

receipts of \$10 million or more but less than \$25 million.<sup>32</sup> The SBA small business size standard for the broad census category of Wireless Telecommunications Carriers, which consists of such entities with fewer than 1,500 employees, appears applicable to MDS and ITFS.

14. The Commission has defined small MDS (now BRS) entities in the context of Commission license auctions. In the 1996 MDS auction, 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. This definition of a small entity in the context of MDS auctions has been approved by the SBA. 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. 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 Wireless Telecommunications Carriers (except satellite).<sup>33</sup> As noted, within the category of Wireless Telecommunications Carriers, such firms with fewer than 1500 employees are considered to be small.<sup>34</sup> The data presented were acquired when the applicable SBA small business size standard was called Cable and Other Program Distribution, and which referred to all such firms having \$13.5 million or less in annual receipts.<sup>35</sup> According to Census Bureau data for 2002, there were a total of 1,191 firms in this category that operated for the entire year.<sup>36</sup> 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.<sup>37</sup> 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.

15. 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). 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.

16. *LTTS*. The Local Television Transmission Service (LTTS) in the 1990-2110 MHz band is used by communications common carriers to provide service to television broadcast stations, television broadcast networks, cable system operations, and cable network entities.<sup>38</sup> There are 45 LTTS licensees in the 1990-2110 MHz band, and these licensees will ultimately be required to use only the 2025-2110 MHz portion of that band. It is unclear how many of these will be affected by our new rules. The Commission has not yet defined a small business with respect to local television transmission services. For purposes of this IRFA, we will use the SBA's definition applicable to Wireless Telecommunications Carriers (except satellite). As noted, within the category of Wireless Telecommunications Carriers, (except satellite), such firms with fewer than 1500 employees are considered to be small.<sup>39</sup> The data presented were acquired when the applicable SBA small business size standard was called Cellular and

<sup>32</sup> *Id.* An additional 61 firms had annual receipts of \$25 million or more.

<sup>33</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

<sup>34</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

<sup>35</sup> 13 C.F.R. § 121.201, NAICS Code 517110.

<sup>36</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).

<sup>37</sup> *Id.* An additional 61 firms had annual receipts of \$25 million or more.

<sup>38</sup> 47 C.F.R. § 101.803(b).

<sup>39</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

Other Wireless Telecommunications—which referred to all such firms having no more than 1,500 persons. According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.<sup>40</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>41</sup> Thus, under this size standard, the majority of firms can be considered small.

17. *MSS*. There are two MSS operators in the 1990-2110 MHz band. These operators will provide services using the 2000-2020 MHz portion of the band. The SBA has developed a small business size for Satellite Telecommunications, which consist of all companies having annual revenues of less than \$15 million.<sup>42</sup> Neither of the two MSS operators currently has revenues because one has not launched a satellite yet and the other is unable to provide service with its satellite because of the delays in the BAS transition. However, given that as of December 31, 2008, these MSS operators had assets of \$1.341 billion and \$664 million, respectively, we expect that both of these companies will have annual revenue of over \$15 million once they are able to offer commercial services.<sup>43</sup> Consequently, we find that neither MSS operator is a small business. Small businesses often do not have the financial ability to become MSS system operators due to high implementation costs associated with launching and operating satellite systems and services.

18. *AWS*. The AWS licensees have not been issued and the Commission has no definite plans to issue these licensees. Presumably, some of the businesses which will eventually obtain AWS licensees will be small businesses. However, we have no means to estimate how many of these licensees will be small businesses.

19. *Sprint Nextel*. Sprint Nextel as a new entrant to the band will occupy spectrum from 1990-1995 MHz. The Report and Order and Order grants Sprint Nextel a waiver of the deadline by which it must relocate the BAS, CARS, and LTTS incumbents from the 1990-2025 MHz portion of the band. Sprint Nextel belongs to the SBA category Wireless Telecommunications Carriers (except satellite).<sup>44</sup> Businesses in this category are considered small if they have fewer than 1500 employees.<sup>45</sup> As of December 31, 2008 Sprint Nextel had about 56000 employees.<sup>46</sup> Consequently, we find that Sprint Nextel is not a small business.

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

20. MSS entrants are required to coordinate their operations within line-of-sight of BAS receiver sites for those BAS licensees who have not yet been relocated. In addition, the MSS entrants may not operate ATC networks within line-of-sight of BAS receiver sites which have not yet been relocated. Because the locations of the BAS receiver sites are not in the Commission's databases, the BAS licensees

<sup>40</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 517212 (issued Oct. 2000).

<sup>41</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."

<sup>42</sup> 13 C.F.R. § 121.201, NAICS Code 517410.

<sup>43</sup> TerreStar Corp., SEC Form 10-K 2008 Annual Report, filed March 12, 2009 at F2; ICO Global Communications (Holdings) Limited, SEC Form 10-K 2008 Annual Report, filed March 31, 2009 at 52. ICO's subsidiary which controls its satellite covering the United States has recently filed for bankruptcy. ICO Global Communications (Holdings) Limited, SEC Form 8-K, filed May 15, 2009.

<sup>44</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

<sup>45</sup> *Id.*

<sup>46</sup> Sprint Nextel Corp., SEC Form 10-K 2008 Annual Report, filed Feb. 27, 2009 at 14.

are required to notify the MSS entrants of the location of the receiver sites upon request.

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

21. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>47</sup>

22. No parties have submitted comments indicating that there will be a disparate impact on small entities because of these rule changes. Because we have no evidence that small businesses will suffer disparate harm based on the rules we adopt today, based on the record now before us, we do not perceive a need for the Commission to take steps to minimize the adverse economic impact on small entities or consider alternatives to the rule amendments in the Report and Order and Order. In general, the BAS, CARS, and LTTS licensees may suffer harm in two ways from our amended rules: by suffering harmful interference to their transmissions from MSS entrants to the band or by having to expend resources to coordinate operations with the MSS entrants prior to completion of the BAS transition.<sup>48</sup>

23. The interest of BAS, CARS, and LTTS licensees would be affected by the proposed rule changes by either subjecting them to the threat of increased interference from MSS or by requiring MSS entrants to coordinate with the incumbents in order to operate in markets where the BAS incumbents have not yet been relocated to the new channel plan.<sup>49</sup> After the elimination of the top 30 market rule the nonrelocated BAS, CARS, and LTTS incumbents have primary status in the band until the band sunset date of December 9, 2013, while the new entrants will be secondary. As such, the new entrants will be required to avoid causing harmful interference to the nonrelocated BAS, CARS, and LTTS incumbents and will have accept interference from the incumbents. Despite this requirement, there may be instances where the BAS, CARS, LTTS incumbents will experience harmful interference. Furthermore, we expect the BAS, CARS, LTTS incumbents to act cooperatively to accommodate the MSS operators in nonrelocated markets to the greatest extent possible while not impairing their ability to make use of the spectrum.

24. We note that because the time period for exposure to potential interference is very short in duration, the potential of harmful interference actually occurring to BAS, CARS, and LTTS incumbents is small. All BAS, CARS, and LTTS incumbents are expected to be relocated by Sprint Nextel before the February 8, 2010 transition deadline. ICO has stated that they do not intend to offer commercial services

---

<sup>47</sup> See 5 U.S.C. § 603(c)(1-4).

<sup>48</sup> We do not believe that the BAS, CARS, and LTTS licensee will suffer a disparate impact from the two waivers we grant in the Report and Order and Order. The waiver of the deadline by which Sprint Nextel must relocate the BAS incumbents will benefit the BAS, CARS and LTTS licensees by making it more likely they will be relocated above 2025 MHz. If they are not relocated, the BAS, CARS, and LTTS will become secondary after the December 2013 sunset date. The waiver of the commercial availability ATC requirement for ICO will not affect the interest of BAS, CARS, and LTTS licensees because ICO is prohibited from operation ATC in markets where the incumbents have not been relocated and must avoid operating ATC networks within line-of-sight of BAS receiver sites that have not been relocated.

<sup>49</sup> We do not believe the interest of future AWS licensees will be negatively affected by the actions of the Report and Order and Order. However, because there are no definite plans to issue the AWS licenses, any consideration of the effects of the Report and Order and Order on the AWS licensees is necessarily speculative.

during 2009.<sup>50</sup> TerreStar's operational milestone is not until August 30, 2009. We expect that TerreStar will need a significant amount of time after its satellite is operational to begin providing commercial service. As a result, the amount of time that MSS will share spectrum with nonrelocated incumbents should be brief. As the transition progresses, fewer and fewer incumbents will remain unrelocated. Those BAS, CARS, and LTTS incumbents who have not been relocated are unlikely to receive harmful interference from MSS because of the coordination and non-interference requirements. Furthermore, any interference that does occur to incumbents will affect small entities in the same way that it affects large entities.

25. As for the coexistence of unrelocated BAS, CARS, and LTTS incumbents with MSS entrants until the incumbents are relocated, the unrelocated BAS, CARS, and LTTS incumbents may have to expend some resources to coordinate operations with the MSS entrants. However, we do not expect that this coordination will be any more burdensome than the coordination that BAS licensees commonly do with other BAS incumbents. The requirement to coordinate with MSS entrants will affect all the BAS, CARS, and LTTS licensees equally, regardless of the size of these entities. We do not expect that BAS, CARS, and LTTS incumbents to suffer significant harm because they will not have to impair their use of the spectrum as a result of the coordination with the MSS entrants. Furthermore, if the MSS entrants can not successfully coordinate their use of the spectrum with the unrelocated incumbents, they will have to avoid use of the spectrum in markets where the incumbents have not been relocated.

26. Our primary concern in this proceeding continues to be balancing the needs of incumbent BAS licensees to provide service without suffering harmful interference and the introduction of new MSS in a timely manner. We believe the slight hardship that may occur to BAS entities is justified by the benefit to the public of receiving MSS services earlier than they might have without the changes we are making to our rules.

27. However, because of our ongoing concern with avoiding arbitrary and unfair burdens on small entities, we considered a number of alternatives to the rules we are adopting. We considered not eliminating the top 30 market rule. Because Sprint Nextel is not expected to relocate the last of the top 30 markets until the end of the BAS transition, this would have likely required MSS to wait until the BAS transition is complete before offering service to the public. In the meantime, a large amount of spectrum would have remained unused in the markets where the BAS incumbents have been relocated. We believe it would not be in the public interest to allow this valuable spectrum to lie fallow. We also considered allowing BAS to operate only in those markets where the BAS incumbents had been relocated. We concluded that allowing MSS operations in unrelocated markets with successful coordination was preferable to this approach because there will be instances in which coordination will permit sharing of the spectrum in markets where the BAS transition has not been completed.

#### **F. Federal Rules that May Duplicate, Overlap or Conflict with the Proposed Rules.**

28. None.

---

<sup>50</sup> ICO Global Communications (Holdings) Limited, SEC Form 10-K 2008 Annual Report, filed March 3, 2009 at 3; Grant of FCC Application for Space and Earth Station: Mod or AMD, File No. Sat-Mod-20080718-00143, granted Nov. 12, 2008.

## APPENDIX C

## Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>1</sup> the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Further Notice of Proposed Rule Making (FNPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided in paragraph 115 of this FNPRM. The Commission will send a copy of this FNPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).<sup>2</sup> In addition, the FNPRM and IRFA (or summaries thereof) will be published in the Federal Register.<sup>3</sup>

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

2. In this Further Notice of Proposed Rulemaking, we seek comment on tentative conclusions and proposals for modifying and clarifying the Commission's requirements for the new entrants to the 1990-2025 MHz band to share the cost of relocating the incumbent BAS licensees from that band. The BAS incumbents are being removed from the 1990-2025 MHz band to make way for Sprint Nextel, MSS entrants, and future AWS licensees. Sprint Nextel, who will occupy the 1990-1995 MHz spectrum, is required to relocate the BAS incumbents from the band by February 8, 2010. The MSS entrants (ICO and TerreStar), who will occupy the 2000-2020 MHz spectrum, are also obligated to relocate the BAS incumbents before they may begin operations. The AWS licenses for the 1995-2000 MHz and 2020-2025 MHz have not yet been issued.

3. The cost sharing requirements for the BAS relocation must be modified because circumstances surrounding the relocation have significantly changed since the requirements were adopted. When the current cost sharing requirements were adopted in 2004, Sprint Nextel was expected to have completed the BAS transition by September 7, 2007; one or both of the MSS entrants was expected to have entered the band and incurred a cost sharing obligation to Sprint; the reconfiguration of the 800 MHz band, which Sprint Nextel was also undertaking, would have been completed by June 26, 2008; and Sprint Nextel was expected to be able to receive credit for the BAS relocation costs not reimbursed by MSS and AWS licenses toward the value of spectrum it was receiving. None of these assumptions have in fact been correct. Furthermore, the current requirements have a number of ambiguities, such as not specifying a standard for determining how MSS and AWS licenses incur a cost sharing obligation to Sprint Nextel and not specifying when reimbursement of BAS relocation expenses is to occur.

4. The FNPRM tentatively concludes that Sprint Nextel may not both receive reimbursement for cost sharing from other new entrants and receive credit for the same relocation costs against the value of the spectrum it is receiving. The MSS and AWS-2 entrants can incur a relocation obligation until the band relocation rules sunset on December 9, 2013. The FNPRM tentatively concludes that an MSS entrant will incur an obligation to reimburse Sprint for BAS relocation costs when it certifies that its satellite is operational for purposes of meeting its operational milestone. As for AWS licensees, the FNPRM proposes that AWS entrants will incur a cost sharing obligation upon grant of their long form application for their licenses, but also seeks comment on whether the AWS licensees should incur a cost sharing obligation when they activate a base station in an area that overlaps a DMA where the BAS

---

<sup>1</sup> 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. 847 (1996).

<sup>2</sup> See 5 U.S.C. § 603(a).

<sup>3</sup> *Id.*

incumbents have been relocated. The FNPRM also seeks comment on whether once the AWS and MSS entrants incur a cost sharing obligation, they may not begin operations until they have reimbursed the party who relocated the BAS incumbents for their *pro rata* share of relocation costs for BAS markets that have transitioned when they incur the cost sharing obligation. As the BAS relocation continues and each additional BAS market is transitioned, the new entrant must pay their share of relocation costs within 30 days of being notified of the market transitioning. The FNPRM also seeks comment on alternative proposals on when AWS and MSS entrants should be required to reimburse earlier entrants for their share of the BAS relocation costs.

5. In addition, the FNPRM tentatively concludes that the MSS entrants' reimbursement obligation to Sprint Nextel should continue to be limited to a *pro rata* share of the costs of relocating BAS in the thirty largest markets (by population) and all fixed BAS links. The FNPRM seeks comment on whether this limitation on the MSS entrants' liability should be removed. Furthermore, the FNPRM proposes to retain the MSS-to-MSS cost sharing, under which the MSS entrants are to "true-up" their cost after the BAS transition is complete to ensure that each MSS entrant pays a *pro rata* share of the relocation cost depending on the amount of spectrum assigned. The FNPRM also seeks comment on allowing Sprint Nextel to recover BAS relocation costs from one of the MSS entrants for BAS operations on 20 MHz of spectrum (the entire MSS allocation in the band), after which that MSS entrant could seek reimbursement from the other MSS entrant. The FNPRM tentatively concludes that Sprint Nextel be required to share with other new entrants from whom it is seeking reimbursement, information about its relocation cost as documented in its annual external audit and as Sprint Nextel provides to the Transition Administrator of the 800 MHz transition. Furthermore, the FNPRM proposes that if new entrants other than Sprint Nextel relocate BAS incumbents and seek reimbursement from other new entrants, the first entrant must provide the later entrants with documented relocation costs.

6. The current relocation rules require that the MSS entrants relocate BAS incumbents in markets 31-100 within three years of beginning operations and markets above 100 within five years of beginning operations. The FNPRM proposes that the MSS entrants be required to relocate BAS incumbents in markets 1-30 within three years of beginning operations, as they are currently required to do for BAS incumbents in markets 31-100. For purposes of this rule, the FNPRM proposes that "beginning operations" be defined as the later of two dates: when an MSS operator certifies that its satellite is operational for purposes of meeting its operational milestone; or the date when the top 30 market rule is eliminated. The FNPRM also proposes that the December 9, 2013 sunset date for the band not serve to terminate this obligation once it has been incurred. In addition, the FNPRM seeks comment on what consequences, if any, should be applied for the failure of MSS entrants to meet these deadlines.

7. The FNPRM also seeks comment on incentives for all BAS incumbents to work diligently toward completing the BAS transition. The FNPRM seeks comments on several approaches to changing the interference status of the BAS incumbents: Nonrelocated BAS could become secondary while Sprint Nextel, MSS, and AWS could become primary in the 1990-2025 MHz band on February 9, 2010; Nonrelocated BAS could be required to cease operation in the 1990-2025 MHz band on February 9, 2010; Nonrelocated BAS could become co-primary with Sprint Nextel, MSS, and AWS in the 1990-2025 MHz band on February 9, 2010. If any of these approaches are adopted, the FNPRM seeks comment on whether we should look favorably upon waiver request from nonrelocated BAS licensees to allow them to maintain primary status and continue operations if enforcing the rule would cause hardship or otherwise not serve the public interest. Furthermore, the FNPRM invites additional analysis of whether MSS entrants should be able to operate on an unrestricted and secondary basis in nonrelocated BAS markets instead of just when MSS entrants can successfully coordinate with nonrelocated BAS incumbents.

**B. Legal Basis.**

8. The proposed action is taken pursuant to Sections 4(i), 5(c), 303(f), 332, 337 and 405 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 155(c), 303(f), 332, 337 and 405.

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

9. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.<sup>4</sup> The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."<sup>5</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>6</sup> A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.<sup>7</sup>

10. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.<sup>8</sup> The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."<sup>9</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>10</sup> A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.<sup>11</sup>

11. The proposed rule modifications may affect the interest of BAS, LTTS, and CARS licensees (which we have been referring to throughout this document generically as "BAS") because these licensees are being relocated from the 1990-2025 MHz band by the new entrants. In addition, the rule modifications will affect the interest of the new entrants to the 1990-2025 MHz band: MSS, Sprint Nextel, and future AWS entrants to the band.

12. **BAS.** This service uses a variety of transmitters to relay broadcast programming to the public

---

<sup>4</sup> 5 U.S.C. § 603(b)(3).

<sup>5</sup> 5 U.S.C. § 601(6).

<sup>6</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

<sup>7</sup> Small Business Act, 15 U.S.C. § 632 (1996).

<sup>8</sup> 5 U.S.C. § 603(b)(3).

<sup>9</sup> 5 U.S.C. § 601(6).

<sup>10</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

<sup>11</sup> Small Business Act, 15 U.S.C. § 632 (1996).

(through translator and booster stations) or within the program distribution chain (from a remote news gathering unit back to the stations). The BAS licensees in the 1990-2110 MHz band will ultimately be required to use only the 2020-2110 MHz portion of that band. It is unclear how many of the BAS licensees will be affected by our new rules.

13. The Commission has not developed a definition of small entities specific to BAS licensees. However, the U.S. Small Business Administration (SBA) has developed small business size standards. For BAS, we use the size standard for Television Broadcasting.<sup>12</sup> The SBA has developed a size standard for firms in this category, which is all firms having revenues less than \$14 million. The only data which we have available for this category are for when the SBA size standard was for firms having revenues of less than \$13.5 million. According to Commission staff review of the BIA Publications, Inc. Master Access Television Analyzer Database (BIA) on March 30, 2007, about 986 of an estimated 1,374 commercial television stations<sup>13</sup> (or approximately 72 percent) have revenues of \$13.5 million or less and thus qualify as small entities under the SBA definition. Thus, under this standard, the majority of firms can be considered small.

14. *CARS*. The CARS licensees in the 1990-2110 MHz band will ultimately be required to use only the 2020-2110 MHz portion of that band. CARS licenses are issued to the owners or operators of cable television systems, cable networks, licensees of the BRS/EBS band, and private cable operators or other multichannel video programming distributors.<sup>14</sup> It is unclear how many of these will be affected by our new rules.

15. *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."<sup>15</sup> The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.<sup>16</sup> 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>17</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>18</sup> Of this total, 1,087 firms had annual receipts of under \$10 million, and 43 firms had

---

<sup>12</sup> 13 C.F.R. §§ 121.201, NAICS code 515120.

<sup>13</sup> Although we are using BIA's estimate for purposes of this revenue comparison, the Commission has estimated the number of licensed commercial television stations to be 1374. See News Release, "Broadcast Station Totals as of December 31, 2006" (dated Jan. 26, 2007); see <http://www.fcc.gov/mb/audio/totals/bt061231.html>.

<sup>14</sup> 47 C.F.R. § 78.13.

<sup>15</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>16</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>17</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>18</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).

receipts of \$10 million or more but less than \$25 million.<sup>19</sup> Thus, the majority of these firms can be considered small.

16. *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>20</sup> Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.<sup>21</sup> In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.<sup>22</sup> Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an additional 379 systems have 10,000-19,999 subscribers.<sup>23</sup> Thus, under this second size standard, most cable systems are small.

17. *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>24</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>25</sup> Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.<sup>26</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>27</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.

18. *Wireless Telecommunications Carriers (except satellite).* Wireless Telecommunications Carriers (except satellite), is a SBA standard which has a size standard of fewer than 1500 employees.<sup>28</sup>

---

<sup>19</sup> *Id.* An additional 61 firms had annual receipts of \$25 million or more.

<sup>20</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*, 10 FCC Rcd 7393, 7408 (1995).

<sup>21</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>22</sup> 47 C.F.R. § 76.901(c).

<sup>23</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>24</sup> 47 U.S.C. § 543(m)(2); see 47 C.F.R. § 76.901(f) & nn. 1-3.

<sup>25</sup> 47 C.F.R. § 76.901(f); see Public Notice, *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, DA 01-158 (Cable Services Bureau, Jan. 24, 2001).

<sup>26</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>27</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).

<sup>28</sup> 13 C.F.R. § 121.201, NAICS Code 517210. Standard for small business is 1500 employees or fewer.

Wireless cable systems use 2 GHz band frequencies of the Broadband Radio Service (“BRS”), formerly Multipoint Distribution Service (“MDS”), and the Educational Broadband Service (“EBS”), formerly Instructional Television Fixed Service (“ITFS”), to transmit video programming and provide broadband services to residential subscribers. 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. We estimate that the number of wireless cable subscribers is approximately 100,000, as of March 2005. As noted, within the category of Wireless Telecommunications Carriers, except satellite, such firms with fewer than 1500 employees are considered to be small.<sup>29</sup> The data presented were acquired when the applicable SBA small business size standard was called Cable and Other Program Distribution, and which referred to all such firms having \$13.5 million or less in annual receipts.<sup>30</sup> According to Census Bureau data for 2002, there were a total of 1,191 firms in this category that operated for the entire year.<sup>31</sup> 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.<sup>32</sup> The SBA small business size standard for the broad census category of Wireless Telecommunications Carriers, which consists of such entities with fewer than 1,500 employees, appears applicable to MDS and ITFS.

19. The Commission has defined small MDS (now BRS) entities in the context of Commission license auctions. In the 1996 MDS auction, 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. This definition of a small entity in the context of MDS auctions has been approved by the SBA. 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. 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 Wireless Telecommunications Carriers (except satellite).<sup>33</sup> As noted, within the category of Wireless Telecommunications Carriers, such firms with fewer than 1500 employees are considered to be small.<sup>34</sup> The data presented were acquired when the applicable SBA small business size standard was called Cable and Other Program Distribution, and which referred to all such firms having \$13.5 million or less in annual receipts.<sup>35</sup> According to Census Bureau data for 2002, there were a total of 1,191 firms in this category that operated for the entire year.<sup>36</sup> 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.<sup>37</sup> Information

<sup>29</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

<sup>30</sup> 13 C.F.R. § 121.201, NAICS Code 517110.

<sup>31</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).

<sup>32</sup> *Id.* An additional 61 firms had annual receipts of \$25 million or more.

<sup>33</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

<sup>34</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

<sup>35</sup> 13 C.F.R. § 121.201, NAICS Code 517110.

<sup>36</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).

<sup>37</sup> *Id.* An additional 61 firms had annual receipts of \$25 million or more.

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.

20. 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). 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.

21. *LTTS*. The Local Television Transmission Service (LTTS) in the 1990-2110 MHz band is used by communications common carriers to provide service to television broadcast stations, television broadcast networks, cable system operations, and cable network entities.<sup>38</sup> There are 45 LTTS licensees in the 1990-2110 MHz band, and these licensees will ultimately be required to use only the 2025-2110 MHz portion of that band. It is unclear how many of these will be affected by our new rules. The Commission has not yet defined a small business with respect to local television transmission services. For purposes of this IRFA, we will use the SBA's definition applicable to Wireless Telecommunications Carriers (except satellite). As noted, within the category of Wireless Telecommunications Carriers, except satellite, such firms with fewer than 1500 employees are considered to be small.<sup>39</sup> The data presented were acquired when the applicable SBA small business size standard was called Cellular and Other Wireless Telecommunications—which referred to all such firms having no more than 1,500 persons. According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.<sup>40</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>41</sup> Thus, under this size standard, the majority of firms can be considered small.

22. *MSS*. There are two MSS operators in the 1990-2110 MHz band. These operators will provide services using the 2000-2020 MHz portion of the band. The SBA has developed a small business size for Satellite Telecommunications, which consist of all companies having annual revenues of less than \$15 million.<sup>42</sup> Neither of the two MSS operators currently has revenues because one has not launched a satellite yet and the other is unable to provide service with its satellite because of the delays in the BAS transition. However, given that as of December 31, 2008, these MSS operators had assets of \$1.341 billion and \$664 million, respectively, we expect that both of these companies will have annual revenue of over \$15 million once they are able to offer commercial services.<sup>43</sup> Consequently, we find that neither MSS operator is a small business. Small businesses often do not have the financial ability to become MSS system operators due to high implementation costs associated with launching and operating satellite systems and services.

---

<sup>38</sup> 47 C.F.R. § 101.803(b).

<sup>39</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

<sup>40</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 517212 (issued Oct. 2000).

<sup>41</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."

<sup>42</sup> 13 C.F.R. § 121.201, NAICS Code 517410.

<sup>43</sup> TerreStar Corp., SEC Form 10-K 2008 Annual Report, filed March 12, 2009 at F2; ICO Global Communications (Holdings) Limited, SEC Form 10-K 2008 Annual Report, filed March 31, 2009 at 52. ICO's subsidiary which controls its satellite covering the United States has recently filed for bankruptcy. ICO Global Communications (Holdings) Limited, Form 8-K, filed May 15, 2009.

23. *AWS*. The AWS licensees have not been issued and the Commission has no definite plans to issue these licensees. Presumably some of the businesses which will eventually obtain AWS licensees will be small businesses. However, we have no means to estimate how many of these licensees will be small businesses.

24. *Sprint Nextel*. Sprint Nextel as a new entrant to the band will occupy spectrum from 1990-1995 MHz. The Report and Order and Order grants Sprint Nextel a waiver of the deadline by which it must relocate the BAS, CARS, and LTTS incumbents from the 1990-2025 MHz portion of the band. Sprint Nextel belongs to the SBA category Wireless Telecommunications Carriers (except satellite).<sup>44</sup> Businesses in this category are considered small if they have fewer than 1500 employees.<sup>45</sup> As of December 31, 2008 Sprint Nextel had about 56000 employees.<sup>46</sup> Consequently, we find that Sprint Nextel is not a small business.

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

25. The FNPRM proposes that if a new entrant other than Sprint Nextel relocates BAS, CARS, or LTTS incumbents and seeks cost sharing from a new entrant who later enters the band later, then the first new entrant must provide the later new entrant with documentation of the relocation costs. The new entrants to whom this requirement applies may be an MSS operator or a future AWS licensee. Some of the future AWS licensees may be small entities.

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

26. Our primary concern in this FNPRM, which we release at the same time we release the Report and Order and Order, continues to be balancing the needs of incumbent BAS, CARS, and LTTS licensees to provide service without suffering harmful interference and the introduction of new MSS in a timely manner. The interest of the BAS, CARS, and LTTS licensees would be affected if one of the approaches for modifying the interference status of the nonrelocated BAS, CARS, and LTTS incumbents on February 9, 2010 is adopted: such as making the nonrelocated BAS, CARS, and LTTS incumbents secondary; requiring them to discontinue operations; or making them co-primary with the new entrants. The potential harm to BAS, CARS, and LTTS will depend on the particular changes made to the rules and the progress of Sprint Nextel in relocating the BAS, CARS, and LTTS incumbents. If Sprint Nextel is able to relocate all of the BAS, CARS, and LTTS incumbents by the February 8, 2010, then no BAS, CARS, and LTTS licensees will be harmed by the proposed changes. However, if not all of the BAS, CARS, and LTTS incumbents are relocated by February 8, 2010, the changes to the remaining incumbents' interference status on February 9, 2010 may cause significant economic harm to these incumbents.

27. The degree of harm suffered by nonrelocated BAS, CARS, and LTTS incumbents will depend on many factors. If the BAS, CARS, and LTTS incumbents' interference status is changed to co-primary, they would suffer no economic harm because, as the first primary licensees to enter the band, they would enjoy interference protection from the new entrants and would not have to avoid interfering with new entrants. If the nonrelocated BAS, CARS, and LTTS incumbents' status is changed to secondary, the BAS, CARS, and LTTS incumbents would still be able to operate their equipment as long

---

<sup>44</sup> 13 C.F.R. § 121.201, NAICS Code 517210.

<sup>45</sup> *Id.*

<sup>46</sup> Sprint Nextel Corp., SEC Form 10-K 2008 Annual Report, filed Feb. 27, 2009 at 14.

as they do not cause interference to the primary users of the band. If the nonrelocated BAS, CARS, and LTTS incumbents are required to discontinue operations, they will suffer economic harm. BAS is used primarily for electronic newsgathering and fixed television relay links. If the BAS incumbents are not able to use their BAS equipment, the quality of their newscast may be affected and they would have to find alternate means of replacing the relay links. If CARS licensees are not able to use their equipment, they may have difficulty in delivering their cable television programming.

28. The possible change in the incumbents' interference status as of February 9, 2010 will affect any BAS, CARS, or LTTS incumbents who have not been relocated from the 1990-2025 MHz band by that date. This status change will affect all incumbent licensees equally. Consequently, we do not believe that the proposed rule changes will have a disparate impact on small entities.

29. Because of the integrated nature of BAS, CARS, and LTTS, all licensees in a market must transition to the new band plan at the same time. As a result, a single licensee who lags behind its peers in completing the transition could cause inconvenience and hardship to the new entrants as well as the other incumbent licensees in the market. Consequently, in the FNPRM the Commission seeks comment on changing the interference status of nonrelocated BAS, CARS, and LTTS incumbents despite the potential of these incumbents experiencing interference or having to discontinue use of part of their licensed spectrum.

30. Nonetheless, however, we note that the number of BAS, CARS, and LTTS incumbents that will be affected by the change in interference status should be small because Sprint Nextel is required to complete the BAS transition by February 8, 2010. To minimize the potential hardship to BAS, CARS, and LTTS incumbents, we seek comment on whether we should look favorably on requests from individual incumbents for waiver of the change of the interference status in the event that it would cause hardship or not be in the public interest. In addition, the possible change in the interference status of the BAS, CARS, and LTTS incumbents would not change the obligation of the new entrants to relocate the remaining incumbents until the band sunset date of December 9, 2013.

31. Most of the proposals in the FNPRM address the cost sharing obligations between the MSS entrants, AWS entrants, and Sprint Nextel. However, the interest of BAS, CARS, and LTTS licensees would be positively affected by making it more likely that these licensees in the thirty largest markets will be relocated to the new channel plan. The FNPRM proposes adding the requirement that MSS entrants relocate BAS, CARS, and LTTS in markets 1-30 within three years of beginning operations. Because BAS, CARS, and LTTS that are not relocated by the band sunset date of December 9, 2013 become secondary, increasing the likelihood that BAS, CARS, and LTTS will be relocated by MSS is a potential benefit for the incumbents—especially since the MSS entrants will be required to provide the relocated incumbents with comparable facilities. Note that because Sprint Nextel has an obligation to relocate the BAS, CARS, and LTTS incumbents by February 8, 2010, the MSS entrants may not have to relocate the incumbents.

32. The proposals made in the FNPRM may affect the interest of future AWS licensees in the band, some of whom may be small businesses. However, because these licenses have not been issued, we have no means to determine whether the proposals will have a disparate impact on these potentially small businesses. We also have no means to determine what steps would minimize the impact on any of these potentially small businesses.

#### **F. Federal Rules that May Duplicate, Overlap or Conflict with the Proposed Rules.**

33. None.