10030, 10085-10088, paras. 98-107 (1999).

[65] *Paging Second Report and Order*, 12 FCC Rcd at 2811, para. 179.

[66] *See* Letter from Aida Alvarez, Administrator, Small Business Administration, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau (dated Dec. 2, 1998) (SBA Dec. 2, 1998 Letter).

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

[68] *Id.*.

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

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

[71] SBA Dec. 2, 1998 Letter.

[72] 13 C.F.R. § 121.201, NAICS code 517212.

employees.[73] According to Commission data, 432 carriers reported that they were engaged in the provision of wireless telephony.[74] We have estimated that 221 of these are small under the SBA small business size standard.

29. *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 defined "small entity" for Blocks C and F as an entity that has average gross revenues of $40 million or less in the three previous calendar years.[75] For Block F, 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.[76] These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.[77] 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.[78] On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 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.

30. *Narrowband Personal Communications Services.* The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second auction 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.[79] Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.[80] To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size

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[73] *Id.*

[74] *Trends in Telephone Service* at Table 5.3.

[75] *See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824, 61 FR 33859 (July 1, 1996) (*PCS Order*); *see also* 47 C.F.R. § 24.720(b).

[76] *See PCS Order*, 11 FCC Rcd 7824.

[77] *See, e.g., Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332, 59 FR 37566 (July 22, 1994).

[78] FCC News, Broadband PCS, D, E and F Block Auction Closes, No. 71744 (rel. Jan. 14, 1997); *see also Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses*, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436, 62 FR 55348 (Oct. 24, 1997).

[79] *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).

[80] *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).

standard in the Narrowband PCS Second Report and Order.[81] 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.[82] 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.[83] The SBA has approved these small business size standards.[84] A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.[85] Three of these claimed status as a small or very small entity and won 311 licenses.

31. *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 small business size standard for 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.[86] For the census category Cellular and Other Wireless Telecommunications, Census Bureau data for 1997 show that there were 977 firms in this category, total, that operated for the entire year.[87] 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.[88] Thus, under this second category and size standard, the majority of firms can, again, be considered small. Assuming 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 size standard. In addition, limited preliminary census data for 2002 indicate that the total number of cellular and other wireless telecommunications carriers increased approximately 321 percent from 1997 to 2002.[89]

[81] *Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, ET Docket No. 92-100, PP Docket No. 93-253, Second Report and Order and Second Further Notice of Proposed Rule Making, 15 FCC Rcd 10456, 10476, para. 40 (2000).

[82] *Id.*

[83] *Id.*

[84] *See* Letter from Aida Alvarez, Administrator, Small Business Administration, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission (dated Dec. 2, 1998).

[85] *See Narrowband PCS Auction Closes*, Public Notice, 16 FCC Rcd 18663 (WTB 2001).

[86] 13 C.F.R. § 121.201, NAICS code 517212.

[87] 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 Oct. 2000).

[88] *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 "Firms with 1000 employees or more."

[89] *See* U.S. Census Bureau, 2002 Economic Census, Industry Series: "Information," Table 2, Comparative Statistics for the United States (1997 NAICS Basis): 2002 and 1997, NAICS code 513322 (issued Nov. 2004). The preliminary data indicate that the total number of "establishments" increased from 2,959 to 9,511. In this context, the number of establishments is a less helpful indicator of small business prevalence than is the number of "firms," because the latter number takes into account the concept of common ownership or control. The more helpful 2002 census data on firms, including employment and receipts numbers, will be issued in late 2005.

32. *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*, we adopted a small business size standard for "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[90] This small business size 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.[91] A "very small business" is 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. The SBA has approved these small business size standards.[92] Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.[93] 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.[94] Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.[95]

33. *800 MHz and 900 MHz Specialized Mobile Radio Licenses.* The Commission awards "small entity" and "very 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, or that had revenues of no more than $3 million in each of the previous calendar years, respectively.[96] These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service 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. The Commission assumes, for purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz SMR bands. There were 60 winning bidders that qualified as small or very small entities in the 900 MHz SMR auctions. Of the 1,020 licenses won in the 900 MHz auction, bidders qualifying as small or very small entities won 263 licenses. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities.

34. *700 MHz Guard Band Licensees.* In the *700 MHz Guard Band Order*, we adopted a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[97] A "small business" as an entity that, together with its affiliates and controlling principals, has average gross

[90] *220 MHz Third Report and Order*, 12 FCC Rcd 10943, 11068-70, paras. 291-95 (1997).

[91] *Id.* at 11068, para. 291.

[92] *See* Letter from A. Alvarez, Administrator, SBA, to D. Phythyon, Chief, Wireless Telecommunications Bureau, FCC (Jan. 6, 1998).

[93] *See generally 220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (1998).

[94] *See, e.g., FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made*, Public Notice, 14 FCC Rcd 1085 (1999).

[95] *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (1999).

[96] 47 C.F.R. § 90.814(b)(1).

[97] *See Service Rules for the 746-764 MHz Bands, and Revisions to part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299, 65 FR 17594 (2000).

revenues not exceeding $15 million for the preceding three years. 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 $3 million for the preceding three years. An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.[98] 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.[99]

35. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.[100] A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).[101] The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.[102] 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.

36. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.[103] We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.[104] There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

37. *Aviation and Marine Radio Services.* Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.[105] Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 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 purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, had 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

[98] *See generally 220 MHz Service Auction Closes*, Public Notice, Report No. WT 98-36 (rel. Oct. 23, 1998).

[99] *700 MHz Guard Band Auction Closes*, Public Notice, 16 FCC Rcd 4590 (rel. Feb. 22, 2001).

[100] The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

[101] BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757, 22.759.

[102] 13 C.F.R. § 121.201, NAICS code 517212.

[103] The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

[104] 13 C.F.R. § 121.201, NAICS code 517212.

[105] *Id.*

interests and affiliates, had average gross revenues for the preceding three years not to exceed $3 million dollars.[106] There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

38. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.[107] There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.[108] Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.[109]

39. *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.[110] 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.[111] The SBA has approved these small business size standards.[112] 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. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and polices adopted herein.

40. *Wireless Cable Systems.* Wireless cable systems use 2 GHz band frequencies of the Broadband Radio Service ("BRS"), formerly Multipoint Distribution Service ("MDS"),[113] and the Educational Broadband Service ("EBS"), formerly Instructional Television Fixed Service ("ITFS"),[114] to

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[106] *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).

[107] This service is governed by Subpart I of Part 22 of the Commission's rules. *See* 47 C.F.R. §§ 22.1001-.1037.

[108] 13 C.F.R. § 121.201, NAICS code 517212.

[109] *Id.*

[110] *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 and Notice of Proposed Rulemaking, 12 FCC Rcd 18600, 63 FR 6079 (Feb. 6, 1998).

[111] *Id.*

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

[113] MDS, also known as Multichannel Multipoint Distribution Service ("MMDS"), is regulated by Part 21 of the Commission's rules, *see* 47 C.F.R. Part 21, subpart K, and has been renamed the Broadband Radio Service (BRS). *See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands; Part 1 of the Commission's Rules - Further Competitive Bidding Procedures; Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions; Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico; Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, WT Docket Nos. 03-66, 03-67, 02-68, and 00-230, MM Docket No. 97-217, RM-10586, RM-9718, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 14165 (2004) (*MDS/ITFS Order*).

[114] ITFS systems are regulated by Part 74 of the Commission's rules; *see* 47 C.F.R. Part 74, subpart I. ITFS, an educational service, has been renamed the Educational Broadband Service (EBS). *See MDS/ITFS Order*, 19 FCC Rcd 14165. ITFS licensees, however, are permitted to lease spectrum for MDS operation.

transmit video programming and provide broadband services to residential subscribers.[115] These services were originally designed for the delivery of multichannel video programming, similar to that of traditional cable systems, but over the past several years licensees have focused their operations instead on providing two-way high-speed Internet access services.[116] We estimate that the number of wireless cable subscribers is approximately 100,000, as of March 2005. Local Multipoint Distribution Service ("LMDS") is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.[117] As described below, the SBA small business size standard for the broad census category of Cable and Other Program Distribution, which consists of such entities generating $13.5 million or less in annual receipts, appears applicable to MDS, ITFS and LMDS.[118] Other standards also apply, as described.

41. The Commission has defined small MDS (now BRS) and LMDS entities in the context of Commission license auctions. In the 1996 MDS auction,[119] the Commission defined a small business as an entity that had annual average gross revenues of less than $40 million in the previous three calendar years.[120] This definition of a small entity in the context of MDS auctions has been approved by the SBA.[121] In the MDS auction, 67 bidders won 493 licenses. Of the 67 auction winners, 61 claimed status as a small business. At this time, the Commission estimates 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.[122] MDS licensees and wireless cable operators that did not receive their licenses as a result of the MDS auction fall under the SBA small business size standard for Cable and Other Program Distribution. Information available to us indicates that there are approximately 850 of these licensees and operators that do not generate revenue in excess of $13.5 million annually. Therefore, we estimate that there are approximately 850 small entity MDS (or BRS) providers, as defined by the SBA and the Commission's auction rules.

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[115] *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report,* 20 FCC Rcd 2507, 2565, para. 131 (2006) (*2006 Cable Competition Report*).

[116] *Id.*

[117] *See Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fix Satellite Services,* CC Docket No. 92-297, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 12545 (1997) (*Local Multipoint Distribution Service Order*).

[118] 13 C.F.R. § 121.201, NAICS code 517510.

[119] MDS Auction No. 6 began on November 13, 1995, and closed on March 28, 1996. (67 bidders won 493 licenses.)

[120] 47 C.F.R. § 21.961(b)(1).

[121] *See Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service & in the Instructional Television Fixed Service,* MM Docket No. 94-131, PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589 (1995).

[122] 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 standards for "other telecommunications" (annual receipts of $13.5 million or less). *See* 13 C.F.R. § 121.201, NAICS code 517910.

42. Educational institutions are included in this analysis as small entities; however, the Commission has not created a specific small business size standard for ITFS (now EBS).[123] We estimate that there are currently 2,032 ITFS (or EBS) licensees, and all but 100 of the licenses are held by educational institutions. Thus, we estimate that at least 1,932 ITFS licensees are small entities.

43. In the 1998 and 1999 LMDS auctions,[124] the Commission defined a small business as an entity that has annual average gross revenues of less than $40 million in the previous three calendar years.[125] Moreover, the Commission added an additional classification for a "very small business," which was defined as an entity that had annual average gross revenues of less than $15 million in the previous three calendar years.[126] These definitions of "small business" and "very small business" in the context of the LMDS auctions have been approved by the SBA.[127] In the first LMDS auction, 104 bidders won 864 licenses. Of the 104 auction winners, 93 claimed status as small or very small businesses. In the LMDS re-auction, 40 bidders won 161 licenses. Based on this information, we believe that the number of small LMDS licenses will include the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers as defined by the SBA and the Commission's auction rules.

44. *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.[128] The auction of the 1,030 LMDS licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licensees as an entity that has average gross revenues of less than $40 million in the three previous calendar years.[129] 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.[130] The SBA has approved these small business size standards in the context of LMDS auctions.[131] 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 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses consists of the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers.

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[123] 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.

[124] The Commission has held two LMDS auctions: Auction 17 and Auction 23. Auction No. 17, the first LMDS auction, began on February 18, 1998, and closed on March 25, 1998. (104 bidders won 864 licenses.) Auction No. 23, the LMDS re-auction, began on April 27, 1999, and closed on May 12, 1999. (40 bidders won 161 licenses.)

[125] *See Local Multipoint Distribution Service Order*, 12 FCC Rcd at 12545.

[126] *Id.*

[127] *See* Letter from A. Alvarez, Administrator, SBA, to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, FCC (January 6, 1998).

[128] *See Local Multipoint Distribution Service Order*, 12 FCC Rcd 12545.

[129] *Id.*

[130] *See id.*

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

45. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was 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.[132] In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we established a small business size standard for 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 to exceed $15 million for the preceding three years.[133] 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 to exceed $3 million for the preceding three years.[134] We cannot estimate, however, 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.

46. *24 GHz – Incumbent 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 "Cellular and Other Wireless Telecommunications" companies. This category provides that such a company is small if it employs no more than 1,500 persons.[135] According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.[136] 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.[137] Thus, under this size standard, the great majority of firms can be considered small. These 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, Teligent[138] 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.

47. *24 GHz – Future Licensees.* With respect to new applicants in the 24 GHz band, the small business size standard for "small business" is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of $15 million.[139] "Very small business" in the 24 GHz band is an entity that, together with controlling interests and

[132] *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 9 FCC Rcd 2330, 59 FR 24947 (May 13, 1994).

[133] *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, 15 FCC Rcd 1497, 64 FR 59656 (Nov. 3, 1999).

[134] *Id.*

[135] 13 C.F.R. § 121.201, NAICS code 517212.

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

[137] *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 "Firms with 1,000 employees or more."

[138] 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.

[139] *Amendments to Parts 1,2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967, para. 77 (2000); *see also* 47 C.F.R. § 101.538(a)(2).

affiliates, has average gross revenues not exceeding $3 million for the preceding three years.[140] The SBA has approved these small business size standards.[141] These size standards will apply to the future auction, if held.

2. Cable and OVS Operators

48. *Cable Television Distribution Services.* Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."[142] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. To gauge small business prevalence for these cable services we must, however, use current census data that are based on the previous category of Cable and Other Program Distribution and its associated size standard; that size standard was: all such firms having $13.5 million or less in annual receipts.[143] According to Census Bureau data for 2002, there were a total of 1,191 firms in this previous category that operated for the entire year.[144] Of this total, 1,087 firms had annual receipts of under $10 million, and 43 firms had receipts of $10 million or more but less than $25 million.[145] Thus, the majority of these firms can be considered small.

49. *Cable Companies and Systems.* The Commission has also developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide.[146] Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.[147] In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.[148] Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers,

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[140] *Amendments to Parts 1,2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967, para. 77 (2000); *see also* 47 C.F.R. § 101.538(a)(1).

[141] *See* Letter from Gary M. Jackson, Assistant Administrator, SBA, to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (July 28, 2000).

[142] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition); http://www.census.gov/naics/2007/def/ND517110.HTM#N517110.

[143] 13 C.F.R. § 121.201, NAICS code 517110.

[144] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, Table 4, Receipts Size of Firms for the United States: 2002, NAICS code 517510 (issued November 2005).

[145] *Id.* An additional 61 firms had annual receipts of $25 million or more.

[146] 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of $100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rate Regulation,* Sixth Report and Order and Eleventh Order on Reconsideration, MM Docket Nos. 92-266, 93-215, 10 FCC Rcd 7393, 7408 (1995).

[147] These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

[148] 47 C.F.R. § 76.901(c).

and an additional 379 systems have 10,000-19,999 subscribers.[149] Thus, under this second size standard, most cable systems are small

50. *Cable System Operators.* The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[150] The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed $250 million in the aggregate.[151] Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.[152] We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million,[153] and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

51. *Open Video Systems (OVS).* In 1996, Congress established the open video system (OVS) framework, one of four statutorily recognized options for the provision of video programming services by local exchange carriers (LECs).[154] The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,[155] OVS falls within the SBA small business size standard of Cable and Other Program Distribution Services, which consists of such entities having $13.5 million or less in annual receipts.[156] The Commission has certified 25 OVS operators, with some now providing service. Broadband service providers (BSPs) are currently the only significant holders of OVS certifications or local OVS franchises.[157] As of June, 2005, BSPs served approximately 1.4 million subscribers, representing 1.5 percent of all MVPD households.[158] Affiliates of Residential Communications Network, Inc. (RCN), which serves about 371,000 subscribers as of June, 2005, is currently the largest BSP and 14th largest

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[149] Warren Communications News, *Television & Cable Factbook 2006*, "U.S. Cable Systems by Subscriber Size," page F-2 (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

[150] 47 U.S.C. § 543(m)(2); *see* 47 C.F.R. § 76.901(f) & nn. 1-3.

[151] 47 C.F.R. § 76.901(f); *see FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, DA 01-158, 16 FCC Rcd 2225 (Cable Services Bureau, Jan. 24, 2001).

[152] These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

[153] The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules. *See* 47 C.F.R. § 76.909(b).

[154] 47 U.S.C. § 571(a)(3)-(4). *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report,* 20 FCC Rcd 2507, 2549, para. 88 (2006) (*2006 Cable Competition Report*).

[155] *See* 47 U.S.C. § 573.

[156] 13 C.F.R. § 121.201, NAICS code 517510.

[157] *See 2006 Cable Competition Report*, 20 FCC Rcd at 2549, para. 88. BSPs are newer firms that are building state-of-the-art, facilities-based networks to provide video, voice, and data services over a single network.

[158] *See id.* at 2507, para. 14.

MVPD.[159] RCN received approval to operate OVS systems in New York City, Boston, Washington, D.C. and other areas. The Commission does not have financial information regarding the entities authorized to provide OVS, some of which may not yet be operational. We thus believe that at least some of the OVS operators may qualify as small entities.

3. Internet Service Providers

52. *Internet Service Providers.* The SBA has developed a small business size standard for Internet Service Providers (ISPs). ISPs "provide clients access to the Internet and generally provide related services such as web hosting, web page designing, and hardware or software consulting related to Internet connectivity."[160] Under the SBA size standard, such a business is small if it has average annual receipts of $23 million or less.[161] According to Census Bureau data for 2002, there were 2,529 firms in this category that operated for the entire year.[162] Of these, 2,437 firms had annual receipts of under $10 million, and an additional 47 firms had receipts of between $10 million and $24, 999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

4. Other Internet-Related Entities

53. *Web Search Portals.* Our action pertains to VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the Census Bureau has identified firms that "operate web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format. Web search portals often provide additional Internet services, such as e-mail, connections to other web sites, auctions, news, and other limited content, and serve as a home base for Internet users."[163] The SBA has developed a small business size standard for this category; that size standard is $6.5 million or less in average annual receipts.[164] According to Census Bureau data for 2002, there were 342 firms in this category that operated for the entire year.[165] Of these, 303 had annual receipts of under $5 million, and an additional 15 firms had receipts of between $5 million and $9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

54. *Data Processing, Hosting, and Related Services.* Entities in this category "primarily . . . provid[e] infrastructure for hosting or data processing services."[166] The SBA has developed a small

[159] *See 2006 Cable Competition Report*, 20 FCC Rcd at 2549, para. 89. WideOpenWest is the second largest BSP and 16th largest MVPD, with cable systems serving about 292,000 subscribers as of June, 2005. The third largest BSP is Knology, serving approximately 170,800 subscribers as of June 2005. *Id.*

[160] U.S. Census Bureau, "2002 NAICS Definitions: 518111 Internet Service Providers," *available at* http://www.census.gov/epcd/naics02/def/NDEF518.HTM.

[161] 13 C.F.R. § 121.201, NAICS code 518111.

[162] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518111 (issued Nov. 2005).

[163] U.S. Census Bureau, "2002 NAICS Definitions: 518112 Web Search Portals," *available at* http://www.census.gov/epcd/naics02/def/NDEF518.HTM.

[164] 13 C.F.R. § 121.201, NAICS code 518112.

[165] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518112 (issued Nov. 2005).

[166] U.S. Census Bureau, "2002 NAICS Definitions: 518210 Data Processing, Hosting, and Related Services," *available at* http://www.census.gov/epcd/naics02/def/NDEF518.HTM.

business size standard for this category; that size standard is $23 million or less in average annual receipts.[167] According to Census Bureau data for 2002, there were 6,877 firms in this category that operated for the entire year.[168] Of these, 6,418 had annual receipts of under $10 million, and an additional 251 firms had receipts of between $10 million and $24,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

55. *All Other Information Services.* "This industry comprises establishments primarily engaged in providing other information services (except new syndicates and libraries and archives)."[169] Our action pertains to VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is $6.5 million or less in average annual receipts.[170] According to Census Bureau data for 2002, there were 155 firms in this category that operated for the entire year.[171] Of these, 138 had annual receipts of under $5 million, and an additional four firms had receipts of between $5 million and $9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

56. *Internet Publishing and Broadcasting.* "This industry comprises establishments engaged in publishing and/or broadcasting content on the Internet exclusively. These establishments do not provide traditional (non-Internet) versions of the content that they publish or broadcast."[172] The SBA has developed a small business size standard for this census category; that size standard is 500 or fewer employees.[173] According to Census Bureau data for 2002, there were 1,362 firms in this category that operated for the entire year.[174] Of these, 1,351 had employment of 499 or fewer employees, and six firms had employment of between 500 and 999. Consequently, we estimate that the majority of these firms small entities that may be affected by our action.

57. *Software Publishers.* These companies may design, develop or publish software and may provide other support services to software purchasers, such as providing documentation or assisting in installation. The companies may also design software to meet the needs of specific users.[175] The SBA has developed a small business size standard of $23 million or less in average annual receipts for all of the following pertinent categories: Software Publishers, Custom Computer Programming Services, and Other Computer Related Services.[176] For Software Publishers, Census Bureau data for 2002 indicate that

[167] 13 C.F.R. § 121.201, NAICS code 518210.

[168] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518210 (issued Nov. 2005).

[169] U.S. Census Bureau, "2002 NAICS Definitions: 519190 All Other Information Services," *available at* http://www.census.gov/epcd/naics02/def/NDEF519.HTM.

[170] 13 C.F.R. § 121.201, NAICS code 519190.

[171] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 519190 (issued Nov. 2005).

[172] U.S. Census Bureau, "2002 NAICS Definitions: 516110 Internet Publishing and Broadcasting," *available at* http://www.census.gov/epcd/naics02/def/NDEF516.HTM.

[173] 13 C.F.R. § 121.201, NAICS code 516110.

[174] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 516110 (issued Nov. 2005).

[175] *See* U.S. Census Bureau, "2002 NAICS Definitions: 511210 Software Publishers," *available at* http://www.census.gov/epcd/naics02/def/NDEF511.HTM.

[176] 13 C.F.R. § 121.201, NAICS codes 511210, 541511, and 541519.

there were 6,155 firms in the category that operated for the entire year.[177] Of these, 7,633 had annual receipts of under $10 million, and an additional 403 firms had receipts of between $10 million and $24, 999,999. For providers of Custom Computer Programming Services, the Census Bureau data indicate that there were 32,269 firms that operated for the entire year.[178] Of these, 31,416 had annual receipts of under $10 million, and an additional 565 firms had receipts of between $10 million and $24,999,999. For providers of Other Computer Related Services, the Census Bureau data indicate that there were 6,357 firms that operated for the entire year.[179] Of these, 6,187 had annual receipts of under $10 million, and an additional 101 firms had receipts of between $10 million and $24,999,999. Consequently, we estimate that the majority of the firms in each of these three categories are small entities that may be affected by our action.

5. Equipment Manufacturers

58. SBA small business size standards are given in terms of "firms." Census Bureau data concerning computer manufacturers, on the other hand, are given in terms of "establishments." We note that the number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the census numbers provided below may reflect inflated numbers of businesses in the given category, including the numbers of small businesses.

59. *Electronic Computer Manufacturing.* This category "comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers."[180] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.[181] According to Census Bureau data, there were 485 establishments in this category that operated with payroll during 2002.[182] Of these, 476 had employment of under 1,000, and an additional four establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities.

60. *Computer Storage Device Manufacturing.* These establishments manufacture "computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media."[183] The SBA has developed a small business size standard for this category of

[177] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 511210 (issued Nov. 2005).

[178] U.S. Census Bureau, 2002 Economic Census, Subject Series: Professional, Scientific, and Technical Services, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 541511 (issued Nov. 2005).

[179] U.S. Census Bureau, 2002 Economic Census, Subject Series: Professional, Scientific, and Technical Services, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 541519 (issued Nov. 2005).

[180] U.S. Census Bureau, 2002 NAICS Definitions, "334111 Electronic Computer Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334111.HTM#N334111.

[181] 13 C.F.R. § 121.201, NAICS code 334111.

[182] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Electronic Computer Manufacturing," Table 4, NAICS code 334111 (issued Dec. 2004).

[183] U.S. Census Bureau, 2002 NAICS Definitions, "334112 Computer Storage Device Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334112.HTM#N334112.

manufacturing; that size standard is 1,000 or fewer employees.[184] According to Census Bureau data, there were 170 establishments in this category that operated with payroll during 2002.[185] Of these, 164 had employment of under 500, and five establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities

61. *Computer Terminal Manufacturing.* "Computer terminals are input/output devices that connect with a central computer for processing."[186] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.[187] According to Census Bureau data, there were 71 establishments in this category that operated with payroll during 2002, and all of the establishments had employment of under 1,000.[188] Consequently, we estimate that all of these establishments are small entities.

62. *Other Computer Peripheral Equipment Manufacturing.* Examples of peripheral equipment in this category include keyboards, mouse devices, monitors, and scanners.[189] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.[190] According to Census Bureau data, there were 860 establishments in this category that operated with payroll during 2002.[191] Of these, 851 had employment of under 1,000, and an additional five establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities.

63. *Audio and Video Equipment Manufacturing.* These establishments manufacture "electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications."[192] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 750 or fewer employees.[193] According to Census Bureau data, there were 571 establishments in this category that operated with payroll during 2002.[194] Of these, 560 had employment of under 500, and ten establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

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[184] 13 C.F.R. § 121.201, NAICS code 334112.

[185] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Computer Storage Device Manufacturing," Table 4, NAICS code 334112 (issued Dec. 2004).

[186] U.S. Census Bureau, 2002 NAICS Definitions, "334113 Computer Terminal Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334113.HTM#N334113.

[187] 13 C.F.R. § 121.201, NAICS code 334113.

[188] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Computer Terminal Manufacturing," Table 4, NAICS code 334113 (issued Dec. 2004). In fact, all had employment of under 500.

[189] U.S. Census Bureau, 2002 NAICS Definitions, "334119 Other Computer Peripheral Equipment Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334119.HTM#N334119.

[190] 13 C.F.R. § 121.201, NAICS code 334119.

[191] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Other Computer Peripheral Equipment Manufacturing," Table 4, NAICS code 334119 (issued Dec. 2004).

[192] U.S. Census Bureau, 2002 NAICS Definitions, "334310 Audio and Video Equipment Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334310.HTM#N334310.

[193] 13 C.F.R. § 121.201, NAICS code 334310.

[194] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Audio and Video Equipment Manufacturing," Table 4, NAICS code 334310 (issued Dec. 2004).

64. *Electron Tube Manufacturing.* These establishments are "primarily engaged in manufacturing electron tubes and parts (except glass blanks)."[195] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 750 or fewer employees.[196] According to Census Bureau data, there were 102 establishments in this category that operated with payroll during 2002.[197] Of these, 97 had employment of under 500, and one establishment had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

65. *Bare Printed Circuit Board Manufacturing.* These establishments are "primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components."[198] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.[199] According to Census Bureau data, there were 936 establishments in this category that operated with payroll during 2002.[200] Of these, 922 had employment of under 500, and 12 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

66. *Semiconductor and Related Device Manufacturing.* Examples of manufactured devices in this category include "integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells and other optoelectronic devices."[201] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.[202] According to Census Bureau data, there were 1,032 establishments in this category that operated with payroll during 2002.[203] Of these, 950 had employment of under 500, and 42 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

67. *Electronic Capacitor Manufacturing.* These establishments manufacture "electronic fixed and variable capacitors and condensers."[204] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.[205] According to Census

[195] U.S. Census Bureau, 2002 NAICS Definitions, "334411 Electron Tube Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334411.HTM#N334411.

[196] 13 C.F.R. § 121.201, NAICS code 334411.

[197] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Electron Tube Manufacturing," Table 4, NAICS code 334411 (issued Dec. 2004).

[198] U.S. Census Bureau, 2002 NAICS Definitions, "334412 Bare Printed Circuit Board Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334412.HTM#N334412.

[199] 13 C.F.R. § 121.201, NAICS code 334412.

[200] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Bare Printed Circuit Board Manufacturing," Table 4, NAICS code 334412 (issued Jan. 2005).

[201] U.S. Census Bureau, 2002 NAICS Definitions, "334413 Semiconductor and Related Device Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334413.HTM#N334413.

[202] 13 C.F.R. § 121.201, NAICS code 334413.

[203] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Semiconductor and Related Device Manufacturing ," Table 4, NAICS code 334413 (issued Jan. 2005).

[204] U.S. Census Bureau, 2002 NAICS Definitions, "334414 Electronic Capacitor Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334414.HTM#N334414.

[205] 13 C.F.R. § 121.201, NAICS code 334414.

Bureau data, there were 104 establishments in this category that operated with payroll during 2002.[206] Of these, 101 had employment of under 500, and two establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

68. *Electronic Resistor Manufacturing.* These establishments manufacture "electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors."[207] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.[208] According to Census Bureau data, there were 79 establishments in this category that operated with payroll during 2002.[209] All of these establishments had employment of under 500. Consequently, we estimate that all of these establishments are small entities.

69. *Electronic Coil, Transformer, and Other Inductor Manufacturing.* These establishments manufacture "electronic inductors, such as coils and transformers."[210] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.[211] According to Census Bureau data, there were 365 establishments in this category that operated with payroll during 2002.[212] All of these establishments had employment of under 500. Consequently, we estimate that all of these establishments are small entities.

70. *Electronic Connector Manufacturing.* These establishments manufacture "electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic."[213] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.[214] According to Census Bureau data, there were 321 establishments in this category that operated with payroll during 2002.[215] Of these, 315 had employment of under 500, and three establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

71. *Printed Circuit Assembly (Electronic Assembly) Manufacturing.* These are establishments "primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards."[216] The SBA has developed a small business size standard for this category

[206] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Electronic Capacitor Manufacturing," Table 4, NAICS code 334414 (issued Jan. 2005).

[207] U.S. Census Bureau, 2002 NAICS Definitions, "334415 Electronic Resistor Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334415.HTM#N334415.

[208] 13 C.F.R. § 121.201, NAICS code 334415.

[209] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Electronic Resistor Manufacturing," Table 4, NAICS code 334415 (issued Jan. 2005).

[210] U.S. Census Bureau, 2002 NAICS Definitions, "334416 Electronic Coil, Transformer, and Other Inductor Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334416.HTM#N334416.

[211] 13 C.F.R. § 121.201, NAICS code 334416.

[212] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Electronic Coil, Transformer, and Other Inductor Manufacturing," Table 4, NAICS code 334416 (issued Jan. 2005).

[213] U.S. Census Bureau, 2002 NAICS Definitions, "334417 Electronic Connector Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334417.HTM#N334417.

[214] 13 C.F.R. § 121.201, NAICS code 334417.

[215] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Electronic Connector Manufacturing," Table 4, NAICS code 334417 (issued Jan. 2005).

[216] U.S. Census Bureau, 2002 NAICS Definitions, "334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334418.HTM#N334418.

of manufacturing; that size standard is 500 or fewer employees.[217] According to Census Bureau data, there were 868 establishments in this category that operated with payroll during 2002.[218] Of these, 839 had employment of under 500, and 18 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

72. *Other Electronic Component Manufacturing.*[219] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.[220] According to Census Bureau data, there were 1,627 establishments in this category that operated with pay roll during 2002.[221] Of these, 1,616 had employment of under 500, and eight establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

73. *Fiber Optic Cable Manufacturing.* These establishments manufacture "insulated fiber-optic cable from purchased fiber-optic strand."[222] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.[223] According to Census Bureau data, there were 96 establishments in this category that operated with payroll during 2002.[224] Of these, 95 had employment of under 1,000, and one establishment had employment of 1,000 to 2,499. Consequently, we estimate that the majority or all of these establishments are small entities.

74. *Other Communication and Energy Wire Manufacturing.* These establishments manufacture "insulated wire and cable of nonferrous metals from purchased wire."[225] The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.[226] According to Census Bureau data, there were 356 establishments in this category that operated with payroll during 2002.[227] Of these, 353 had employment of under 1,000, and three establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority or all of these establishments are small entities.

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[217] 13 C.F.R. § 121.201, NAICS code 334418.

[218] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Printed Circuit Assembly (Electronic Assembly) Manufacturing," Table 4, NAICS code 334418 (issued Jan. 2005).

[219] U.S. Census Bureau, 2002 NAICS Definitions, "334419 Other Electronic Component Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND334419.HTM#N334419.

[220] 13 C.F.R. § 121.201, NAICS code 334419.

[221] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Other Electronic Component Manufacturing," Table 4, NAICS code 334419 (issued Jan. 2005).

[222] U.S. Census Bureau, 2002 NAICS Definitions, "335921 Fiber Optic Cable Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND335921.HTM#N335921.

[223] 13 C.F.R. § 121.201, NAICS code 335921.

[224] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Fiber Optic Cable Manufacturing," Table 4, NAICS code 335921 (issued Dec. 2004).

[225] U.S. Census Bureau, 2002 NAICS Definitions, "335929 Other Communication and Energy Wire Manufacturing," *available at* http://www.census.gov/epcd/naics02/def/ND335929.HTM#N335929.

[226] 13 C.F.R. § 121.201, NAICS code 335929.

[227] U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Other Communication and Energy Wire Manufacturing," Table 4, NAICS code 335929 (issued Dec. 2004).

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

75. In this Report and Order, we are requiring telecommunications carriers and providers of interconnected VoIP service to collect certain information and take other actions to comply with LNP and other numbering administration obligations. For example, we are requiring both interconnected VoIP providers and their numbering partners to facilitate a customer's porting request to or from an interconnected VoIP provider, which means that the interconnected VoIP provider has an affirmative legal obligation to take all steps necessary to initiate or allow a port-in or port-out itself or through its numbering partner on behalf of the interconnected VoIP customer, subject to a valid port request, without unreasonable delay or unreasonable procedures that have the effect of delaying or denying porting of the number.[228] We also prohibit interconnected VoIP providers and their numbering partners from entering into agreements that would prohibit or unreasonably delay an interconnected VoIP service end user from porting between interconnected VoIP providers, or to or from a wireline carrier or a covered CMRS provider.[229] Further, we expect interconnected VoIP providers to fully inform their customers about limitations on porting between providers, particularly limitations that result from the portable nature of, and use of non-geographic numbers by, certain interconnected VoIP services.[230]

76. We are also requiring interconnected VoIP providers to contribute to meet shared numbering administration and LNP costs. The reporting requirements for determining interconnected VoIP providers' contribution to the shared cost of numbering administration and LNP require interconnected VoIP providers to file an annual FCC Form 499-A.[231] We require interconnected VoIP providers to include in their annual FCC Form 499-A filing historical revenue information for the relevant year, including all information necessary to allocate revenues across the seven LNPA regions.[232] To alleviate the burdens of attributing costs among the seven LNPA regions, we allow these providers to use a proxy based on the percentage of subscribers a provider serves in a particular region for reaching an estimate for allocating their end-user revenues to the appropriate regional LNPA.[233]

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

77. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (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.[234]

78. The *IP-Enabled Services Notice* sought comment on whether numbering obligations should be extended to IP-enabled services, and invited comment on the effect various proposals would

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[228] *See* Report and Order, *supra* para. 32.

[229] *See id.*, *supra* para. 33.

[230] *See id.*, *supra* note 114.

[231] *See id.*, *supra* para. 40.

[232] *See id.*

[233] *See id.*, *supra* para. 38.

[234] 5 U.S.C. § 603(c).

have on small entities, as well as the effect alternative rules would have on these entities.[235] However, we must assess the interests of small businesses in light of the overriding public interest in ensuring that all consumers benefit from local number portability. In the Report and Order, the Commission found that allowing customers of interconnected VoIP services to receive the benefits of LNP is fundamentally important for the protection of consumers and benefits not only customers, but the interconnected VoIP providers themselves.[236] Specifically, the Commission found that the ability of end users to retain their NANP telephone numbers when changing service providers gives customers flexibility in the quality, price, and variety of services they can choose to purchase. Allowing customers to respond to price and service changes without changing their telephone numbers will enhance competition, a fundamental goal of section 251 of the Act.[237] In addition, the Commission found that failure to extend LNP obligations to interconnected VoIP providers and their numbering partners would thwart the effective and efficient administration of the Commission's number administration responsibilities under section 251 of the Act.[238]

79. The Commission concluded that because interconnected VoIP providers, including small businesses, benefit from LNP, all interconnected VoIP providers, including small businesses, should contribute to meet shared LNP costs.[239] However, to alleviate costs involved in the attribution systems for all of their end-user services, when filing FCC Form 499-A, the Commission allowed interconnected VoIP providers, including small businesses, to use a proxy based on the percentage of subscribers a provider serves in a particular region for allocating their end-user revenues to the appropriate regional LNPA.[240]

80. **Report to Congress:** The Commission will send a copy of the Order, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.[241] A copy of the Order and FRFA (or summaries thereof) will also be published in the Federal Register.[242]

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[235] *See IP-Enabled Services Notice*, 19 FCC Rcd at 4912-14, paras. 74-76.

[236] *See* Report and Order, *supra* paras. 17, 26.

[237] *See id.*

[238] *See id.*, *supra* para. 27.

[239] *See id.*, *supra* para. 38.

[240] *See id.*

[241] *See* 5 U.S.C. § 801(a)(1)(A).

[242] *See* 5 U.S.C. § 604(b).

APPENDIX D

Final Regulatory Flexibility Analysis (Intermodal Local Number Portability)

CC Docket No. 95-116

1. As required by the Regulatory Flexibility Act, as amended (RFA),[1] an Initial Regulatory Flexibility Analysis (IRFA) was published for the *Intermodal Number Portability Order*.[2] The Commission sought written public comment on the IRFA. We received comments specifically directed toward the IRFA, which are discussed below. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.[3]

A. Need for, and Objectives of, the Rules

2. Section 251(b) of the Communications Act requires local exchange carriers to provide number portability, to the extent technically feasible, in accordance with the requirements prescribed by the Commission.[4] In the *Intermodal Number Portability Order*, the Commission found that porting from a wireline carrier to a wireless carrier is required where the requesting wireless carrier's coverage area overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port.[5] The United States Court of Appeals for the District of Columbia remanded the *Intermodal Number Portability Order* to the Commission to prepare the required FRFA on the impact of the order on carriers that qualify as small entities under the RFA.[6] After considering information received from commenters in response to the IRFA, we conclude that wireline carriers qualifying as small entities under the RFA will be required to provide wireline-to-wireless intermodal porting where the requesting wireless carrier's coverage area overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port.

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

3. In this section, we respond to comments filed in response to the IRFA.[7] To the extent the Commission received comments raising general small business concerns during this proceeding, those comments are discussed throughout the *Intermodal Number Portability Order*.

4. As an initial matter, we reject arguments that carriers that qualify as "small entities" should not have to comply with the intermodal porting requirements until the Commission addresses issues

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

[2] *See Federal Communications Commission Seeks Comment on Initial Regulatory Flexibility Analysis in Telephone Number Portability Proceeding*, CC Docket No. 95-116, Public Notice, 20 FCC Rcd 8616 (2005) (*Number Portability IRFA Notice*); *see also* 70 Fed. Reg. 41655 (Jul. 20, 2005).

[3] *See* 5 U.S.C. § 604.

[4] 47 U.S.C. § 251(b).

[5] *See Intermodal Number Portability Order*, 18 FCC Rcd at 23706, para. 22.

[6] *See United States Telecom Ass'n. v. FCC*, 400 F.3d at 43.

[7] *See* 5 U.S.C. § 604.

pertaining to rating and routing that are pending in the intercarrier compensation proceeding.[8] The issues that have been raised in this proceeding with respect to transporting calls to ported numbers are also before the Commission in the context of all numbers (without distinguishing between ported or non-ported numbers) in the intercarrier compensation proceeding.[9] Further, as the Commission found in the *Intermodal Number Portability Order*, the issue of transport costs associated with calls to ported numbers is outside the scope of this proceeding and not relevant to the application of the LNP obligations under the Act.[10]

5. We also reject recommendations that the Commission create a partial or blanket exemption for small carriers from the wireline-to-wireless intermodal porting requirements based on the high costs of implementation.[11] We find that small carriers have not demonstrated such significant costs associated with implementation of LNP to warrant an exemption. Several small carriers claim that they may face a variety of costs associated with wireline-to-wireless intermodal porting, which would be excessive in light of their small customer bases.[12] However, other commenters point out that the cost information these carriers present shows a large range of cost estimates, and in fact, even when the estimates are taken at face value, they indicate that the cost of wireline-to-wireless intermodal LNP does not impose a

[8] *See, e.g.*, NTCA/OPASTCO Comments, CC Docket No. 95-116, at 18-19 (filed Aug. 19, 2005); NTCA/OPASTCO Reply, CC Docket No. 95-116, at 5 (filed Sept. 7, 2005); Office of Advocacy, SBA Comments, CC Docket No. 95-116, at 8 (filed Aug. 15, 2005); Missouri Small Telephone Company Group, CC Docket No. 95-116, at 4-7 (filed Aug. 19, 2005); Nebraska Rural Independent Companies Comments, CC Docket No. 95-116, at 6-7 (filed Aug. 19, 2005).

[9] Rating and routing issues are currently before the Commission in several proceedings. *See, e.g.*, *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Notice of Proposed Rulemaking, 16 FCC Rcd 9610 (2001) (*Intercarrier Compensation Notice of Proposed Rulemaking*); *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Further Notice of Proposed Rulemaking, 20 FCC Rcd 4685 (2005) (*Intercarrier Compensation Further Notice*); *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Order, 21 FCC Rcd 14764 (WCB 2007); *Pleading Cycle Extended for Comment on Amendments to the Missoula Plan Intercarrier Compensation Proposal to Incorporate a Federal Benchmark Mechanism*, CC Docket No. 01-92, Public Notice, 22 FCC Rcd 5098 (2007); Sprint Petition for Declaratory Ruling, CC Docket No. 01-92, at 1 (filed May 9, 2002); *see also Comment Sought on Petitions for Declaratory Ruling Regarding Intercarrier Compensation for Wireless Traffic*, CC Docket 01-92, Public Notice, 17 FCC Rcd 19046 (2002); ASAP Paging, Inc. Petition for Preemption of Public Utility Commission of Texas Concerning Retail Rating of Local Calls to CMRS Carriers, WC Docket No. 04-6 (filed Dec. 22, 2003); *Pleading Cycle Establishing for Petition of ASAP Paging, Inc. for Preemption of the Public Utility Commission of Texas Concerning Retail Rating of Local Calls to CMRS Carriers*, WC Docket No. 04-6, Public Notice, 19 FCC Rcd 936 (2004).

[10] *See Intermodal Number Portability Order*, 18 FCC Rcd at 23713, para. 40. We emphasize that our findings in this FRFA are limited to the context of the wireline-to-wireless intermodal LNP requirements that are applicable to wireline carriers qualifying as small entities under the RFA. We make no determination regarding issues pending in the intercarrier compensation proceeding and nothing in this FRFA should be viewed as prejudging the outcome of that proceeding. Our decision here does not prejudge the ability of state commissions to consider rating and routing issues or transport costs in their review of petitions filed pursuant to section 251(f)(2).

[11] *See, e.g.*, Missouri Small Telephone Company Group Comments, CC Docket No. 95-116, at 13 (filed Aug. 19, 2005); Nebraska Rural Independent Companies Comments, CC Docket No. 95-116, at 8 (filed Aug. 19, 2005); Rural Iowa Independent Telephone Association Comments, CC Docket No. 95-116, at 5 (filed Aug. 19, 2005); South Dakota Telecommunications Association, CC Docket No. 95-116, at 6 (filed Aug. 19, 2005).

[12] *See, e.g.*, Missouri Small Telephone Company Group Comments, CC Docket No. 95-116, at 2-6 (filed Aug. 19, 2005); Montana Small Rural Independents Comments, CC Docket No. 95-116, at 10 (filed Aug. 19, 2005); Nebraska Rural Independent Companies Comments, CC Docket No. 95-116, at 4 (filed Aug. 19, 2005); USTA Comments, CC Docket No. 95-116, at 8-10 (filed Aug. 19, 2005); USTA Reply, CC Docket No. 95-116, at 8 (filed Sept. 6, 2005).