

7. *Small Businesses.* Nationwide, there are a total of approximately 22.4 million small businesses according to SBA data.<sup>16</sup>

8. *Small Organizations.* Nationwide, there are approximately 1.6 million small organizations.<sup>17</sup>

**1. Telecommunications Service Entities**

**a. Wireline Carriers and Service Providers**

9. We have included small incumbent local exchange carriers (LECs) in this present RFA analysis. As noted above, a “small business” under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees) and “is not dominant in its field of operation.”<sup>18</sup> The SBA’s Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not “national” in scope.<sup>19</sup> We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

10. *Incumbent LECs.* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent LECs. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.<sup>20</sup> According to Commission data,<sup>21</sup> 1,311 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,311 carriers, an estimated 1,024 have 1,500 or fewer employees and 287 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our action.

11. *Competitive LECs, Competitive Access Providers (CAPs), “Shared-Tenant Service Providers,” and “Other Local Service Providers.”* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.<sup>22</sup> According to Commission data,<sup>23</sup> 1,005 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive LEC services. Of these 1,005 carriers, an estimated 918 have 1,500 or fewer employees and

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<sup>16</sup> See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

<sup>17</sup> Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

<sup>18</sup> 15 U.S.C. § 632.

<sup>19</sup> Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of “small-business concern,” which the RFA incorporates into its own definition of “small business.” See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret “small business concern” to include the concept of dominance on a national basis. See 13 C.F.R. § 121.102(b).

<sup>20</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>21</sup> FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, *Trends in Telephone Service* at Table 5.3, page 5-5 (Aug. 2008) (*Trends in Telephone Service*). This source uses data that are current as of November 1, 2006.

<sup>22</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>23</sup> *Trends in Telephone Service* at Table 5.3.

87 have more than 1,500 employees. In addition, 16 carriers have reported that they are “Shared-Tenant Service Providers,” and all 16 are estimated to have 1,500 or fewer employees. In addition, 89 carriers have reported that they are “Other Local Service Providers,” and all 89 are estimated to have 1,500 or fewer employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, “Shared-Tenant Service Providers,” and “Other Local Service Providers” are small entities.

12. *Local Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.<sup>24</sup> According to Commission data,<sup>25</sup> 151 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 149 have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by our action.

13. *Toll Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.<sup>26</sup> According to Commission data,<sup>27</sup> 815 carriers have reported that they are engaged in the provision of toll resale services. Of these, an estimated 787 have 1,500 or fewer employees and 28 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by our action.

14. *Interexchange Carriers (IXCs).* Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.<sup>28</sup> According to Commission data,<sup>29</sup> 300 carriers have reported that they are engaged in the provision of interexchange service. Of these, an estimated 268 have 1,500 or fewer employees and 32 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXCs are small entities that may be affected by our action.

#### **b. Satellite Telecommunications and All Other Telecommunications**

15. *Satellite Telecommunications and All Other Telecommunications.* These two economic census categories address the satellite industry. The first category has a small business size standard of \$15 million or less in average annual receipts, under SBA rules.<sup>30</sup> The second has a size standard of \$25 million or less in annual receipts.<sup>31</sup> The most current Census Bureau data in this context, however, are from the (last) economic census of 2002, and we will use those figures to gauge the prevalence of small businesses in these categories.<sup>32</sup>

<sup>24</sup> 13 C.F.R. § 121.201, NAICS code 517310.

<sup>25</sup> *Trends in Telephone Service* at Table 5.3.

<sup>26</sup> 13 C.F.R. § 121.201, NAICS code 517310.

<sup>27</sup> *Trends in Telephone Service* at Table 5.3.

<sup>28</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>29</sup> *Trends in Telephone Service* at Table 5.3.

<sup>30</sup> 13 C.F.R. § 121.201, NAICS code 517410.

<sup>31</sup> 13 C.F.R. § 121.201, NAICS code 517919.

<sup>32</sup> 13 C.F.R. § 121.201, NAICS codes 517410 and 517910 (2002).

16. The category of Satellite Telecommunications “comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”<sup>33</sup> For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.<sup>34</sup> Of this total, 307 firms had annual receipts of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.<sup>35</sup> Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

17. The second category of All Other Telecommunications comprises, *inter alia*, “establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.”<sup>36</sup> For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.<sup>37</sup> Of this total, 303 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.<sup>38</sup> Consequently, we estimate that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

**c. Wireless Telecommunications Carriers (except Satellite)**

18. 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.

19. *Wireless Telecommunications Carriers (except Satellite)*. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.<sup>39</sup> Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.”<sup>40</sup> Under the present and prior categories, the SBA has deemed a wireless business

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<sup>33</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517410 Satellite Telecommunications”; <http://www.census.gov/naics/2007/def/ND517410.HTM>.

<sup>34</sup> 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).

<sup>35</sup> *Id.* An additional 38 firms had annual receipts of \$25 million or more.

<sup>36</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517919 All Other Telecommunications”; <http://www.census.gov/naics/2007/def/ND517919.HTM#N517919>.

<sup>37</sup> 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).

<sup>38</sup> *Id.* An additional 14 firms had annual receipts of \$25 million or more.

<sup>39</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517210 Wireless Telecommunications Categories (Except Satellite)”; <http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

<sup>40</sup> U.S. Census Bureau, 2002 NAICS Definitions, “517211 Paging”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

to be small if it has 1,500 or fewer employees.<sup>41</sup> Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year.<sup>42</sup> Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.<sup>43</sup> For the category of Wireless Telecommunications Carriers (except Satellite), data for 2002 show that there were 1,397 firms that operated for the entire year.<sup>44</sup> Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.<sup>45</sup> Thus, we estimate that the majority of wireless firms are small.

20. In the *Paging Third Report and Order*, we developed 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.<sup>46</sup> 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. 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.<sup>47</sup> The SBA has approved these small business size standards.<sup>48</sup> An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000.<sup>49</sup> Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won. 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.<sup>50</sup> 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

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<sup>41</sup> 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

<sup>42</sup> 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).

<sup>43</sup> *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.”

<sup>44</sup> 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).

<sup>45</sup> *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.”

<sup>46</sup> *Amendment of Part 90 of the Commission’s Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service*, PR Docket No. 89-552, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, paras. 291-295, 62 FR 16004 (1997) (*220 MHz Third Report and Order*).

<sup>47</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from A. Alvarez, Administrator, SBA (Dec. 2, 1998) (SBA Dec. 2, 1998 Letter).

<sup>48</sup> *Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems*, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, paras. 98-107 (1999).

<sup>49</sup> *Id.* at 10085, para. 98.

<sup>50</sup> See *Lower and Upper Paging Band Auction Closes*, Public Notice, 16 FCC Rcd 21821 (WTB 2002).

won 2,093 licenses.<sup>51</sup> We also note that, currently, there are approximately 74,000 Common Carrier Paging licenses.

21. *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.<sup>52</sup> 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.

22. *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 “Wireless Telecommunications Carriers (except Satellite)” services.<sup>53</sup> Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.<sup>54</sup> According to Commission data, 434 carriers reported that they were engaged in the provision of wireless telephony.<sup>55</sup> We have estimated that 222 of these are small under the SBA small business size standard.

23. *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.<sup>56</sup> 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.<sup>57</sup> These standards defining “small entity” in the context of broadband PCS auctions have been approved by the SBA.<sup>58</sup> 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.<sup>59</sup> On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business

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<sup>51</sup> See *Lower and Upper Paging Bands Auction Closes*, Public Notice, 18 FCC Rcd 11154 (WTB 2003).

<sup>52</sup> SBA Dec. 2, 1998 Letter.

<sup>53</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>54</sup> *Id.*

<sup>55</sup> *Trends in Telephone Service* at Table 5.3.

<sup>56</sup> 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).

<sup>57</sup> See *PCS Order*, 11 FCC Rcd 7824.

<sup>58</sup> 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).

<sup>59</sup> FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (rcl. 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).

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.

24. *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.<sup>60</sup> Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.<sup>61</sup> To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order.<sup>62</sup> 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.<sup>63</sup> 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.<sup>64</sup> The SBA has approved these small business size standards.<sup>65</sup> 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.<sup>66</sup> Three of these claimed status as a small or very small entity and won 311 licenses.

25. *220 MHz Radio Service – Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a 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 “Wireless Telecommunications Carriers (except Satellite)” companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.<sup>67</sup> Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire

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<sup>60</sup> *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).

<sup>61</sup> *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).

<sup>62</sup> *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).

<sup>63</sup> *Id.*

<sup>64</sup> *Id.*

<sup>65</sup> *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).

<sup>66</sup> *See Narrowband PCS Auction Closes*, Public Notice, 16 FCC Rcd 18663 (WTB 2001).

<sup>67</sup> 13 C.F.R. § 121.201, NAICS code 517212.

year.<sup>68</sup> Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.<sup>69</sup> Thus, under this category and size standard, the majority of firms can be considered small.

26. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service and is subject to spectrum auctions. In the *220 MHz Third Report and Order*, 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.<sup>70</sup> 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.<sup>71</sup> 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.<sup>72</sup> Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.<sup>73</sup> 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.<sup>74</sup> 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.<sup>75</sup> A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.<sup>76</sup>

27. *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.<sup>77</sup> 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

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<sup>68</sup> 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).

<sup>69</sup> *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.”

<sup>70</sup> *220 MHz Third Report and Order*, 12 FCC Rcd at 11068-70, paras. 291-95.

<sup>71</sup> *Id.* at 11068, para. 291.

<sup>72</sup> See Letter from A. Alvarez, Administrator, SBA, to D. Phythyon, Chief, Wireless Telecommunications Bureau, FCC (Jan. 6, 1998).

<sup>73</sup> See generally *220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (1998).

<sup>74</sup> 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).

<sup>75</sup> *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (1999).

<sup>76</sup> See *Multi-Radio Service Auction Closes*, Public Notice, 17 FCC Rcd 1446 (WTB 2002).

<sup>77</sup> 47 C.F.R. § 90.814(b)(1).

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.

28. *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.<sup>78</sup> 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. 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.<sup>79</sup> 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.<sup>80</sup> Subsequently, in the *700 MHz Second Report and Order*, the Commission reorganized the licenses pursuant to an agreement among most of the licensees, resulting in a spectral relocation of the first set of paired spectrum block licenses, and an elimination of the second set of paired spectrum block licenses (many of which were already vacant, reclaimed by the Commission from Nextel).<sup>81</sup> A single licensee that did not participate in the agreement was grandfathered in the initial spectral location for its two licenses in the second set of paired spectrum blocks.<sup>82</sup> Accordingly, at this time there are 54 licenses in the 700 MHz Guard Bands and there is no auction data applicable to determine which are held by small businesses.

29. *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.<sup>83</sup> 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.<sup>84</sup> The SBA has approved these small business size standards.<sup>85</sup> 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 policies adopted herein.

<sup>78</sup> 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).

<sup>79</sup> See generally *220 MHz Service Auction Closes*, Public Notice, Report No. WT 98-36 (rel. Oct. 23, 1998).

<sup>80</sup> *700 MHz Guard Band Auction Closes*, Public Notice, 16 FCC Rcd 4590 (rel. Feb. 22, 2001).

<sup>81</sup> See *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, WT Docket 06-150, Second Report and Order, 22 FCC Rcd 15289, 15339-15344, paras. 118-134 (2007) (*700 MHz Second Report and Order*).

<sup>82</sup> *Id.*

<sup>83</sup> 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).

<sup>84</sup> *Id.*

<sup>85</sup> 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).

30. *Wireless Cable Systems.* Wireless cable systems use 2 GHz band frequencies of the Broadband Radio Service (“BRS”), formerly Multipoint Distribution Service (“MDS”),<sup>86</sup> and the Educational Broadband Service (“EBS”), formerly Instructional Television Fixed Service (“ITFS”),<sup>87</sup> to transmit video programming and provide broadband services to residential subscribers.<sup>88</sup> 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.<sup>89</sup> 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.<sup>90</sup> 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.<sup>91</sup> Other standards also apply, as described.

31. The Commission has defined small MDS (now BRS) and LMDS entities in the context of Commission license auctions. In the 1996 MDS auction,<sup>92</sup> 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.<sup>93</sup> This definition of a small entity in the context of MDS auctions has been approved by the SBA.<sup>94</sup> 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

<sup>86</sup> 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*).

<sup>87</sup> 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.

<sup>88</sup> *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*).

<sup>89</sup> *Id.*

<sup>90</sup> *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*).

<sup>91</sup> 13 C.F.R. § 121.201, NAICS code 517510.

<sup>92</sup> MDS Auction No. 6 began on November 13, 1995, and closed on March 28, 1996. 67 bidders won 493 licenses.

<sup>93</sup> 47 C.F.R. § 21.961(b)(1).

<sup>94</sup> *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).

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.<sup>95</sup> 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.

32. 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).<sup>96</sup> 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.

33. In the 1998 and 1999 LMDS auctions,<sup>97</sup> 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.<sup>98</sup> 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.<sup>99</sup> These definitions of "small business" and "very small business" in the context of the LMDS auctions have been approved by the SBA.<sup>100</sup> 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.

34. *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.<sup>101</sup> 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.<sup>102</sup> An additional small business size standard for "very small business" was added as an entity that, together

<sup>95</sup> 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.

<sup>96</sup> 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.

<sup>97</sup> 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.)

<sup>98</sup> See *Local Multipoint Distribution Service Order*, 12 FCC Rcd at 12545.

<sup>99</sup> *Id.*

<sup>100</sup> See Letter from A. Alvarez, Administrator, SBA, to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, FCC (January 6, 1998).

<sup>101</sup> See *Local Multipoint Distribution Service Order*, 12 FCC Rcd at 12545.

<sup>102</sup> *Id.*

with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>103</sup> The SBA has approved these small business size standards in the context of LMDS auctions.<sup>104</sup> 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.

35. *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.<sup>105</sup> 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.<sup>106</sup> 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.<sup>107</sup> 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.

36. *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 “Wireless Telecommunications Carriers (except Satellite)” companies. This category provides that such a company is small if it employs no more than 1,500 persons.<sup>108</sup> According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.<sup>109</sup> 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.<sup>110</sup> 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

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<sup>103</sup> *See id.*

<sup>104</sup> *See* Letter from Aida Alvarez, Administrator, SBA, from Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC (Jan. 6, 1998).

<sup>105</sup> *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).

<sup>106</sup> *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).

<sup>107</sup> *Id.*

<sup>108</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>109</sup> 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).

<sup>110</sup> *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.”

the 18 GHz band, Teligent<sup>111</sup> 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.

37. *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.<sup>112</sup> “Very small business” in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.<sup>113</sup> The SBA has approved these small business size standards.<sup>114</sup> These size standards will apply to the future auction, if held.

## 2. Cable and OVS Operators

38. *Cable Television Distribution Services.* The “Cable and Other Program Distribution” census category includes cable systems operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems, and subscription television 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. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services; wired (cable) audio and video programming distribution; and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”<sup>115</sup> 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.<sup>116</sup> 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.<sup>117</sup> Of this total, 1,087 firms had annual receipts of under \$10

<sup>111</sup> 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.

<sup>112</sup> *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).

<sup>113</sup> *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).

<sup>114</sup> 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).

<sup>115</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers” (partial definition); <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

<sup>116</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>117</sup> 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).

million, and 43 firms had receipts of \$10 million or more but less than \$25 million.<sup>118</sup> Thus, the majority of these firms can be considered small.

39. *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.<sup>119</sup> Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.<sup>120</sup> In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.<sup>121</sup> Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have fewer than 10,000 subscribers, and an additional 379 systems have 10,000-19,999 subscribers.<sup>122</sup> Thus, under this second size standard, most cable systems are small

40. *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."<sup>123</sup> 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.<sup>124</sup> Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.<sup>125</sup> 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,<sup>126</sup> and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

41. *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

<sup>118</sup> *Id.* An additional 61 firms had annual receipts of \$25 million or more.

<sup>119</sup> 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).

<sup>120</sup> 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.

<sup>121</sup> 47 C.F.R. § 76.901(c).

<sup>122</sup> 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.

<sup>123</sup> 47 U.S.C. § 543(m)(2); see 47 C.F.R. § 76.901(f) & nn.1-3.

<sup>124</sup> 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).

<sup>125</sup> 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.

<sup>126</sup> 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).

local exchange carriers (LECs).<sup>127</sup> The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,<sup>128</sup> 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.<sup>129</sup> 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.<sup>130</sup> As of June, 2005, BSPs served approximately 1.4 million subscribers, representing 1.5 percent of all MVPD households.<sup>131</sup> 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 MVPD.<sup>132</sup> 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.

42. *Satellite Carriers.* The term “satellite carrier” includes entities providing services as described in 17 U.S.C. § 119(d)(6) using the facilities of a satellite or satellite service licensed under Part 25 of the Commission’s rules to operate in Direct Broadcast Satellite (“DBS”) or Fixed-Satellite Service (“FSS”) frequencies.<sup>133</sup> As a general practice, not mandated by any regulation, DBS licensees usually own and operate their own satellite facilities as well as package the programming they offer to their subscribers. In contrast, satellite carriers using FSS facilities often lease capacity from another entity that is licensed to operate the satellite used to provide service to subscribers. These entities package their own programming and may or may not be Commission licensees themselves. In addition, a third situation may include an entity using a non-U.S. licensed satellite to provide programming to subscribers in the United States pursuant to a blanket earth station license.<sup>134</sup> Since 2007, the SBA has recognized satellite television distribution services within the broad economic census category of Wired Telecommunications Carriers.<sup>135</sup> The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. The most current Census Bureau data, however, are from the last economic census of 2002, and we will use those figures to gauge the prevalence of small businesses in

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<sup>127</sup> 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).

<sup>128</sup> See 47 U.S.C. § 573.

<sup>129</sup> 13 C.F.R. § 121.201, NAICS code 517510.

<sup>130</sup> 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.

<sup>131</sup> See *id.* at 2507, para. 14.

<sup>132</sup> 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.*

<sup>133</sup> Part 100 of the Commission’s Rules was eliminated in 2002 and now both FSS and DBS satellite facilities are licensed pursuant to Part 25 of the rules. *Policies and Rules for the Direct Broadcast Satellite Service*, 17 FCC Rcd 11331 (2002); 47 C.F.R. § 25.148.

<sup>134</sup> See, e.g., *Application Of DirecTV Enterprises, LLC, Request For Special Temporary Authority for the DirecTV 5 Satellite*; *Application Of DirecTV Enterprises, LLC, Request for Blanket Authorization for 1,000,000 Receive Only Earth Stations to Provide Direct Broadcast Satellite Service in the U.S. using the Canadian Authorized DirecTV 5 Satellite at the 72.5° W.L. Broadcast Satellite Service Location*, 19 FCC Rcd 15529 (Sat. Div. 2004).

<sup>135</sup> 13 C.F.R. § 121.201, NAICS code 517110 (2007).

this category. Those size standards are for the two census categories of “Satellite Telecommunications” and “Other Telecommunications.” Under both prior categories, such a business was considered small if it had \$13.5 million or less in average annual receipts.<sup>136</sup>

43. *Direct Broadcast Satellite (DBS) Service.* DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic “dish” antenna at the subscriber’s location. Because DBS provides subscription services, DBS falls within the SBA-recognized definition of Wired Telecommunications Carriers.<sup>137</sup> However, as discussed above, we rely on the previous size standard, Cable and Other Subscription Programming, which provides that a small entity is one with \$13.5 million or less in annual receipts.<sup>138</sup> Currently, only two operators – DirecTV<sup>139</sup> and EchoStar Communications Corporation (“EchoStar”)<sup>140</sup> – hold licenses to provide DBS service, which requires a great investment of capital for operation. Both currently offer subscription services and report annual revenues that are in excess of the threshold for a small business. Because DBS service requires significant capital, we believe it is unlikely that a small entity as defined by the SBA would have the financial wherewithal to become a DBS licensee. Nevertheless, given the absence of specific data on this point, we acknowledge the possibility that there are entrants in this field that may not yet have generated \$13.5 million in annual receipts, and therefore may be categorized as a small business, if independently owned and operated.

44. *Fixed-Satellite Service (“FSS”).* The FSS is a radiocommunication service between earth stations at a specified fixed point or between any fixed point within specified areas and one or more satellites.<sup>141</sup> The FSS, which utilizes many earth stations that communicate with one or more space stations, may be used to provide subscription video service. Therefore, to the extent FSS frequencies are used to provide subscription services, FSS falls within the SBA-recognized definition of Wired Telecommunications Carriers.<sup>142</sup> However, as discussed above, we rely on the previous size standard, Cable and Other Subscription Programming, which provides that a small entity is one with \$13.5 million or less in annual receipts.<sup>143</sup> Although a number of entities are licensed in the FSS, not all such licensees use FSS frequencies to provide subscription services. Both of the DBS licensees (EchoStar and DirecTV) have indicated interest in using FSS frequencies to broadcast signals to subscribers. It is possible that other entities could similarly use FSS frequencies, although we are not aware of any entities that might do so.

### 3. Internet Service Providers

45. *Internet Service Providers.* The 2007 Economic Census places these providers, which includes voice over Internet protocol (VoIP) providers, in the category of All Other

<sup>136</sup> 13 C.F.R. § 121.201, NAICS codes 517410 and 517910 (2002).

<sup>137</sup> 13 C.F.R. § 121.201, NAICS Code 517110 (2007).

<sup>138</sup> 13 C.F.R. § 121.201, NAICS Code 515210 (2002).

<sup>139</sup> DirecTV is the largest DBS operator and the second largest MVPD, serving an estimated 14.67 million subscribers nationwide, as of June 2005; see *Annual Assessment of the Status of Competition in the Market for Delivery of Video Programming*, MB Docket No. 05-255, Twelfth Annual Report, 21 FCC Rcd 2503, 2540, para. 73 (2006).

<sup>140</sup> EchoStar, which provides service under the brand name Dish Network, is the second largest DBS operator and the third largest MVPD, serving an estimated 11.45 million subscribers nationwide, as of June 2005. *Id.*

<sup>141</sup> See 47 C.F.R. § 2.1(c).

<sup>142</sup> 13 C.F.R. § 121.201, NAICS Code 517110 (2007).

<sup>143</sup> 13 C.F.R. § 121.201, NAICS code 515210 (2002).

Telecommunications.<sup>144</sup> The SBA small business size standard for such firms is: those having annual average receipts of \$25 million or less.<sup>145</sup> The most current Census Bureau data on such entities, however, are the 2002 data for the previous census category<sup>146</sup> called Internet Service Providers. The 2002 data show that there were 2,529 such firms that operated for the entire year.<sup>147</sup> Of those, 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.<sup>148</sup> Consequently, we estimate that the majority of ISP firms are small entities that may be affected by our action.

#### 4. Other Internet-Related Entities

46. *Internet Publishing and Broadcasting and Web Search Portals.* The Census Bureau defines this category as including “establishments primarily engaged in 1) publishing and/or broadcasting content on the Internet exclusively or 2) operating Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals). . . . Establishments known as 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.”<sup>149</sup> The SBA small business size standard for such firms is: those having 500 or fewer employees.<sup>150</sup> The most current Census Bureau data on such entities, however, are the 2002 data for the previous two separate categories of Internet Publishing and Broadcasting, and Web Search Portals. Entities.<sup>151</sup> For the first previous category, the 2002 data show that there were 1,362 firms that operated for the entire year.<sup>152</sup> Of these, 1,351 had employment of 499 or fewer employees, and 11 firms had employment of between 500 and 999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action. For the second previous census category of Web Search Portals, the SBA had developed a small business size standard of \$6.5 million or less in average annual receipts.<sup>153</sup> According to the data for 2002, there were 342 firms in this category that operated for the entire year.<sup>154</sup> Of these, 303 had annual receipts of under \$5 million, and an additional 15

<sup>144</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517919 All Other Telecommunications”; <http://www.census.gov/naics/2007/def/ND517919.HTM#N517919>.

<sup>145</sup> 13 C.F.R. § 121.201, NAICS code 517919 (updated for inflation in 2008).

<sup>146</sup> U.S. Census Bureau, “2002 NAICS Definitions: 518111 Internet Service Providers”; <http://www.census.gov/epcd/naics02/def/NDEF518.HTM>.

<sup>147</sup> 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).

<sup>148</sup> An additional 45 firms had receipts of \$25 million or more.

<sup>149</sup> U.S. Census Bureau, 2007 NAICS Definitions, “519130 Internet Publishing and Broadcasting and Web Search Portals”; <http://www.census.gov/naics/2007/def/ND519130.HTM#N519130>.

<sup>150</sup> 13 C.F.R. § 121.201, NAICS code 519130 (revised in 2008 to be an entirely employee-based standard).

<sup>151</sup> U.S. Census Bureau, “2002 NAICS Definitions: 516110 Internet Publishing and Broadcasting”; <http://www.census.gov/epcd/naics02/def/NDEF516.HTM>; U.S. Census Bureau, “2002 NAICS Definitions: 518112 Web Search Portals”; <http://www.census.gov/epcd/naics02/def/NDEF518.HTM>.

<sup>152</sup> 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). This previous category followed the size standard of 500 or fewer employees. Superseded citation: 13 C.F.R. § 121.201, NAICS code 516110.

<sup>153</sup> Superseded citation: 13 C.F.R. § 121.201, NAICS code 518112.

<sup>154</sup> 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).

(continued...)

firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of Web Search Portals firms are small entities that may be affected by our action.

47. *Data Processing, Hosting, and Related Services.* Entities in this category “primarily . . . provid[e] infrastructure for hosting or data processing services.”<sup>155</sup> The SBA has developed a small business size standard for this category; that size standard is \$23 million or less in average annual receipts.<sup>156</sup> According to Census Bureau data for 2002, there were 6,877 firms in this category that operated for the entire year.<sup>157</sup> 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.

48. *All Other Information Services.* “This industry comprises establishments primarily engaged in providing other information services (except new syndicates and libraries and archives).”<sup>158</sup> 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.<sup>159</sup> According to Census Bureau data for 2002, there were 155 firms in this category that operated for the entire year.<sup>160</sup> 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.

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

49. In this *Order*, we require providers of interconnected VoIP service to take actions to comply with section 214 service discontinuance obligations. For example, to protect against abrupt termination of service, the *Order* requires providers of interconnected VoIP services to be subject to the same service discontinuance procedures as non-dominant carriers.<sup>161</sup> Thus, we require that a provider of interconnected VoIP service seeking to discontinue service provide all affected customers with notice of the planned discontinuance of service. Specifically, the *Order* requires an interconnected VoIP provider to provide all affected customers with its name and address, the date of the planned service discontinuance, the geographic areas where service will be discontinued, a brief description of the service to be discontinued, and the statement found in section 63.71(a)(5)(i) of the Commission’s rules.<sup>162</sup> The

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<sup>155</sup> 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>.

<sup>156</sup> 13 C.F.R. § 121.201, NAICS code 518210.

<sup>157</sup> 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).

<sup>158</sup> U.S. Census Bureau, “2002 NAICS Definitions: 519190 All Other Information Services,” available at <http://www.census.gov/epcd/naics02/def/NDEF519.HTM>.

<sup>159</sup> 13 C.F.R. § 121.201, NAICS code 519190.

<sup>160</sup> 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).

<sup>161</sup> See *Order*, *supra* para. 14.

<sup>162</sup> See *id* at para. 16.

*Order* requires written notice to be provided to each affected customer, but allows the Commission to authorize in advance another form of notice for good cause shown upon request.

50. The *Order* also requires an interconnected VoIP provider to file with the Commission an application for authorization of the planned discontinuance.<sup>163</sup> The application shall identify that the provider is an interconnected VoIP provider with respect to the service to be discontinued and shall include, in addition to the information set forth in the notice provided to affected customers, a caption, a brief description of the dates and methods of notice to all affected customers, and any other information the Commission may require. The *Order* also requires an interconnected VoIP provider to submit a copy of its application to the public utility commission and to the Governor of the State(s) in which it proposes to discontinue, reduce, or impair service, as well as to the Secretary of Defense.

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

51. 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.<sup>164</sup>

52. The *IP-Enabled Services Notice* sought comment on whether to extend consumer protections afforded in the Act to subscribers of VoIP or other IP-enabled services, and invited comment on the effect on small entities.<sup>165</sup> We must assess the interests of small businesses in light of the overriding public interest in protecting consumers from interrupted voice service and its associated consequences.

53. In the *Order*, the Commission found that allowing customers of interconnected VoIP services to receive the benefits of section 214 discontinuance procedures is fundamentally important for the protection of consumers.<sup>166</sup> Specifically, the Commission found that extending section 214 discontinuance procedures to interconnected VoIP service customers is necessary to protect consumers from abrupt and unexpected telecommunications service interruptions.<sup>167</sup> As the Commission stated, even customers with competitive alternatives need fair notice and information to choose a substitute service.<sup>168</sup> The Commission thus found that notice of proposed service discontinuances is important for the protection of all customers of interconnected VoIP providers, including those of small businesses.<sup>169</sup> In considering whether to impose section 214 service discontinuance obligations on interconnected VoIP providers, the Commission considered several alternatives, including imposing streamlined obligations for dominant and non-dominant carriers and separate notice provisions. The Commission concluded that imposing the minimal streamlined obligations for non-dominant carriers on interconnected VoIP

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<sup>163</sup> See *id.* at para. 17.

<sup>164</sup> 5 U.S.C. § 603(c).

<sup>165</sup> See *IP-Enabled Services Notice*, 19 FCC Rcd at 4910-11, paras. 71-72.

<sup>166</sup> See *Order*, *supra* paras. 14-15.

<sup>167</sup> See *id.* at para. 14.

<sup>168</sup> See *id.*

<sup>169</sup> See *id.* at note 52.

providers was appropriate, striking a good balance between the Commission's dual objectives of permitting ease of exit from competitive markets and ensuring that the public will be given a reasonable period of time to make other service arrangements. The Commission further concluded that given that these same minimal requirements were imposed on non-dominant carrier small entities and did not result in any hardship, imposing these requirements on all interconnected VoIP providers, including providers that may be small entities, would be appropriate.<sup>170</sup>

54. **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.<sup>171</sup> A copy of the Order and FRFA (or summaries thereof) will also be published in the Federal Register.<sup>172</sup>

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<sup>170</sup> *See id.*

<sup>171</sup> *See* 5 U.S.C. § 801(a)(1)(A).

<sup>172</sup> *See* 5 U.S.C. § 604(b).

**STATEMENT OF  
ACTING CHAIRMAN MICHAEL J. COPPS**

Re: *IP-Enabled Services*, WC Docket No. 04-36

Over the past several years, we have seen widespread adoption by the American public of dynamic new telecommunications technologies and services, and we are going to see even more dramatic deployments in the new age of broadband. We welcome, we encourage, this growth. As change occurs, however, we have the continuing obligation always to protect consumers. We discharge that obligation in this item and smooth the way when IP voice services replace traditional voice services.

Today's Order applies the same discontinuance, reduction and impairment of service requirements to interconnected Voice over Internet Protocol (VoIP) providers that we currently apply to non-dominant carriers. The Order requires interconnected VoIP providers to notify customers in a reasonable amount of time so that consumers don't find themselves left unexpectedly without voice service—a service that we have all come to expect and rely on. In addition, interconnected VoIP providers are required to notify officials in states where service is offered of any impending loss of service to those communities. These requirements do not strike me as burdensome, and in helping consumers and states along, I believe they serve the public interest.

Thanks to the Bureau for its forward-looking work on this and to my colleagues for agreeing once again to put consumers first.

**STATEMENT OF  
COMMISSIONER JONATHAN S. ADELSTEIN**

Re: *IP-Enabled Services*, WC Docket No. 04-36

Today we take an overdue step to further protect users of interconnected Voice over Internet Protocol (VoIP) services. I support this Order because it reaffirms the Commission's commitment to consumer protection and public safety as consumers continue to migrate to new and innovative technologies like VoIP. Interconnected VoIP users will no longer be subject to abrupt discontinuance of service as carriers will now be required to give them sufficient notice before discontinuing, reducing, or impairing service. The bottom line is that interconnected VoIP users will now enjoy the same protection as users of traditional telephone service.

This is good news for the millions of Americans who subscribe to interconnected VoIP services. We already have extended disabilities access and privacy requirements to interconnected VoIP. As we have recognized for a while now, these users expect the same protection as users of traditional telephone technologies. This is critical since we expect that more people will switch to VoIP, especially as we push broadband availability throughout the country.

Today's action is not merely about consumers' convenience. It is a serious public safety matter. If a subscriber does not receive sufficient warning that their interconnected VoIP provider will cut off service, that consumer could well be left without telephone – and 911 – service. The Commission should have given consumers these protections years ago, as we have seen interconnected VoIP service providers go out of business and strand consumers.

Today is also a victory for competition. By giving interconnected VoIP users the same protections as users of traditional telephone, we further position this exciting technology as a direct competitor against more established services.

I want to thank Chairman Copps for bringing attention to this and the other consumer-protection actions that we take today. This is government at its best, taking concrete steps to protect citizens' safety and well-being.

**STATEMENT OF  
COMMISSIONER ROBERT M. McDOWELL**

Re: *IP-Enabled Services*, WC Docket No. 04-36

I am pleased to support today's order. Consumers increasingly are finding that interconnected VoIP services are a substitute for traditional telephone service. In some instances, interconnected VoIP service providers exited markets or went out of business altogether and did not notify their customers beforehand. Consumers only knew something was awry once they lost dial tone. Today's order allows consumers of interconnected VoIP service to receive the same courtesy of a notice of discontinuance of service as a consumer of any other type of phone service. Such notice gives customers a reasonable opportunity to switch providers, and is consistent with our previous actions to ensure parity regarding obligations for E911, universal service, customer proprietary network information protections, disability access, and local number portability.

Many thanks to Acting Chairman Copps for bringing this order forward and to the Bureau staff for their work on this matter.