

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of	)	
	)	
Improving Public Safety Communications in the 800 MHz Band	)	WT Docket 02-55
	)	
Consolidating the 800 and 900 MHz Industrial/Land Transportation and Business Pool Channels	)	
	)	
Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems	)	ET Docket No. 00-258
	)	
Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for use by the Mobile Satellite Service	)	ET Docket No. 95-18
	)	
Application for Review of Grant of ATC authority to New ICO Satellite Services G.P.	)	File No. SES-LIC-20071203-01646
	)	SES-AMD-20080118-00075
	)	SES-AMD-20080219-00172
	)	Call Sign: E070272
	)	

**REPORT AND ORDER AND ORDER AND  
FURTHER NOTICE OF PROPOSED RULEMAKING**

**Adopted: June 10, 2009**

**Released: June 12, 2009**

**Comment Date: [21 days after date of publication in the Federal Register]**

**Reply Comment Date: [31 days after date of publication in the Federal Register]**

By the Commission:

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## I. INTRODUCTION

1. In this Report and Order and Order and Further Notice of Proposed Rulemaking, we address the ongoing relocation of the Broadcast Auxiliary Service (BAS) from the 1990-2110 MHz band to the 2025-2110 MHz band. The rules and procedures we adopt, as well as the modifications we propose, are crafted to ensure the continuity of important BAS operations – such as remote newsgathering operations and studio-to-transmitter links – while completing a transition that will make 35 megahertz of valuable spectrum available for many different new services by Mobile Satellite Service (MSS) operators, Sprint Nextel Corporation (Sprint Nextel), and future Advanced Wireless Services (AWS) licensees.

2. In the Report and Order and Order, we:

- waive until February 8, 2010 the deadline by which Sprint Nextel is required to complete the transition of the BAS incumbents to frequencies above 2025 MHz;
- eliminate the requirement that MSS operators may not begin operations until the relocation of BAS in the thirty largest markets and all fixed BAS links in all markets is complete;
- address the interference environment during the period in which both MSS and BAS operate in the 2000-2020 MHz band by permitting the MSS entrants to conduct operations where the BAS incumbents have not been relocated only if they successfully coordinate with the BAS incumbents; and
- waive our rules governing when an MSS operator may provide Ancillary Terrestrial Component (ATC) service in relation to commercial satellite service.

In the Further Notice of Proposed Rulemaking (Further Notice), we:

- tentatively conclude that MSS operators and future AWS licensees will have an obligation to share, on a *pro rata* basis, in the costs associated with the relocation of BAS incumbents if they “enter the band” prior to the BAS sunset date of December 9, 2013;
- tentatively conclude that an MSS operator “enters the band” and thus incurs an obligation to share in the costs associated with relocation of BAS incumbents when its satellite is found operational under its authorization milestone;
- seek comment on various approaches for when MSS operators should be required to reimburse Sprint Nextel for their *pro rata* shares of the relocation costs;
- invite additional analysis on whether MSS entrants can operate on a secondary basis without coordination where BAS incumbents have not been relocated;
- propose to clarify that MSS operators retain an obligation to relocate BAS incumbents after the MSS operator begins operations; and
- seek comment on incentives to continue to encourage BAS licensees to complete the relocation process without unnecessary delay.

All of the matters addressed herein relate to our fundamental goals of completing the relocation of BAS operations from the 1990-2025 MHz band and providing for the operation of new services on those frequencies.

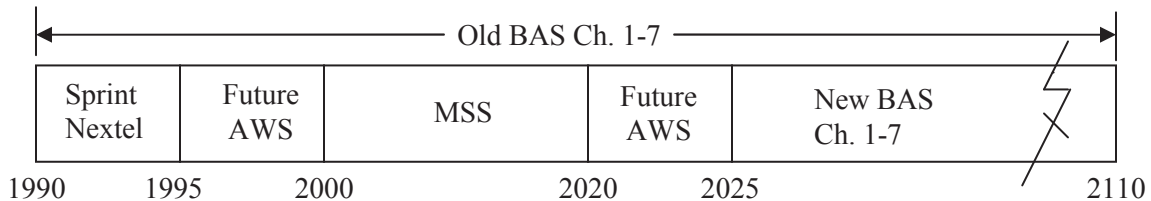
3. It has been over a decade since the Commission determined that BAS operations should be relocated to allow for the exclusive deployment of new MSS operations and established relocation and cost sharing requirements for the new MSS entrants. Since that time, there have been many changes involving the 1990-2025 MHz band. The number of MSS operators seeking to use the band declined from eight to two, and the beginning of MSS operations has been delayed several years for various reasons. The Commission determined that the amount of spectrum made available for MSS operations should be reduced from 35 megahertz to 20 megahertz, and it reallocated the other 15 megahertz of spectrum to the Fixed and Mobile services to be used for new terrestrial services. Sprint Nextel, as part of its agreement to restructure operations in the 800 MHz band, developed a plan to undertake the relocation of BAS operations throughout the 1990-2025 MHz band in order to use 5 megahertz of this spectrum. The remaining 10 megahertz of spectrum has been identified for future AWS licensees, although the Commission is still considering the appropriate service and licensing rules for those bands. Finally, the relocation of BAS incumbents, which did not begin in earnest until 2005, has proven to be much more complex and difficult than was originally anticipated.

4. The Commission made various necessary modifications to the rules and procedures for the relocation of incumbent BAS licensees when it decided to reallocate 15 megahertz of the 1990-2025 MHz band spectrum for new terrestrial services by Sprint Nextel and future AWS licensees. Nonetheless, the continued delay in completing the BAS relocation and the disagreement between Sprint Nextel and the MSS entrants on sharing relocation costs require the Commission to take further action. The actions we take herein are designed to balance the interests of both incumbent BAS licensees, which are entitled to relocation to the 2025-2110 MHz band, and new entrants that are poised to provide new and valuable services to the public. Moreover, because we recognize that the importance of BAS as a crucial component of broadcasting operations dictates that we cannot leave this transition unfinished, the modifications and proposals we adopt are intended to bring this long and complex process to completion. Successful completion of this process does not rest with any one party but requires the cooperation of the incumbents and all new entrants, acting in good faith, to assume responsibility for the relocation process so that all may benefit.

## II. BACKGROUND

5. The 1990-2110 MHz band is currently primarily used by the Broadcast Auxiliary Service.<sup>1</sup> The predominant application of BAS in this band is electronic news gathering (ENG) by mobile units. Other uses include studio-transmitter links, which carry television signals from studios to broadcast transmission antennas, and relay stations, which re-transmit television signals.

6. To promote more efficient use of this spectrum, and to permit the entry of new services, the Commission previously determined that these BAS licensees should be transitioned to a new, narrower bandplan.<sup>2</sup> By replacing existing analog BAS equipment with more spectrally efficient digital BAS equipment, the Commission concluded that licensees would be able to maintain their current level of operations within the 2025-2110 MHz band segment. This, in turn, enabled the Commission to make the 1990-2025 MHz band segment available for new applications, as shown below.



7. *Band Reallocation.* The Commission's first plans for transitioning BAS date back to March 1997, when the Commission decided to reallocate a 35 megahertz band segment (1990-2025 MHz) to the MSS as an uplink band, effective January 1, 2000.<sup>3</sup> As part of its reallocation decision, the Commission established a plan for new MSS entrants to relocate incumbent BAS licensees that was based on policies for determining responsibility for relocating services that were first established in the Commission's *Emerging Technologies* proceeding.<sup>4</sup> Specifically, MSS entrants would realign the band by modifying or

<sup>1</sup> 47 C.F.R. §§ 74.602, 78.18(a)(6), 101.803(b). The band is also authorized for use by the Cable Television Relay Service (CARS) and the Local Television Transmission Service (LTTS). For purposes of this proceeding, we will refer to all three of these services under the collective term "BAS."

<sup>2</sup> Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile Satellite Service, ET Docket No. 95-18, *First Report and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 7388 at ¶ 32 (1997) (*MSS First R&O*); Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile Satellite Service, ET Docket No. 95-18, *Second Report and Order and Second Memorandum Opinion and Order*, 15 FCC Rcd 12315 at ¶¶ 6, 11-13, 20 (2000) (*MSS Second R&O*); See also Revisions to Broadcast Auxiliary Service Rules in Part 74 and Conforming Technical Rules for Broadcast Auxiliary Service, Cable Television Relay Service and Fixed Services in Parts 74, 78 and 101 of the Commission's Rules, ET Docket No. 01-75, *Report and Order*, 17 FCC Rcd 22979 at ¶ 15 (2002).

<sup>3</sup> *MSS First R&O* at ¶ 8.

<sup>4</sup> See *Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies*, ET Docket No. 92-9, *First Report and Order and Third Notice of Proposed Rule Making*, 7 FCC Rcd 6886 (1992); *Second Report and Order*, 8 FCC Rcd 6495 (1993); *Third Report and Order and Memorandum Opinion and Order*, 8 FCC Rcd 6589 (1993); *Memorandum Opinion and Order*, 9 FCC Rcd 1943 (1994); *Second Memorandum Opinion and Order*, 9 FCC Rcd 7797 (1994); *aff'd Association of Public Safety Communications Officials-International, Inc. v. FCC*, 76 F.3d 395 (D.C. Cir. 1996) (collectively, "*Emerging Technologies* proceeding"). See also Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, WT Docket No. 95-157, *First Report and Order and Further Notice of Proposed Rule Making*, 11 FCC Rcd 8825 (1996); *Second Report and Order*, 12 FCC Rcd 2705 (1997).

replacing the equipment of BAS licensees.<sup>5</sup> In recognition of the fact that BAS use is often concentrated within and coordinated by individual television markets, the plan called for BAS realignment to proceed based on a market-by-market basis in which all BAS licensees in a particular market were to be transitioned at the same time.<sup>6</sup>

8. In January 2003, the Commission recognized that not all of the originally authorized 2 GHz MSS applicants still planned to construct their systems, determined that the remaining MSS systems could operate on a reduced amount of spectrum, and reallocated 15 megahertz of former BAS spectrum in the 1990-2000 MHz and 2020-2025 MHz band segments to the Fixed and Mobile services to be used for new terrestrial services.<sup>7</sup> In making this reallocation decision, the Commission noted that responsibility for relocation of BAS from the band would be shared between the MSS systems and the other new entrants to the band.<sup>8</sup> In November 2003, as a consequence of this reallocation of part of the 2 GHz MSS spectrum to other uses, the Commission modified the rules by which MSS operators would relocate BAS incumbents.<sup>9</sup> Under the revised transition plan, the MSS systems would not be permitted to begin operation until the relocation of BAS in the top 30 television markets (in terms of population) as well as relocation of fixed BAS links in all markets was complete (together, the “top 30 market rule”).<sup>10</sup> However, the MSS operators would have to transition markets 31-100 within three years and the remaining markets within five years.<sup>11</sup> Finally, BAS licensees in markets not yet transitioned when MSS began offering service would have to refrain from using BAS channels 1 and 2 until transitioned (*i.e.* 1990-2025 MHz).<sup>12</sup>

9. In 2004, the Commission determined that five megahertz (the 1990-1995 MHz band) of this 15 megahertz allocation for Fixed and Mobile services should be licensed to Sprint Nextel (which, at that

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<sup>5</sup> *MSS Second R&O* at ¶¶ 29-33. The plan called for BAS to transition in two phases. The BAS incumbents would first be relocated to a 2008-2110 MHz “phase 1” bandplan. Later, when more spectrum was required for MSS, the BAS incumbents would be transitioned to the final 2025-2110 MHz “phase 2” channel plan.

<sup>6</sup> For purposes of BAS relocation, markets are based on Nielsen Designated Market Areas (DMAs) as they existed on September 6, 2000. 47 C.F.R. § 74.690(e). For convenience we shall refer to the DMAs as “markets” or “BAS markets.”

<sup>7</sup> Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, IB Docket No. 99-81, *Third Report and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order*, 18 FCC Rcd 2223 at ¶¶ 28, 35 (2003) (*AWS Third R&O*). This decision reduced the MSS allocation in this band to the 2000-2020 MHz segment. By the time this decision was issued, the number of MSS entrants had been reduced from eight to five.

<sup>8</sup> *Id.* at ¶ 37.

<sup>9</sup> Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for use by the Mobile Satellite Service, ET Docket No. 95-18, ET Docket No. 00-258, IB Docket No. 01-185, *Third Report and Order and Third Memorandum Opinion and Order*, 18 FCC Rcd 23638 at ¶¶ 29-44 (2003) (*MSS Third R&O*). The rules were modified in 2003 to eliminate Phase 1 because only a small portion of the revised MSS allocation from 2000-2020 MHz would have become available under the phase 1 bandplan. *MSS Third R&O* at ¶¶ 30-35.

<sup>10</sup> 47 C.F.R. §§ 74.690(e)(1)(i), 78.40(f)(1)(i); *MSS Third R&O* at ¶¶ 38, 51. The BAS relocation plan adopted in 2000 required the relocation of BAS facilities in the top 30 markets before MSS could begin operations while the requirement that the fixed links also be relocated was added in 2003. The Commission required fixed BAS links in all markets to be relocated before MSS could begin operation because, in general, these are fixed point-to-point links which can not be easily switched to another BAS channel. Non-fixed BAS operations in the markets outside the top 30 can avoid interference from MSS by switching to BAS channels that do not conflict with the MSS spectrum. *Id.* at ¶¶ 48-52.

<sup>11</sup> 47 C.F.R. §§ 74.690(e)(5), 78.40(f)(5).

<sup>12</sup> See Final Rules 47 C.F.R. §§ 74.690(e)(1)(ii), 78.40(f)(1)(ii) in *MSS Third R&O* at Appendix B.

time, was known as Nextel).<sup>13</sup> This decision was a component of the *800 MHz R&O*, in which the Commission undertook a major realignment of the 800 MHz band to resolve ongoing interference between public safety and commercial operations – including those by Sprint Nextel – within the band. In conjunction with this realignment, Sprint Nextel was granted the future use of the five megahertz in the 1990-1995 MHz band, which was paired with the 1910-1915 MHz band (which falls outside of the BAS allocation).<sup>14</sup> However, and as discussed in greater detail below as part of this action, Sprint Nextel also committed to certain actions regarding the relocation of BAS incumbents from the entire 35 megahertz in the 1990-2025 MHz band.

10. When the decision was made to permit Sprint Nextel to use the 1990-1995 MHz band, no BAS licensees had yet been relocated and there was no evidence that any meaningful relocation negotiations had taken place between BAS licensees and MSS entrants. Moreover, the initial two-year mandatory negotiation period of the relocation plan between MSS and BAS, which had been scheduled to end on September 6, 2002, had already been extended several times.<sup>15</sup> Against this backdrop, the Commission established, in the *800 MHz R&O*, specific BAS relocation obligations for Sprint Nextel. These procedures were based, in large part, on a joint proposal of Sprint Nextel, the Association for Maximum Service Television (MSTV), and the National Association of Broadcasters (NAB), and required Sprint Nextel to relocate all BAS licensees from the 1990-2025 MHz band within 30 months of the effective date of the *800 MHz R&O*, which was subsequently extended by 45 days, to September 7, 2007.<sup>16</sup> Under the plan, Sprint Nextel was permitted to relocate the BAS licensees in any order, but was prohibited from using the 1990-1995 MHz spectrum in a BAS market until all BAS licensees in that market have been relocated.

11. When Sprint Nextel undertook its commitment to relocate the BAS licensees, the Commission did not remove either the obligation previously placed on the MSS entrants to relocate the BAS licensees, or the procedures that had already been put in place for doing so. Because MSS entrants were not permitted to begin operation until BAS in the top 30 television markets and all fixed BAS links in all markets have been relocated, the Commission recognized in the 2004 *800 MHz R&O* the possibility that MSS systems might wish to begin operation before Sprint Nextel had relocated BAS licensees in the

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<sup>13</sup> Improving Public Safety Communications in the 800 MHz Band, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, 19 FCC Rcd 14969 at ¶¶ 8-12 (2004) (*800 MHz R&O*). The remaining ten megahertz was designated for Advanced Wireless Service (AWS) in the *AWS Sixth Report and Order*. Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, ET Docket No. 95-18, *Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order*, 19 FCC Rcd 20720 (2004). Licenses have not been issued for these AWS bands, and thus, there are no entrants in the 1995-2000 MHz and 2020-2025 MHz band segments to participate in the BAS relocation process at this time.

<sup>14</sup> Sprint Nextel's band clearing obligations for the 1910-1915 MHz band were distinct from its obligations to BAS and MSS in the 1990-1995 MHz band and are not at issue here.

<sup>15</sup> This was the mandatory negotiation period for phase 1 of the BAS-MSS transition plan adopted in 2000. See Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile-Satellite Service, ET Docket No. 95-18, *Order*, 17 FCC Rcd 15141 (2002); Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile-Satellite Service, ET Docket No. 95-18, *Order*, 18 FCC Rcd 18359 (OET, 2003); Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile-Satellite Service, ET Docket No. 95-18, *Order*, 18 FCC Rcd 23074 (OET, 2003); *MSS Third R&O* at ¶ 42.

<sup>16</sup> *800MHz R&O* at ¶¶ 251-54, 347; Commission Seeks Comment on *Ex Parte* Presentations and Extends Certain Deadlines Regarding the 800 MHz Public Safety Interference Proceeding in WT Docket No. 02-55, *Public Notice*, 19 FCC Rcd 21492 (2004).

top 30 markets.<sup>17</sup> As of today, no MSS entrant, however, has opted to invoke its right to relocate BAS licensees in any of the top 30 markets.<sup>18</sup>

12. As part of its integration of the Sprint Nextel relocation plan with the pre-existing MSS relocation procedures, the Commission eliminated the requirement that BAS licensees outside the top 30 markets that had not been relocated had to cease using a portion of the band once MSS operators began service. In removing this requirement, the Commission noted that Sprint Nextel would likely relocate most BAS licensees before MSS systems begin operations, and thus, the need for the rule – to avoid interference between MSS and BAS in those markets where BAS relocation had not yet taken place – would likely be overtaken by events.<sup>19</sup> Moreover, if MSS systems did begin operation before all BAS were relocated, the Commission reasoned, the MSS entrants and remaining BAS licensees could work together to minimize interference. The Commission noted, however, that MSS “would have to accept interference from the remaining BAS users until they are relocated.”<sup>20</sup>

13. Meanwhile, in 2003 the Commission adopted rules allowing the MSS entrants to add an ancillary terrestrial component (ATC) to their systems.<sup>21</sup> An ATC is “a terrestrial communications network used in conjunction with a qualifying satellite network system.”<sup>22</sup> The Commission will not grant a 2 GHz MSS operator authority to add ATC to its system unless it satisfies several preconditions (known as gating criteria), including the requirements that satellite service must be commercially available in the entire coverage area for the band and that the MSS operator offer an integrated satellite and ATC service.<sup>23</sup> While the Commission will not grant ATC authority until all of the gating criteria are satisfied, MSS operators may submit their application for ATC authority prior to satisfying all the criteria and MSS operators may construct and test their ATC systems prior to receiving ATC authority.<sup>24</sup> However, they may not offer commercial service using the ATC portion of their network until their ATC application has been approved. 2 GHz MSS ATC systems must use the 2000-2020 MHz band now

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<sup>17</sup> *800 MHz R&O* at ¶ 257. See also 47 C.F.R. §§ 74.690(e)(1)(i), 78.40(f)(1)(i) (describing this relocation obligation).

<sup>18</sup> The Commission required Sprint Nextel to file a plan within 30 days of the issuance of the *800 MHz R&O* stating which markets that it would relocate within eighteen months. The MSS entrants then had 30 days to review this plan and identify which of the top 30 markets they intended to invoke involuntary relocations. Sprint Nextel submitted its plan as required, and no MSS entrant opted to invoke its right to relocate BAS licensees in any of the top 30 markets. See *BAS Relocation Schedule and Implementation Plan*, Nextel Communications, Inc., WT Docket 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed April 6, 2005.

<sup>19</sup> *800 MHz R&O* at ¶¶ 269-270.

<sup>20</sup> *Id.* at ¶ 270.

<sup>21</sup> Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, *Report and Order and Notice of Proposed Rulemaking*, IB Docket No. 01-185, IB Docket No. 02-364, 18 FCC Rcd 1962 (2003) (*Flexibility R&O*).

<sup>22</sup> 47 C.F.R. § 25.201.

<sup>23</sup> 47 C.F.R. § 25.149(b). *Flexibility R&O* at ¶¶ 78-88. The offering of an integrated service may be established by demonstrating that the MSS ATC operator will use a dual mode subscriber handset which can communicate with both the satellite and ancillary terrestrial components of the network in order to provide the proposed service. 47 C.F.R. § 25.149(b)(4). Other gating criteria require the MSS operator to demonstrate that it can provide service via its satellite throughout all fifty states, Puerto Rico, and the U.S. Virgin Islands, unless it is not technically possible, and for MSS operators using geosynchronous satellites to maintain a spare satellite. 47 C.F.R. §§ 25.149(b)(1)(i), 25.149(b)(2)(ii).

<sup>24</sup> Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, *Order on Reconsideration*, IB Docket No. 01-185, 18 FCC Rcd 13590 at ¶¶ 8-13 (2003) (*Flexibility Recon Order*). See also 47 C.F.R. § 25.143(i)-(j); *Flexibility R&O* at ¶ 250.

occupied by BAS for transmissions from mobile terminals to base stations.<sup>25</sup> The MSS operator must resolve any harmful interference that occurs to other services from ATC base stations or mobile terminals.<sup>26</sup>

14. In 2007, the two remaining 2 GHz MSS entrants, TerreStar Networks Inc. (TerreStar) and New ICO Satellite Services G.P. (ICO),<sup>27</sup> each notified the Commission of its intent to construct and test ATC systems.<sup>28</sup> In January of 2009, ICO was authorized to operate ATC stations conditioned on its commercial satellite service being available to the public throughout its satellite's coverage area and subject to the outcome of this proceeding.<sup>29</sup> Because ICO may not begin satellite operations until BAS incumbents in the top 30 markets and all fixed BAS links have been relocated, ICO is likewise prevented from offering commercial ATC service until these BAS incumbents have been relocated.<sup>30</sup> The Commission has not yet acted on TerreStar's request for authorization to operate an ATC system.<sup>31</sup>

15. *BAS Relocation MO&O and FNPRM.* Under the BAS relocation framework set forth in the *800 MHz R&O*, Sprint Nextel was to have relocated the BAS incumbents by September 7, 2007. On September 4, 2007, Sprint Nextel, MSTV, NAB, and the SBE filed a Joint Petition, which sought a waiver of the September 7, 2007 BAS relocation deadline for 29 months, *i.e.* until February 7, 2010.<sup>32</sup> According to the Joint Petition, circumstances beyond the control of Sprint Nextel and the BAS licensees delayed the relocation process in ways that could not have reasonably been anticipated.

16. On December 6, 2007, the Joint Petitioners filed a plan for completing the BAS transition.<sup>33</sup> This plan was created after a comprehensive series of discussions and a day-long conference between the Joint Petitioners, several independent broadcasters, BAS system integrators, BAS installation firms, BAS

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<sup>25</sup> 47 C.F.R. § 25.149(a)(1). *Flexibility R&O* at ¶¶ 107-08. Transmissions from base stations to mobile terminals must take place in the 2180-2200 MHz band.

<sup>26</sup> 47 C.F.R. § 25.255.

<sup>27</sup> On May 13, 2009, ICO filed a letter to notify the Commission that it has changed its corporate name to New DBSD Satellite Services G.P. with respect to the entity holding the spectrum reservation and associated licenses. For administrative convenience, we will refer to the entity by its previous corporate name throughout this document.

<sup>28</sup> Letter Notification of Intent to Construct and Test ATC Facilities (Corrected Version), New ICO Satellite Services G.P., File Nos. SAT-LOI-199770926-00163, SAT-MOD-20070806-00110, filed Aug. 30, 2007; Letter of Intent Authorization, TerreStar Networks Inc., File Nos. SAT-LOI-19970926-00161, SAT-ASG-20021211-00238, SAT-AMD-20061127-00143, SAT-MOD-20070529-00075, filed Sept. 7, 2007.

<sup>29</sup> New ICO Satellite Services G.P. Application for blanket authority to operate Ancillary Terrestrial Component base station and dual-mode MSS-ATC mobile terminals in the 2 GHz bands, *Order and Authorization*, DA 09-38, File-No. SES-LIC-20071203-01646, SES-AMD-20080118-00075, SES-AMD-20080219-00172, 24 FCC Rcd 171 at ¶¶ 33-34, 68-69 (2009).

<sup>30</sup> *Id.* at ¶¶ 32-33.

<sup>31</sup> TerreStar Networks Inc. Application for authority to operate Ancillary Terrestrial Component, File No. SES-AMD-20080229-00217, filed Sept. 7, 2007, amended by File No. SES-AMD-20080229-00217, filed Feb. 29, 2008.

<sup>32</sup> Joint Petition for Waiver of Sprint Nextel Corporation, the Association for Maximum Service Television, Inc. (MSTV), the National Association of Broadcasters (NAB), and the Society of Broadcast Engineers (SBE), WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, Sept. 4, 2007 (*Joint Petition*).

<sup>33</sup> Consensus Plan of Sprint Nextel Corp., the Association for Maximum Service Television, Inc., the National Association of Broadcasters, and the Society of Broadcast Engineers, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed Dec. 6, 2007 (*Sprint Nextel et al. Plan*); Letter from Sprint Nextel Corp., WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed Dec. 13, 2007 (erratum correcting *Sprint Nextel et al. Plan*).

equipment manufacturers, T-Mobile USA, TerreStar, and ICO.<sup>34</sup> The Sprint Nextel *et al.* plan proposed that the BAS transition be completed within twenty-four months of the September 7, 2007 BAS transition deadline (*i.e.*, September 7, 2009) instead of twenty-nine months as requested by the Joint Petition. The plan included a schedule showing when each BAS market will be transitioned. Under the plan, BAS operations in the last three of the top 30 markets, which under the Commission's current rules must be transitioned before the 2 GHz MSS operators can provide service, will not be transitioned until August 2009.<sup>35</sup>

17. In the *BAS Relocation MO&O* adopted in March of 2008, the Commission waived Sprint Nextel's deadline for completing the relocation of the BAS incumbents until March 5, 2009.<sup>36</sup> The Commission concluded that waiver of the deadline was in the public interest because of the role Sprint Nextel had taken in relocating BAS licensees, and because removing Sprint Nextel from the process would bring a halt to the transition that was well underway.<sup>37</sup> Furthermore, the Commission found that the record documented numerous factors that had prevented Sprint Nextel from relocating the BAS incumbents under the original schedule, and concluded that the "record presents a compelling case that the BAS transition is sufficiently complex that it would be difficult (if not impossible) to finish it before" the September 7, 2007 date.<sup>38</sup>

18. Although the Commission believed that granting a waiver of the September 7, 2007 date was in the public interest, it did not grant a 29-month waiver of the deadline as requested in the Joint Petition. It instead settled on a new BAS transition deadline of March 5, 2009 and held in abeyance the parties' request to extend the relocation deadline to February 7, 2010. The Commission recognized that MSS entrants had expressed an interest in deploying nationwide service as early as January 1, 2009 and also concluded that it was prudent to set a date for completion of the BAS relocation beyond the nationwide DTV transition date, which at that time was scheduled for February 17, 2009.<sup>39</sup> While it did not adopt nor approve the Sprint Nextel *et al.* plan, the Commission observed it was a useful tool and stated that it would consider how well it was implemented before considering whether and how long to extend the waiver of the BAS relocation process beyond March 5, 2009.<sup>40</sup>

19. In the *BAS Relocation FNPRM* that accompanied the *BAS Relocation MO&O*, the Commission tentatively concluded that it would eliminate, starting on January 1, 2009, the requirement that BAS in markets 1-30 and all fixed BAS links be relocated before the MSS entrants may begin operations.<sup>41</sup> The Commission also sought comment on the potential for interference to occur if the MSS operators begin operation before all of the BAS licensees have been relocated, as well as means that such

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<sup>34</sup> *Id.* at ¶ 2. Although all of these parties are listed as having attended the conference at which the Sprint Nextel *et al.* plan was developed, the plan was submitted to the Commission by only the filers of the Joint Petition.

<sup>35</sup> The filed Sprint Nextel *et al.* plan also notes that the MSS operators sought unfettered access to all the MSS frequencies between 2000-2020 MHz as of January 1, 2009. However, the BAS licensees express concerns that allowing the MSS entrants access to this spectrum prior to BAS markets being transitioned could cause harmful interference to BAS operations. *Id.* at 8-9.

<sup>36</sup> Improving Public Safety Communications in the 800 MHz Band, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, 23 FCC Rcd 4393 ¶ 29 (2008) (*BAS Relocation MO&O*).

<sup>37</sup> *Id.* at ¶ 30.

<sup>38</sup> *BAS Relocation MO&O* at ¶¶ 31-33. These factors included limited manufacturing and installation resources, unexpected difficulties in integrating of new and legacy BAS equipment, and unanticipated tax and other issues that arose during the relocation negotiation process.

<sup>39</sup> *Id.* at ¶ 34.

<sup>40</sup> *Id.* at ¶ 36.

<sup>41</sup> *Id.* at ¶ 49.

interference may be avoided or corrected.<sup>42</sup> The Commission noted that, even in the absence of the top 30 market rule, MSS would be secondary in those markets where BAS had not been relocated and requested comments on whether this rule should be maintained.<sup>43</sup> In addition, the Commission sought comment on requiring only fixed BAS links in the MSS portion of the band be relocated before MSS can begin operations as opposed to the current requirement that all fixed BAS links be relocated.<sup>44</sup> Further, the Commission sought comment on allowing MSS operators to begin operation only in those markets where BAS licensees have been relocated (a market-by-market approach).<sup>45</sup>

20. In response to the *BAS Relocation FNPRM*, both ICO and TerreStar have filed comments supporting the elimination of the requirement that BAS incumbents in the top 30 markets and all fixed BAS links must be relocated before they can begin operations.<sup>46</sup> Sprint Nextel, MSTV, and NAB oppose the elimination of these requirements.<sup>47</sup>

21. *Subsequent Developments*: As required by the terms of the *BAS Relocation MO&O*, Sprint Nextel has filed status reports on the BAS transition every two months.<sup>48</sup> These reports show that the BAS transition continues to make substantial progress, but also that Sprint Nextel has never anticipated that the BAS relocation could be completed by March 5, 2009.<sup>49</sup> As of April 2009, frequency relocation agreements and purchase orders had been completed for ninety-nine percent of BAS stations, and all equipment had been delivered to sixty-four percent of the stations. In fifty-three percent of the BAS stations, incumbents have installed their replacement equipment, and thirty-nine percent of the stations are in markets that have transitioned to the new bandplan.<sup>50</sup> The BAS transition has been completed along much of the east coast, southern Texas, the western part of the country excluding the west coast, and parts of the Midwest. The BAS transition is, in general, following the Sprint Nextel *et al.* plan. However, many of the market transitions have occurred later than scheduled in the plan.

22. In the *BAS Relocation MO&O*, the Commission discussed the milestones regarding the construction, launch, and operation of satellite systems that ICO and TerreStar are required to meet as a

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<sup>42</sup> *Id.* at ¶ 55. The 2000-2020 MHz band will be used by MSS for transmissions from MSS handsets to MSS satellites and MSS ancillary terrestrial component (ATC) base stations. Transmissions from the MSS handsets can interfere with BAS receivers. BAS transmitters can cause interference to receivers in the MSS satellites and ATC base stations.

<sup>43</sup> *BAS Relocation MO&O* at ¶¶ 52, 54.

<sup>44</sup> *Id.* at ¶ 53.

<sup>45</sup> *Id.* at ¶ 56.

<sup>46</sup> Comments of TerreStar Networks Inc., WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed April 30, 2008 at 3-5 (*TerreStar FNPRM Comments*); Reply Comments of TerreStar Networks Inc., WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed May 30, 2008 at 5-9 (*TerreStar FNPRM Reply*); Comments of New ICO Satellite Services G.P., WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed April 30, 2008 at 3-9 (*ICO FNPRM Comments*); Reply Comments of New ICO Satellite Services G.P., WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed May 30, 2008 at 2-7 (*ICO FNPRM Reply*).

<sup>47</sup> Comments of Sprint Nextel Corp., WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed April 30, 2008 at 6-11 (*Sprint FNPRM Comments*); Comments of the Association for Maximum Service Television and the National Association of Broadcasters, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed April 30, 2008 at 5-7, 12-14 (*MSTV/NAB FNPRM Comments*).

<sup>48</sup> *BAS Relocation MO&O* at ¶ 44.

<sup>49</sup> See, e.g. Sprint Nextel *ex parte* Filing, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed Nov. 26, 2008 at Appendix C (setting forth a relocation schedule that anticipates the last BAS markets being cleared in August, 2009).

<sup>50</sup> *Id.* at Appendix B, p. 1.

condition for obtaining their MSS spectrum reservations.<sup>51</sup> As background, both MSS entrants have sought and received a number of extensions of these milestones in the time since they received their spectrum reservations. TerreStar's spectrum reservation was granted in 2001 with a launch milestone of July 2006 and an operational milestone of July 2007.<sup>52</sup> TerreStar's launch milestone is now June 30, 2009 and its operational milestone has been delayed until August 30, 2009.<sup>53</sup> ICO's spectrum reservation was granted in 2001 with an original launch milestone of July 2005 and an operational milestone of July 2007.<sup>54</sup> In the *BAS Relocation MO&O*, the Commission recognized the unusual circumstances presented by the BAS transition, and clarified that, for purposes of their milestone certifications, ICO's and TerreStar's satellite systems will be considered operational based upon the occurrence of transmissions between the satellite and an authorized earth station using the 2000-2020 MHz and 2180-2200 MHz bands.<sup>55</sup> ICO launched its satellite in April 2008 and, in May 2008, met its operational milestone under the terms of the *BAS Relocation MO&O*.<sup>56</sup>

23. On February 12, 2009, Sprint Nextel, MSTV, NAB, and SBE filed the Supplemental Request, in which they renewed their request to extend until February 7, 2010 the deadline by which Sprint Nextel must

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<sup>51</sup> TerreStar's predecessor-in-interest (TMI Communications and Company, Limited Partnership) and ICO were issued a reservation of spectrum in lieu of a Title III license, as is permitted for foreign licensed satellites. See Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, *Report and Order*, IB Docket No. 96-111, CC Docket No. 93-23, 12 FCC Rcd 24094 ¶¶ 183-188 (1997); 47 C.F.R. § 25.137.

<sup>52</sup> TMI Communications and Company, Limited Partnership, Letter of Intent to Provide Mobile-Satellite Service in the 2 GHz Bands, File Nos. 189-SAT-LOI-97, SAT-LOI-19970926-00161, SAT-AMD-20001103-00158, *Order*, 16 FCC Rcd 13808 (Int'l Bur. 2001).

<sup>53</sup> On June 21, 2004 (two weeks prior to the adoption of the *800 MHz R&O*), TerreStar's launch milestone was changed to November 2007 and its operational milestone was extended to November 2008. TMI Communications and Company, Limited Partnership and TerreStar Networks Inc. Application for Review and Request for Stay, File Nos. SAT-LOI-19970926-00161, SAT-AMD-20001103-00158, SAT-MOD-20021114-00237, SAT-ASG-20021211-0023819 FCC Rcd 12603 (2004). In 2008 TerreStar's milestones were extended further. Grant of FCC Application for Space and Earth Station: Mod or AMD, File No. Sat-Mod-20080718-00143, granted Nov. 12, 2008. TerreStar recently informed the Commission that the launch of its satellite will be delayed beyond the current June 30, 2009 launch milestone. However, TerreStar still expects to meet the August 30, 2009 operational milestone. TerreStar Networks Inc. Letter, File Nos. SAT-LOI-19970926-00161, SAT-AMD-20001103-00158, SAT-MOD-20021114-00237, SAT-ASG-20021211-00238, filed June 9, 2009.

<sup>54</sup> ICO Services Limited Letter of Intent to Provide Mobile-Satellite Service in the 2 GHz Bands, File No. 188-SAT-LOI-97, SAT-LOI-19970926-00163, SAT-AMD-20000612-00107, SAT-AMD-20001103-00155, *Order*, 16 FCC Rcd 13762 (Int'l Bur. 2001). In May 2005, ICO's launch milestone was delayed until July 2007. ICO Satellite Services G.P. Application for Modification of 2 GHz LOI Authorization, *Memorandum Opinion and Order*, IBFS Nos. SAT-MOD-20050110-00004, SAT-LOI-19970926-00163, SAT-PDR-20050110-00024, 20 FCC Rcd 9797 (Int'l Bur. 2005). In February 2007, ICO's launch milestone was extended to November 2007 and its operational milestone was extended to December 2007. New ICO Satellite Services G.P. Application to Extend Milestones, *Memorandum Opinion and Order*, IBFS Nos. SAT-MOD-20061109-00137, 22 FCC Rcd 2229 (Int'l Bur. 2007). ICO's launch milestone was later extended to April 15, 2008 and its operational milestone to May 15, 2008. FCC Application for Space or Earth Station: Mod or AMD, File Nos. SAT-MOD-20070806-00110, SAT-AMD-20071109-00155, granted April 2, 2008.

<sup>55</sup> *BAS Relocation MO&O* at ¶ 48. The *BAS Relocation MO&O* noted that the MSS entrants will be able to perform testing of their satellite systems without violating the requirement that BAS in the top 30 markets and all fixed BAS links in all markets be relocated before they may begin operations. *Id.* at ¶¶ 45-47. The Commission expected that this testing could be accomplished in markets where the BAS transition has been completed and that the potential for interference to BAS would be minimal.

<sup>56</sup> Final Milestone Certification and Selected Assignment Notification, New ICO Satellite Services G.P., filed May 9, 2008.

complete the transition of the 2 GHz BAS licensees.<sup>57</sup> On February 27, 2009, the Office of Engineering and Technology issued a Public Notice seeking comment on the Supplemental Request setting a comment date of March 9, 2009 and reply comment date of March 19, 2009.<sup>58</sup> In order to consider the issues raised in the Supplemental Request and the record developed in response to it, the Commission thrice waived the March 5, 2009 BAS relocation deadline without prejudice relative to the merits of the Supplemental Request.<sup>59</sup> The deadline is now June 10, 2009.

### III. REPORT AND ORDER AND ORDER

24. The actions we take today follow from the Commission's March 2008 *BAS Relocation MO&O* and accompanying *FNPRM*. We determine that it is in the public interest to waive the deadline by which Sprint Nextel must complete relocation of the BAS to frequencies above 2025 MHz until February 8, 2010. In light of the extended relocation time of BAS operations by Sprint Nextel that will result from the waiver extension, we also address the ability of MSS to operate in the 2000-2020 MHz band. As further described below, we determine that the requirements that the MSS entrants may not begin operations until the BAS incumbents in the top 30 markets by population and all fixed BAS links in the 1990-2025 MHz band have been relocated no longer serves the original purpose in light of changed circumstances. In recognition of BAS incumbents' primary status in those markets where they have not been relocated, we also set forth provisions that will allow MSS entities to operate in those markets if, after coordination, such operations can be conducted without causing harmful interference to the nonrelocated BAS incumbents (*i.e.* to those BAS incumbents who have not yet been transitioned to the new bandplan). Finally, we determine that ICO, which has been granted authority to operate ATC in conjunction with its satellite system, should be granted a waiver of the condition that it must first make available to the public commercial satellite service throughout its satellite's coverage area.

#### A. Waiver of Relocation Deadline

25. In the *BAS Relocation MO&O*, the Commission held open the option of extending the deadline by which Sprint Nextel must complete the relocation of BAS incumbents upon further consideration. After careful consideration, we conclude that the public interest is served by waiving the deadline by which Sprint Nextel must complete the relocation of BAS to frequencies above 2025 MHz until February 8, 2010. As discussed below, we hold open the option of taking additional actions to promote the relocation of BAS incumbents.

26. The Supplemental Request cites numerous circumstances that the parties characterize as being beyond Sprint Nextel's and the broadcasters' control and that will prevent completion of the BAS transition before the current deadline. These circumstances include a limited number of BAS equipment manufacturers, installers, tower climbers, vendors and other resources that limit the pace at which BAS equipment can be replaced; complexities related to BAS system design and deployment; weather-related delays; bankruptcies in the broadcasting industry; and accommodations made to minimize disruption to

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<sup>57</sup> In the September 2007 Joint Petition, the same parties who have filed the Supplemental Request had asked that the Commission waive the BAS deadline until February 2010. The Commission partially granted the Joint Petition waiver request by extending the BAS transition deadline until March 2009 and otherwise held the request in abeyance pending resolution of the issues raised in the *Further Notice. BAS Relocation MO&O* at ¶ 34 n.108.

<sup>58</sup> *Office of Engineering and Technology Declares Sprint Nextel, Inc. Request for a Waiver of the 2.0 GHz BAS Relocation Deadline to be a "Permit-but-Disclose" Proceeding for Ex Parte Purposes*, WT Docket No. 02-55, WT Docket No. 00-258, ET Docket No. 95-18, DA 09-468, 24 FCC Rcd 2691 (2009). Both MSS entities – ICO and TerreStar – filed responsive comments to this Public Notice and Sprint Nextel, MSTV, NAB, and SBE submitted reply comments.

<sup>59</sup> *Improving Public Safety Communications in the 800 MHz Band*, *Order*, WT Docket No. 02-55, WT Docket No. 00-258, ET Docket No. 00-258, 24 FCC Rcd 3340 (2009); *Order*, 24 FCC Rcd 5281 (2009); *Order*, FCC 09-48 (June 3, 2009).

news and sports coverage, and to clear BAS incumbents in markets that MSS entrants have identified as high-priority.<sup>60</sup>

27. In response to the Supplemental Request, the MSS entrants express concern that an extension of the BAS relocation deadline will frustrate their planning and introduction of service, and seek to tie an extension to other matters under consideration in this proceeding such as changing the rules for when MSS can provide commercial operations and resolving questions pertaining to cost sharing among new entrants.<sup>61</sup> For example, TerreStar states that it can accommodate extending the transition deadline as long as the requirement that BAS in markets 1-30 and all fixed BAS links be relocated before MSS can begin operations is eliminated.<sup>62</sup> ICO also filed comments stating that the waiver of the transition deadline should be granted only with action on the March 2008 *Further Notice* to mitigate the harm of the extensive delays on MSS.<sup>63</sup> The filers of the Supplemental Request responded to TerreStar and ICO by arguing that neither MSS entrant seriously contests the need for additional time to complete the BAS transition and that neither MSS entrant will suffer real harm from the delay because they are not yet ready to offer services.<sup>64</sup>

28. As the Commission stated in the *BAS Relocation MO&O*, the Commission will waive our rules if “[i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest . . .”<sup>65</sup> We remain convinced that the timely relocation of BAS licensees remains a necessary step for the full introduction of new services in the 1990-2025 MHz band, and we observe that Sprint Nextel remains the sole entity actively undertaking such relocations.<sup>66</sup> Moreover, Sprint Nextel satisfied the interim benchmark requirement set forth in the *BAS Relocation MO&O* by transitioning the markets identified as high priority by the MSS operators no later than September 30, 2008.<sup>67</sup> It has also met the reporting requirements imposed in the *BAS Relocation MO&O* by filing status reports every two months that provide comprehensive details on the progress of the BAS transition.<sup>68</sup>

29. We also believe that Sprint Nextel, working with the broadcasters, has made a good faith effort to increase the pace of the BAS transition. The Commission previously stated that we would consider how successfully the Sprint Nextel *et al.* relocation plan was implemented if we consider whether and for how long we should extend a waiver of the BAS relocation process beyond March 5,

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<sup>60</sup> *Supplemental Request* at 7-18.

<sup>61</sup> The cost sharing rules for relocation of the BAS incumbents are addressed in the *Further Notice*.

<sup>62</sup> Comments of TerreStar Networks Inc., WT Docket 02-55, WT Docket No. 00-258, ET Docket No. 00-258, filed March 9, 2009 at 8 (*TerreStar Supp. Request Comments*).

<sup>63</sup> Opposition to Supplemental Joint Request, New ICO Satellite Services G.P., WT Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed March 9, 2009 at 5 (*ICO Supp. Request Comments*).

<sup>64</sup> Reply Comments of Sprint Nextel Corporation, the Association for Maximum Service Television, Inc., the National Association of Broadcasters, and the Society of Broadcast Engineers, WT Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed March 19, 2009 at 6, 8-9 (*Sprint et al. Supp. Request Reply*).

<sup>65</sup> *BAS Relocation MO&O* at ¶ 30 (citing 47 C.F.R. § 1.925(b)(3)(ii) and *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969)).

<sup>66</sup> See *BAS Relocation MO&O* at ¶ 32.

<sup>67</sup> *Id.* at ¶ 43; See also Sprint Nextel *ex parte* Filing, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed October 1, 2008 at Appendix C (listing transitioned markets). The Commission found that timely relocation of these markets would permit MSS operators to avoid delays in launching and testing their systems. *BAS Relocation MO&O* at ¶ 43. While ICO did launch its satellite in April 2008, TerreStar’s November 2008 operational milestone that existed when the *BAS Relocation MO&O* was adopted has been subsequently modified.

<sup>68</sup> *BAS Relocation MO&O* at ¶ 44.

2009.<sup>69</sup> We recognize that the status reports demonstrate that the BAS transition was not complete by the March 5, 2009 transition deadline and that it will not likely be complete by the end of August 2009 as had been proposed by the Sprint Nextel *et al.* plan.<sup>70</sup> Moreover, as the MSS entrants note, Sprint Nextel's reports show that the anticipated relocation date for many BAS markets has been delayed.<sup>71</sup> However, the reports also reflect a steady increase in many key metrics, including that for 99 percent of the BAS stations being transitioned, all frequency relocation agreements and purchase orders have been completed.<sup>72</sup> As the Commission recognized in the *BAS Relocation MO&O*, the pace of the BAS transition is constrained by the small number of manufacturers who make the BAS equipment, a shortage of qualified equipment installers and tower climbers, and coordination problems between the new radio equipment and preexisting controllers.<sup>73</sup> These challenges have been documented in both the status reports and the Supplemental Request, and are reflected in the statistics Sprint Nextel has submitted for equipment delivery and installation. We further note that those numbers (75 and 60 percent, respectively, in June 2009) have risen considerably from a year before (21 and 13 percent in April 2008),<sup>74</sup> reflecting a pattern of continued progress by Sprint Nextel and the broadcasters. We conclude that a fair reading of the overall record indicates that Sprint Nextel has made considerable progress in the BAS relocation process that has proven to be a more complex undertaking than any party may have initially anticipated. We shall continue to closely monitor the progress of the BAS transition. As such, we leave in place the requirement that Sprint Nextel file status reports every two months on the progress of the BAS transition until the transition is complete.<sup>75</sup>

30. Furthermore, in the *BAS Relocation MO&O*, the Commission noted that it would “undoubtedly halt a transition that is already well under way were we to deny the Joint Petition and remove Sprint Nextel from the process.”<sup>76</sup> Now, as we consider the Supplemental Request, this observation remains true, and no commenter has suggested an alternate plan by which BAS licensees can be relocated quicker in order to give new entrants full and complete access to the band.

31. For these reasons, we conclude that the public interest is best served by granting a waiver of the BAS transition deadline to February 8, 2010 and allowing Sprint Nextel to continue its relocation efforts.<sup>77</sup> In granting this extension, we acknowledge the concerns expressed by the MSS entities about being able to plan for use of the band. In the *BAS Relocation MO&O*, the Commission recognized that delays in the relocation of BAS made it even more vital to accommodate the interest in finding a means of

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<sup>69</sup> See *BAS Relocation MO&O* at ¶ 36 (deeming the Sprint Nextel relocation plan a “useful tool”).

<sup>70</sup> *Sprint Nextel et al. Plan* at 2. Prior to our adoption of the March 5, 2009 BAS transition deadline, Sprint Nextel *et al.* had proposed a plan by which the transition could be completed by the end of the August 2009. Sprint Nextel did not claim that the transition could be completed by March 5, 2009.

<sup>71</sup> See *TerreStar Supp. Request Comments* at 9-10; *ICO Supp. Request Comments* at 6-7.

<sup>72</sup> Sprint Nextel *ex parte* Filing, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed June 1, 2009 at Appendix A, p. 1.

<sup>73</sup> *BAS Relocation MO&O* at ¶ 31.

<sup>74</sup> Sprint Nextel *ex parte* Filing, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed June 1, 2009 at Appendix A, p. 1.

<sup>75</sup> See *BAS Relocation MO&O* at ¶ 44.

<sup>76</sup> *BAS Relocation MO&O* at ¶ 30.

<sup>77</sup> We note that this date is also well beyond the revised digital television transition date of June 12, 2009. See *BAS Relocation MO&O* at ¶ 34 (expressing concern that broadcasters were preparing for the DTV transition that was then scheduled for February 17, 2009, and stating that “[w]e believe it is prudent to set a date beyond the DTV transition date for the completion of the BAS relocation”). Because February 7, 2009 falls on a Sunday, we are waiving the BAS transition deadline until February 8, 2009 instead of February 7, 2009 as requested by Sprint Nextel *et al.*

permitting MSS operators to begin to deploy nationwide service.<sup>78</sup> This balancing of interests also makes it necessary to manage the interference environment during the period in which both MSS and BAS operate in the band and to minimize the time during which they must co-exist.

32. We discuss, *infra*, rule modifications that will permit MSS operators quicker access to the band and consider the ways to manage the period of joint MSS and BAS co-existence. We realize that further delays in that process frustrate our goals in this proceeding, and we fully intend to take all necessary steps to ensure that the BAS licensees, Sprint Nextel, and the MSS operators act to complete the BAS relocation process in a timely manner. As discussed above, the broadcast community has been actively involved in the relocation process, and developed the original proposal to relocate BAS licensees in conjunction with Sprint Nextel.<sup>79</sup> Thus, while we intend to exercise appropriate enforcement action if Sprint Nextel is not able to complete the BAS transition by February 8, 2010 for reasons it could have reasonably avoided,<sup>80</sup> we also believe that there should be appropriate consequences for BAS licensees for failure to complete the relocation by the new deadline. In the Further Notice adopted today, we consider further modifying the BAS relocation rules to allow new entrants to begin unencumbered operations in the band before all BAS operations are relocated. We also emphasize that, under our existing relocation rules, MSS operators have an absolute responsibility to protect incumbent BAS licensees, and that we will consider taking vigorous enforcement action against any violations of this rule. Together, in adopting these measures, we intend to provide MSS operators with the certainty that will help them plan and deploy services to the public.

33. Finally, as the bimonthly reports which Sprint Nextel is required to file indicate, there are a handful of licensees who have yet to execute frequency relocation agreements with Sprint Nextel.<sup>81</sup> We remind BAS licensees that under the Commission's rules they have an obligation to negotiate in good faith with Sprint Nextel and the other new entrants relocation agreements for the 1990-2025 MHz band. If a party believes that another party, whether a BAS licensee or a new entrant, is not negotiating in good faith, it may petition the Commission for a declaratory ruling. The Commission will consider taking whatever action it deems reasonable under the rules to resolve disagreements between the parties so that the relocation can be completed in a timely manner.

## **B. Top 30 Market Rule**

34. Sections 74.690(e)(1)(i) and 78.40(f)(1)(i) of the Commission's Rules require MSS operators to relocate all BAS licensees in markets 1-30 and all fixed BAS stations operating in the band on a primary basis prior to beginning operations.<sup>82</sup> Because of the rule, MSS operators are not permitted to serve those markets where BAS licensees have been relocated and where the spectrum is, essentially, lying fallow as a result of Sprint Nextel's work to clear the entire 35 megahertz block of BAS spectrum at 1990-2025 MHz. When, in the *BAS Relocation FNPRM*, the Commission proposed to eliminate the top 30 market rule, the Sprint Nextel *et al.* plan's anticipated relocation of some of the top 30 markets was after the dates by which ICO and TerreStar were required as a condition of their authorizations to have

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<sup>78</sup> *BAS Relocation MO&O* at ¶ 34. See also *id.* at ¶ 32 (also recognizing "the enormous up-front build and launch costs that make rapid initiation of income-producing service vital to the success of a satellite venture").

<sup>79</sup> See paragraph 10 *supra* (describing how BAS relocation obligations for Sprint Nextel established in the *800 MHz R&O* were based, in large part, on a joint proposal of Sprint Nextel, the MSTV and NAB).

<sup>80</sup> The *800 MHz R&O* provided that "if [Sprint Nextel] fails to meet [the BAS relocation deadline] for reasons that [Sprint Nextel] could reasonably have avoided, the Commission will determine whether forfeitures should be imposed and/or whether [Sprint] Nextel['s] licenses, including, but not limited to, its 1.9 GHz licenses, should be revoked." *800 MHz R&O* at ¶¶ 326 & 353.

<sup>81</sup> Sprint Nextel *ex parte* Filing, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed June 1, 2009 at Appendix D.

<sup>82</sup> 47 C.F.R. §§ 74.690(e)(1)(i), 78.40(f)(1)(i).

operational satellite systems.<sup>83</sup>

35. Our proposal to eliminate the rule drew mixed responses. The MSS operators support elimination of the rule, contending that the rule only serves to delay the provision of MSS services without providing any public interest benefit, and that eliminating the rule will mitigate the hardship on them of any further waiver of the BAS transition deadline.<sup>84</sup> The MSS operators further contend that they will be able to operate on a secondary basis in nonrelocated markets without causing interference to BAS incumbents, providing technical studies that they contend reinforce this point, and stress the importance of being able to deploy their services in a nationwide manner.

36. By contrast, MSTV and NAB contend that the MSS operators have not demonstrated that they will be able to operate in uncleared markets without causing interference and oppose permitting MSS to begin nationwide operation via elimination of the top 30 market rule.<sup>85</sup> MSTV further contends that, because the top 30 market rule now requires MSS operators to provide relocation compensation to stations in the top 30 markets before such a station is relocated, elimination of the rule would unfairly permit MSS entities to operate nationwide without having to first compensate nonrelocated BAS licensees in the top 30 markets.<sup>86</sup> Notably, however, MSTV and NAB do not object to permitting MSS operations to begin on a secondary, non-interfering basis.<sup>87</sup> Sprint Nextel asks that we not remove the rule until after the MSS operators commit to reimburse Sprint Nextel for its relocation expenses, claiming that the limitation on market entry is tied to the MSS entrants' obligation to pay for their share of the costs of BAS relocation.<sup>88</sup>

37. Our analysis of the top 30 market rule must recognize how circumstances have changed since the rule was first adopted. At that time, when only MSS entrants were anticipated to occupy the band, MSS entities would have had a strong incentive to focus on the relocation of the top 30 markets and all fixed links exclusively because, once the top 30 markets and all fixed links had been relocated, MSS would have been permitted to provide service nationwide.<sup>89</sup> The introduction of Sprint Nextel and its terrestrial-based network into the band shifted the relocation focus from market size to market geography. This is because Sprint Nextel was not bound by the top 30 market rule and instead was free to concentrate on the relocation of those markets where it most desired to initiate operations. As a result, Sprint Nextel has not planned to clear all of the top 30 markets until the end of its relocation process. We also recognize that the MSS entrants had an opportunity to participate in the clearing of the top 30 markets and fixed links, but have not chosen to take action in that regard.<sup>90</sup> However, this fact must be balanced against our decisions to extend the deadline for Sprint Nextel to relocate BAS licensees long past the original September 7, 2007 date.

38. In proposing to eliminate the top 30 market rule, we noted that the delays in the relocation of BAS have increased the importance of finding opportunities that could allow MSS operators to begin to

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<sup>83</sup> *BAS Relocation MO&O* at ¶ 52.

<sup>84</sup> *TerreStar FNPRM Comments* at 3-5; *TerreStar FNPRM Reply* at 5-6, 8-9; *ICO FNPRM Comments* at 6-8, 10; *TerreStar Supp. Request Comments* at 8; *ICO Supp. Request Comments* at 5.

<sup>85</sup> MSTV/NAB FNPRM Comments at 5, 7-9.

<sup>86</sup> See MSTV *ex parte* comments in ET Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed April 8, 2009, at 3.

<sup>87</sup> *Id.* at 1; *MSTV/NAB FNPRM Comments* at 5-6.

<sup>88</sup> *Sprint FNPRM Comments* at 7.

<sup>89</sup> As noted above, our rules previously required BAS licensees in markets 31 and above that had not been relocated to cease using a portion of the band once MSS operators began service (*i.e.*, after MSS operators had relocated BAS in markets 1-30). See *supra* ¶¶ 8, 12.

<sup>90</sup> See 47 C.F.R. §§ 74.690(e)(1), 78.40(f)(1); see also *800 MHz R&O* at ¶ 257.

deploy robust commercial services. Although the January 1, 2009 date that the MSS operators had sought to begin nationwide service at the time of the *BAS Relocation MO&O* has largely been overtaken by circumstances – including the focus on market testing (for ICO) and delays in satellite launch (for TerreStar) – our decision to revise the deadline for BAS relocation to February 8, 2010 means that there still exists a period in which MSS can be expected to seek extensive use of the band before all BAS incumbents have been cleared. The top 30 market rule serves as a barrier to MSS operation, even in those areas where there are no primary BAS incumbents to protect. Elimination of the top 30 market rule would allow the benefits of MSS – such as public safety service during disasters when terrestrial communications networks may be compromised and increased competition in wireless communications through the provision of new and unique mobile services – to be provided to the public sooner rather than later.

39. In light of the changed circumstances, we conclude that the public interest is best served by eliminating the requirement, set forth in Sections 74.690(e)(1)(i) and 78.40(f)(1)(i) of the Rules, that MSS entrants must relocate all BAS licensees in markets 1-30 and all fixed stations operating in the band on a primary basis prior to beginning operations.<sup>91</sup> We note that the rule was a component of a relocation plan that was designed to “minimize[] the amount of valuable 2 GHz spectrum that could lie fallow, unused by relocated BAS licensees and not yet occupied by MSS licensees, during the early phase of MSS growth.”<sup>92</sup> Application of the top 30 market rule would now only serve to frustrate this purpose.

40. In the *BAS Relocation FNPRM*, the Commission proposed adopting a market-by-market approach in which the MSS entrants would be allowed to operate only in those markets where the BAS incumbents have been relocated.<sup>93</sup> The MSS operators generally opposed this approach, and while MSTV and NAB did not oppose market-by-market relocation, they also did not object to permitting MSS operations to begin on a secondary, non-interference basis.<sup>94</sup>

41. We conclude that the elimination of the top 30 market rule is preferable to the market-by-market approach because there will be instances in which coordination will permit the sharing of spectrum in markets where the BAS transition has not been completed. By contrast, the market-by-market approach would preclude any shared operations in nonrelocated markets.<sup>95</sup>

42. We also retain the rule that BAS licensees maintain primary status until they are relocated, decline relocation, or the BAS relocation rules sunset on December 13, 2013. MSS entrants assert that they are uniquely burdened by the delays that have been encountered by Sprint Nextel in relocating BAS incumbents, and ask that BAS incumbents be secondary to MSS entrants at an earlier date – March 5, 2009 (the end of the current BAS transition deadline) or September 1, 2009 (the last month BAS market transitions are scheduled under the Sprint Nextel *et al.* plan).<sup>96</sup> To modify this rule at this late date in the process would unfairly burden BAS licensees who have been allowed to remain in the band until relocated by new entrants or until their primary status sunsets. We see no reason to further modify this

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<sup>91</sup> We previously held in abeyance ICO’s request to waive the top 30 market rule. *BAS Relocation MO&O* at ¶ 40; ICO *ex parte* comments in ET Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed Feb. 26, 2008 at 3. Because we are now eliminating the top 30 market rule, we now dismiss as moot ICO’s request to waive the top 30 market rule.

<sup>92</sup> *MSS Second R&O* at ¶ 35.

<sup>93</sup> *BAS Relocation MO&O* at ¶ 56. Such use would require MSS operators to employ spotbeams or geolocation technology to assure they did not operate in nonrelocated BAS markets.

<sup>94</sup> *TerreStar FNPRM Comments* at 6; *ICO FNPRM Comments* at 10-11; *MSTV/NAB comments* at 5 and 10. *See also Sprint et al. Supp. Request Reply* at 27.

<sup>95</sup> We recognize that even under the approach we adopt, it may not be possible for the MSS entrants to operate without causing interference to the BAS incumbents in certain markets where BAS is heavily used.

<sup>96</sup> *ICO FNPRM Comments* at 11; *TerreStar FNPRM Comments* at 8.

important element of our existing relocation rules. Our decision to eliminate the top 30 market rule will provide MSS entrants with opportunities to begin offering service to the public, and represents a fair balancing of the interests in this proceeding. We also note that in the Further Notice we seek comment on whether we should modify the interference status of individual BAS licensees under certain circumstances.

43. We also address in this Report and Order and Order and the accompanying Further Notice, incentives designed to motivate parties to complete the BAS transition. Moreover, the number of nonrelocated BAS markets will continue to diminish as Sprint Nextel continues its relocation efforts. While we continue to hold open the option to re-evaluate our decision based on the future course of BAS relocation efforts, we do not alter the existing December 13, 2013 sunset date at this time.

44. In addition, we address concerns that our elimination of the top 30 market rule changes the rights of BAS incumbents to be relocated by MSS entrants. As the Commission has repeatedly noted throughout this proceeding, our adoption of Sprint Nextel's relocation procedures did not remove the underlying obligation of MSS entrants to relocate BAS licensees. Under the existing rules applicable to the relocation of BAS incumbents, the MSS entrants are required to relocate the incumbent BAS licensees in markets 31-100 within three years of beginning operations and the remaining BAS licensees within five years.<sup>97</sup> We discuss, elsewhere in this document, the modifications necessary to bring markets 1-30 under this rule. It was not our intent in proposing to eliminate the top 30 market rule to modify the long-recognized and basic obligation that new entrants have to relocate incumbent licensees, and we see no reason in doing so now. We believe this modification largely addresses the concerns raised by MSTV that elimination of the rule would unfairly permit MSS entities to operate nationwide without first compensating nonrelocated BAS licensees in the top 30 markets. We do not find it significant that BAS licensees operating in the top 30 markets may not be relocated to comparable facilities until after MSS begins operations because the BAS operations are primary and therefore will enjoy interference protection.

45. The elimination of the top 30 market rule is effective 30 days after this decision is published in the Federal Register. Thereafter, MSS entrants are able to begin operations when they are ready to do so, which could well be before the conclusion of the rulemaking proposed in the accompanying Further Notice on cost sharing requirements for the BAS relocation. We recognize that allowing the MSS entrants to operate on cleared spectrum before they have satisfied their cost sharing obligations to Sprint Nextel is a departure from prior Commission decisions on this issue. Generally, the Commission's relocation policies provide that when a new entrant relocates incumbent licensees in spectrum that will be occupied by a later new entrant, the latter new entrant must reimburse the earlier new entrant for a *pro rata* share of the costs of relocating the incumbent.<sup>98</sup> Usually, reimbursement is required before or shortly after the later new entrant will begin use of the cleared spectrum.<sup>99</sup> Nonetheless, we conclude that, given the unique circumstances in this case, our decision to allow the MSS entrants to begin operations in the near term, before they may have satisfied their cost sharing reimbursement obligations, best serves the public interest. In other cases, the relocation cost sharing requirements were able to be estimated with a reasonable amount of certainty well in advance of issuing licenses to new entrants. In this case, as discussed in more detail in the Further Notice, the circumstances surrounding the BAS relocation have significantly changed since the Commission adopted cost sharing rules in the *800 MHz R&O*, and

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<sup>97</sup> 47 C.F.R. § 74.690(e)(5); 47 C.F.R. § 78.40(f)(5).

<sup>98</sup> See, for example, Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, WT Docket No. 95-157, *First Report and Order and Further Notice of Proposed Rule Making*, 11 FCC Rcd 8825 at ¶¶ 71-78 (1996).

<sup>99</sup> For example, in the relocation of fixed microwave incumbents by AWS and MSS entrants, the new entrant must notify a clearinghouse prior to initiating operations. The new entrant must reimburse an earlier entrant for relocation costs within 30 days of the clearinghouse determining that cost sharing is required. See 47 C.F.R. §§ 27.1168, 27.1170, 27.1186.

uncertainty has surrounded the precise nature and extent of the MSS entrants' cost sharing obligations since that time.<sup>100</sup>

46. We want to be clear, though, that our decision to allow the MSS entrants to begin operations before they may have satisfied their cost sharing obligations to Sprint Nextel in no way relieves them of these obligations.<sup>101</sup> A guiding principle for relocation is that those entrants that benefit from cleared spectrum have an obligation to shoulder their portion of the costs to relocate incumbent operations. We fully intend to apply that principle here, as set forth in the Further Notice. In the context of the changed circumstances surrounding BAS relocation in the time since we adopted cost sharing rules for these entrants, the parties have raised questions about how those rules should be applied. We clarify these issues below. As we tentatively conclude in the Further Notice, the MSS entrants have a reimbursement obligation to Sprint Nextel. We propose and seek comment on clearly delineated cost sharing requirements reflecting these changed circumstances to balance the responsibilities for and benefits of relocating incumbent BAS operations among all new entrants in the band.<sup>102</sup> We expect the MSS entrants to comply with the rules we adopt in response to the Further Notice, and we intend to enforce those rules.<sup>103</sup>

### 1. MSS Operations in Markets Prior to BAS Relocation

47. Our decision to eliminate the top 30 market rule makes it vital for us to effectively manage the interference environment during the period in which both MSS operators and incumbent BAS licensees occupy the band. BAS is a critical part of the broadcasting system by which information and entertainment are provided to the American public. Our current rules provide that, during the pendency of the BAS transition, BAS incumbents are primary in the band until they are relocated, they refuse relocation, or the relocation rules sunset on December 9, 2013.<sup>104</sup> This means that MSS entrants may not cause interference to the nonrelocated BAS incumbents, and that MSS entrants must also accept interference from the nonrelocated BAS incumbents.<sup>105</sup> We note that this obligation includes interference from MSS operations in markets where BAS has been transitioned to BAS incumbents operating in adjacent markets that have not yet been transitioned. Furthermore, MSS operations in markets where BAS has been transitioned must accept interference from BAS operating in markets where the BAS

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<sup>100</sup> See paragraphs 77-80, *infra*.

<sup>101</sup> Sprint Nextel suggest that it is necessary to link the MSS entrant's cost sharing obligations to the top 30 market rule in order to help ensure that the MSS entrants will pay their share of the transition costs. The removal of the top 30 market rule does not by itself lead to a particular resolution of the outstanding issues relating to cost sharing among new entrants in the BAS band.

<sup>102</sup> See paragraphs 84-86, 91 *infra*.

<sup>103</sup> TerreStar acknowledges that MSS entrants "are always obligated to meet any obligations placed on them by the Commission." TerreStar Networks Inc. *ex parte* letter, ET Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed June 5, 2009.

<sup>104</sup> 47 C.F.R. § 74.960(b), 74.690(e)(6), 78.40(b), 78.40(f)(6); See also 47 C.F.R. § 2.105(c)(2) (setting forth the principle that secondary licensees have the responsibility to avoid causing interference to primary licensees). *Sprint et al.* implies in their comments that they believe MSS would obtain primary status with respect to BAS nationwide if the top 30 market rule is eliminated. *Sprint et al. Supp. Request Reply* at 24-25. This is incorrect. As our rules state, the BAS incumbents maintain their primary status until they are relocated, they refuse relocation, or the relocation rules sunset in December 2013. With the elimination of the top 30 market rule, MSS becomes primary with respect to BAS only in those markets where the BAS transition has been completed.

<sup>105</sup> The requirement that MSS must accept interference from and not cause interference to nonrelocated BAS applies only to BAS licensees with primary status. Certain BAS licensees, such as those associated with low power TV and translator stations, short-term BAS facilities operating under Section 74.24 of our rules, and those licensed after June 27, 2000 have secondary status. See 47 C.F.R. § 2.106 Footnote NG 156; 47 C.F.R. § 74.24(c); 47 C.F.R. § 74.602(f); *MSS Second R&O* at ¶ 59.

transition has not occurred.<sup>106</sup>

48. We now consider whether, and under what circumstances, MSS operations can take place in and adjacent to BAS markets where relocation has yet to occur. In the March 2008 *Further Notice*, the Commission observed that it might be possible for MSS operations to take place prior to the relocation of all BAS incumbents through coordinated use, and sought comment on how MSS could avoid or correct interference in markets where they would operate on a secondary basis.<sup>107</sup> Both TerreStar and ICO have submitted technical studies purporting to show that they can operate in markets where BAS has not been relocated, while only rarely causing interference.<sup>108</sup> TerreStar's technical study does admit that interference to BAS incumbents using analog equipment can occur,<sup>109</sup> but it claims that computer simulations have shown that interference events will occur only every 1.06 to 2.29 years depending on which BAS channel MSS is operating.<sup>110</sup> ICO's technical study also reaches the conclusion that interference will only rarely occur.<sup>111</sup> However, ICO's results are based on measurements included in TerreStar's technical study that have been adjusted for the expected differences between ICO's mobile terminals and TerreStar's. ICO's study also claims that because its mobile terminals will transmit in short 5 to 20 millisecond bursts, even when interference does occur it will not have a noticeable effect on the received BAS signals.<sup>112</sup> ICO did not test this theory with actual analog BAS equipment.

49. NAB and MSTV generally disagree with the MSS operators' assertions and express concern that significant interference could occur if MSS operates before BAS has been relocated.<sup>113</sup> For example, MSTV asserts that because the exact technical configuration of ICO's system is not completely known, further technical data is necessary to assess ICO's claims. It also refutes TerreStar's study, noting that its claim that there will be little or no interference to digital BAS operations is inapplicable, given that analog equipment is predominantly used in uncleared markets.<sup>114</sup> MSTV claims that TerreStar should have

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<sup>106</sup> Because BAS transmitters typically use highly directional antennas, a MSS satellite may receive interference from a BAS transmitter when its antenna is pointed in the direction of a satellite. An MSS satellite will have to accept interference from a BAS transmitter operating in a market where the BAS transition has not occurred.

<sup>107</sup> *BAS Relocation MO&O* at ¶ 55.

<sup>108</sup> Predicted Impact to 2 GHz Broadcast Auxiliary Operations from Proposed Handset to Satellite Emissions, TerreStar Networks Inc., WT Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed Jan. 30, 2008 (*TerreStar Technical Study*); MSS-BAS Spectrum Sharing Analysis, *ICO FNPRM Comments* at Annex A (*ICO Technical Study*). TerreStar also submitted a technical analysis for interference to BAS fixed links, which is discussed *infra*.

<sup>109</sup> "A TSN (TerreStar Networks) handset may cause interference in some situations no matter on which frequency it operates." *TerreStar Technical Study* at 18.

<sup>110</sup> *TerreStar FNPRM Comments* at 4-5.

<sup>111</sup> While TerreStar provides no details on the assumptions it made in calculating that interference events will occur every 1.06 to 2.29 years, ICO explains the assumptions used in its calculations. For example, ICO assumes that it will have 100,000 subscribers by the end of the 2009, with 66,667 by the end of August and 10% of subscribers roaming outside their home markets at any time. ICO makes the assumptions that three BAS receiver sites per market will operate on BAS channel 2 and 15% of the time a BAS signal will be received close to the coverage threshold so that interference may occur. ICO also assumes that its subscribers will make one 0.18 millisecond transmission every 10 minutes. Based on these assumptions ICO calculates that the probability that a transmission from an ICO subscriber will occur at a signal level that could cause interference to a BAS receiver as 0.000021%. *ICO Technical Study* at 10-12.

<sup>112</sup> "By limiting uplink transmissions to 5 to 20 millisecond burst, ICO's MSS operations will not interfere with BAS reception." *ICO Technical Study* at 9.

<sup>113</sup> *MSTV/NAB FNPRM Comments* at 7-9. See also *Sprint et al. Supp. Request Reply* at 25.

examined representative analog equipment, and considered the effect of such factors as BAS analog “split channel” techniques in heavily used markets and the use of mobile electronic newsgathering relay vans.<sup>115</sup>

50. We conclude that the record is insufficient to support the MSS operators’ claims that they will be able to routinely operate in nonrelocated BAS markets without causing interference. As an initial matter, these studies are, to a certain extent speculative because MSS mobile terminals are not yet available for testing.<sup>116</sup> In addition, TerreStar gives no description of the computer simulations or information about the assumptions made in these simulations. We agree with TerreStar’s conclusion that interference to BAS incumbents from the MSS operations can occur, but we have no means of estimating how frequent or severe such interference will be.<sup>117</sup> ICO’s filings are equally troubling, as we are unable to determine if ICO’s assumptions as to how often its mobile terminals will transmit and how many of its customers are likely to travel into areas where BAS has not been relocated are correct. Moreover, to the extent that ICO’s analysis relies on TerreStar’s claims, they incorporate some of the same shortcomings.

51. While the studies suggest that in certain circumstances, MSS operations could result in harmful interference to BAS receivers operating in nonrelocated markets, nothing in the record diminishes our tentative conclusion that there are steps MSS entrants and BAS licensees may be able to take to operate cooperatively in the same spectrum. For example, in markets where not all the BAS channels are being used, the BAS channels which overlap the spectrum used by MSS could be left vacant. In markets where some of the BAS incumbents have received digital equipment which allows them to operate with reduced bandwidth, the digital equipment could be used on the BAS channels that overlap the MSS spectrum so that the MSS entrants may operate in vacant spectrum between the digital signals. At certain times of the day the BAS channels may be lightly used, which would allow MSS to make use of the fallow spectrum. When spectrum overlapping only one of the MSS entrants’ spectrum is not being used, the two MSS entrants could share the available spectrum. Of course, we recognize that the specific measures that could allow MSS to successfully operate on a secondary basis will vary with each nonrelocated market, and in some cases it may not be feasible to implement any of the options discussed above.

52. In the *BAS Relocation FNPRM*, the Commission sought comment on how “MSS could avoid or correct interference that might occur” to BAS incumbents when operating on a secondary basis in markets where BAS has not been relocated.<sup>118</sup> Based on the record before us, we conclude that interference to nonrelocated BAS incumbents cannot be avoided if MSS is allowed to conduct

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<sup>114</sup> MSTV has submitted a technical analysis of TerreStar’s technical study which claims that the study is flawed because it uses bench and field test for a newer analog receiver that is more resistant to interference than receivers typically employed by BAS licensees and does not take into account that in many markets each BAS channel is used to send two video signals instead of just a single signal as assumed TerreStar technical report. MSTV *ex parte*, WT Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed April 8, 2009 (*MSTV Technical Report*). TerreStar has responded to MSTV’s technical study in an *ex parte* filing that includes a technical response and a consultant’s report. TerreStar *ex parte*, WT Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, MSTV, filed May 26, 2009 (*TerreStar May 2009 ex parte*). TerreStar’s technical response notes that an older analog BAS receiver that was tested was found to have similar interference rejection characteristics to the current generation of analog BAS receivers. *Id.* Technical Response at 4.

<sup>115</sup> *MSTV Technical Report*. TerreStar’s technical consultant notes that outside of Los Angeles split-channels are only occasionally used. *TerreStar May 2009 ex parte* BTC Consultations Report at 5. Furthermore, TerreStar asserts that relay vans have been replaced by satellite ENG trucks and portable ENG cameras most likely use digital transmission techniques, which will not be impacted by interference from TerreStar equipment. *Id.*

<sup>116</sup> TerreStar’s technical study used a North American Digital Cellular signal to model the MSS mobile terminal transmissions. *TerreStar Technical Study* at 4.

<sup>117</sup> We also generally agree with MSTV that the TerreStar study’s conclusion regarding digital equipment are misplaced given the continued use of analog equipment in uncleared markets.

<sup>118</sup> BAS Relocation MO&O at ¶ 55.

unrestricted operations in uncleared markets.<sup>119</sup> Accordingly, we conclude that MSS entrants will only be permitted to conduct operations in nonrelocated BAS markets if such operations comply with the conditions set forth below. Our decision represents a compromise between our interests in promoting the provision of MSS services to the public, protecting important BAS operations from interference prior to their relocation, and avoiding further delays to completing the overall BAS relocation. The unexpected delays in the completion of the BAS transition, as well as the relatively short period of time before the required completion of the BAS transition, weigh against the alternative option of categorically excluding MSS operations from those markets in which BAS incumbents have not been relocated. We emphasize that MSS entrants must avoid operation of their mobile terminals where it will cause harmful interference to BAS. If harmful interference does occur to the nonrelocated BAS incumbents from the MSS entrants, the MSS entrant must take all actions to correct the interference, up to and including curtailing operation in and around the affected markets.

53. We impose the following requirements to protect the primary BAS operations: First, MSS entrants will be required to successfully coordinate any operations in nonrelocated markets with BAS incumbents in those markets prior to beginning service. Second, MSS entrants are prohibited from marketing their services to customers in markets where the BAS transition has not been completed. This restriction will further our goal of avoiding any interference that might occur because the only MSS customers who could potentially cause interference are those who reside in areas where the BAS transition has occurred who are traveling to areas where the BAS transition is not yet complete. Third, we prohibit MSS entrants from operating ATC networks in markets where the BAS transition is not complete. We note that both MSS entrants have pledged that they will not operate ATC networks in markets where the BAS has not been transitioned.<sup>120</sup>

54. Interference may also occur to nonrelocated BAS incumbents from MSS mobile terminals operating adjacent to markets where the BAS transition has not been completed. To address this possibility, we determine that MSS mobile terminals may not operate within line-of-sight of BAS receiver sites in markets where the BAS transition has not been completed, unless such use has been coordinated between the MSS operator and BAS licensee.<sup>121</sup> In addition, we will not allow the MSS entrants to

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<sup>119</sup> As TerreStar's technical study concluded "a TSN (TerreStar Network) handset may cause interference no matter on which frequency it operates, usually when the BAS link is at or close to its threshold level and the TSN handset is in the beam of the BAS receive antenna." *TerreStar Technical Study at 18*. TerreStar's technical consultant states that MSS and BAS can "co-exist without interference using simple coordination procedures that are non-intrusive or minimally intrusive on ENG operations." *TerreStar May 2009 ex parte BTC Consultations Report at 4*. It is noteworthy that the technical consultant does not say co-existence can occur absent coordination procedures.

<sup>120</sup> ICO indicates that it "is willing to refrain from operating ATC facilities and marketing MSS/ATC user terminals in uncleared DMAs prior to the Sprint-BAS relocation deadline." *ICO FNPRM Comments at 8*; ICO also implies that it will not market services in markets where the BAS transition has not occurred because its technical study just considers interference from roaming devices—*i.e.* mobile terminals which are operating outside of the market where the customer resides. *MSS-BAS Spectrum Sharing Analysis, ICO FNPRM Comments at Annex A, 10 (ICO Technical Study)*. "TerreStar has already indicated that it will not initiate ATC operations in any market unless BAS relocation in the market has been completed or TerreStar's ATC operations have been coordinated with the market's BAS licensees." *TerreStar FNPRM comments at 5*. However, TerreStar has more recently requested that the Commission leave open the possibility of allowing ATC operation prior to the extended BAS transition deadline upon an appropriate showing. *TerreStar Supp. Request Comments at 9 n.23*.

<sup>121</sup> Although our rules do not require the location of BAS receiver sites to be registered with the Commission, BAS licensees may choose to place this information in the Commission's ULS database. *See* Wireless Telecommunications Bureau announces ULS upgrade: Licensees of Television Pick-up Stations now have the option to identify their stationary, receive-only sites on ULS to aid coordination with other services, *Public Notice*, DA 08-892, 23 FCC Rcd 6521 (2008). BAS licensees may also notify the MSS operators of the location of BAS receiver sites in nonrelocated markets. MSS operators are responsible for preventing their mobile terminals from operating within line-of-sight of nonrelocated BAS receiver sites about which they have knowledge (either via notification by the licensee or listing in the ULS database), absent coordination. If a MSS operator is notified by a (continued...)

operate ATC equipment within line-of-sight of a BAS receiver site about which they have knowledge and for a market which has not been transitioned. MSS transponders must also accept any interference caused by BAS operations in uncleared markets.<sup>122</sup>

55. While the coordination requirement places important responsibilities on the MSS entrants to show how they can operate without causing interference to BAS, we nevertheless expect the BAS incumbents to act cooperatively to accommodate good faith proposals for MSS operation. Because not all BAS receive site information is available in the Commission's licensing databases, we expect BAS licensees to disclose the locations of these sites to MSS entrants upon request in order to facilitate coordination. While we believe that there may be instances where individual BAS licensees may be able to adjust the channels or bandwidth on which they operate or make other adjustments to accommodate MSS operations, we emphasize that BAS incumbents are not expected to agree to coordination proposals that would impair their ability to meet the electronic newsgathering needs of a particular market at a particular time or that would delay the scheduled relocation of BAS. To a certain extent, we disagree with MSTV and NAB that BAS operations should never reduce bandwidth or cease channel operation, if doing so is agreed to as part of coordination.<sup>123</sup> However, we would not expect broadcasters to retune or modify equipment to accommodate MSS when that equipment is already scheduled to be replaced, unless it will not divert resources from the BAS transition. We will not permit an MSS entrant to approach the BAS incumbents in a particular market to coordinate operations until sixty days before the MSS entrant expects to provide commercial service in that market. By doing so, we strike a balance between providing the parties a reasonable time to work out an agreement and preventing disruptions to the BAS transition schedule. If coordination takes place too early, the market may have transitioned by the time the MSS entrant actually begins providing service.

56. We do not believe it is necessary to adopt special technical provisions for the protection of fixed BAS links. By eliminating the top 30 market rule, we also remove the requirement for MSS to relocate all fixed links prior to beginning operations. In the March 2008 *BAS Relocation FNPRM*, the Commission proposed eliminating the requirement that all fixed BAS links in the 1990-2025 MHz band be relocated in all markets before the MSS entrants may begin operations.<sup>124</sup> We conclude that our alternate proposal, to require the fixed BAS links that overlap the MSS portion of the band from 2000-2020 MHz to be relocated before the MSS entrants may begin operations, is not necessary.

57. TerreStar claims that sharing between MSS and fixed BAS links is technically feasible.<sup>125</sup> TerreStar has submitted a technical study showing no interference from MSS operations is predicted for a fixed studio-to-transmitter link used by KTVT in Fort Worth, Texas.<sup>126</sup> As TerreStar's technical study illustrates, in many instances the MSS mobile terminals may be able to operate without causing interference to fixed BAS links. We have no data, however, as to whether the particular fixed BAS link TerreStar used in its technical study is typical of the other fixed BAS links, and, consequently, cannot determine whether this prediction is valid in general. Because each fixed BAS link has different characteristics in terms of the distance covered, the power levels used, antenna gain, and terrain, we conclude that a case-by-case analysis will have to be done to determine whether the spectrum can be

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BAS incumbent that interference is occurring to a nonrelocated BAS system, the MSS operator is responsible for correcting the interference and preventing future interference.

<sup>122</sup> See MSTV *ex parte* filing in WT Docket 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed April 8, 2009 at 2 (describing an interference scenario in which operators of an electronic newsgathering truck aim their transmissions in a southerly direction to connect to a receive site).

<sup>123</sup> See MSTV/NAB *FNPRM Comments* at 8.

<sup>124</sup> *BAS Relocation MO&O* at ¶¶ 49, 53.

<sup>125</sup> *TerreStar FNPRM Comments* at 4-5.

<sup>126</sup> *Id.* at Appendix.

shared.<sup>127</sup> Thus, while TerreStar's filing offers a model for MSS sharing, it does not follow that MSS operations will always be able to co-exist with nonrelocated fixed BAS operations.

58. Accordingly, we determine that an MSS entrant will be required to coordinate with nonrelocated fixed BAS links which overlap the spectrum it will be using.<sup>128</sup> Through coordination, the MSS entrant and the BAS licensee may determine by mutual agreement that harmful interference to the BAS fixed link will not occur. In that case the MSS entrant will be able to operate in that market. In other instances, the fixed BAS link may not use the entire spectrum overlapping the MSS spectrum, which would allow the MSS entrant to operate in the remaining portion of the band without causing interference to the BAS links.<sup>129</sup>

59. Nevertheless, it may not be possible in some cases for the MSS entrant to operate without causing interference to the fixed BAS link. In these situations, the MSS entrant will have to relocate the fixed BAS link before it may operate in that market. We note that typical fixed BAS link applications involve continuous use for critical purposes by the BAS licensees, such as links between a television studio and a transmitter or between a parent station and a translator station. Unlike mobile BAS applications, fixed BAS equipment is often not frequency-agile. This means that BAS licensees cannot readily re-tune to other BAS frequencies as a means of avoiding potential interference from MSS operations. While the nature of fixed BAS operations may make it more likely that they will have to be relocated than mobile BAS equipment, any relocations should not be particularly burdensome for MSS operators because the number of fixed BAS links in this portion of the band is relatively small.<sup>130</sup>

## 2. ATC Operations

60. ICO has been granted authority to operate ATC in conjunction with its satellite system conditioned on its commercial satellite service being available to the public throughout its satellite's coverage area, and subject to FCC action concerning ICO's ongoing dispute with Sprint Nextel over

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<sup>127</sup> This analysis can be made in accordance with ITU-R recommendation M.1469.1 "Methodology for evaluating potential for interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS)(Earth-to-space) transmissions into line-of-sight fixed service receivers in the 2 GHz range."

<sup>128</sup> For example, ICO, as the first MSS entrant with an operational satellite, has chosen the 2010-2020 MHz portion of the band for its operations. See Final Milestone Certification and Selected Assignment Notification, New ICO Satellite Services G.P., filed May 9, 2008. As a result, ICO will have to coordinate with fixed BAS links which overlap the 2010-2020 MHz band before ICO may operate MSS mobile terminals in a market where those BAS links are located. MSS operators are allowed to operate in the 2000-2020 MHz band outside of their assigned spectrum on a secondary basis. See Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, *Report and Order*, IB Docket 99-81, 15 FCC Rcd 16127 ¶ 19 (2000). A MSS operator may not operate elsewhere in the 2000-2020 MHz band, where the fixed BAS links have not been relocated, without first coordinating with the BAS licensee. For example, ICO may not operate in the 2000-2010 MHz portion of the band on a secondary basis without coordinating with fixed BAS links that have not yet been relocated from that portion of the band.

<sup>129</sup> MSS entrants will still be responsible for any interference caused to fixed BAS links in the entire 1990-2025 MHz band. Consequently, the MSS entrants will need to coordinate with (and, in some cases, relocate) fixed BAS links in the rest of the band if MSS operations will result in harmful interference to those BAS licensees.

<sup>130</sup> According to the Commission's records, there are 1128 fixed BAS links in the 1990-2110 MHz BAS band. Of these links, 341 overlap the 2000-2020 MHz portion of the band where MSS will operate. According to MSTV/NAB, replacement equipment should be readily available and not subject to the equipment production delays associated with the larger BAS transition because the fixed BAS links operate as fixed point-to-point microwave links rather than the mobile ENG equipment used by the other BAS licensees. *MSTV/NAB FNPRM Comments* at 13.

reimbursement for Sprint Nextel's cost in relocating the BAS incumbents in the band.<sup>131</sup> As described above, while we are eliminating the top 30 market rule and permitting ICO to begin operations, ICO may not market its services to customers in markets where the BAS transition has not been completed. Consequently, ICO's commercial satellite service will not be commercially available throughout its coverage area until the BAS transition is complete and, as a result, ICO would not meet the "commercial availability" gating requirement for offering ATC.<sup>132</sup>

61. Previously, ICO had requested waiver of the commercial availability requirement, if necessary, to allow it to commence ATC operation at the same time and in the same markets in which it can provide satellite service, even if it is unable to provide satellite service nationwide at that point.<sup>133</sup> We hereby grant ICO a limited waiver of the commercial availability requirement, pending completion of the BAS transition. Once ICO begins to commercially offer satellite service in a market in which the BAS transition has been completed, ICO will be permitted to operate ATC in that market.<sup>134</sup> Once the BAS transition has been completed, ICO may operate ATC service throughout its coverage area, provided that it is also offering commercial satellite service throughout its coverage area.<sup>135</sup>

62. We take this action only because of the unique situation of the BAS transition. The delays in the BAS transition preclude ICO from making satellite service commercially available throughout its coverage area – *i.e.* all of the United States, Puerto Rico, and the U.S. Virgin Islands. Absent a temporary waiver of the commercial availability requirement, ICO would likely have to wait until the end of the BAS transition to offer ATC capabilities – even though there will be many markets in which there will be no incumbent BAS operations and where it will be providing satellite service. Permitting ICO to operate ATC only in those cleared BAS markets in which it offers commercial satellite service allows us to recognize the changed circumstances regarding the BAS transition while still ensuring that ATC will only be deployed where there is underlying satellite service.<sup>136</sup>

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<sup>131</sup> See *infra* ¶ 14. The Further Notice portion of this action addresses cost sharing between MSS and Sprint Nextel. Sprint Nextel filed an Application for Review of the order by the Commission's International Bureau granting authority to ICO to offer ATC. Application for Review of Sprint Nextel Corp., IBFS File No. SES-LIC-20071203-01646, SES-AMD-20080118-00075, SES-AMD-20080219-00172, filed Feb. 17, 2008. According to Sprint Nextel, the Commission's rules and precedent unambiguously require ATC applicants to satisfy the satellite coverage and commercial availability requirements before receiving ATC operating authority. As discussed below, we find that permitting ICO to commence ATC service as BAS is relocated in each market would serve the public interest. Therefore, we also dismiss Sprint Nextel's Application for Review.

<sup>132</sup> 47 C.F.R. § 25.149(b)(3). ICO's coverage area is all of the United States, Puerto Rico, and the U.S. Virgin Islands. 47 C.F.R. § 25.149(b)(1)(i).

<sup>133</sup> Consolidated Opposition and Response of New ICO Satellite Services G.P., IBFS File No. SES-LIC-20071203-01646, SES-AMD-20080118-00075, SES-AMD-20080219-00172, filed April 17, 2008 at 5.

<sup>134</sup> Of course, ICO must satisfy the other ATC gating criteria such as maintaining a spare satellite within one year of commencing operations and offering an integrated service of MSS satellite and MSS ATC. 47 C.F.R. §§ 25.149(b)(2)(ii), 25.149(b)(4). The MSS entrants must also satisfy the ATC gating criteria for the 2180-2200 MHz band.

<sup>135</sup> We are waiving the commercial availability requirement only until the BAS transition is completed. Once the BAS transition has been completed, ICO will have to satisfy the commercial availability requirement in order to expand ATC service.

<sup>136</sup> We have not yet acted on TerreStar's ATC authorization request. We hereby delegate authority to the International Bureau to grant a similar waiver in connection with TerreStar's proposed ATC operations, should such a waiver be necessary. As discussed in note 131, *supra*, we dismiss the Application for Review that Sprint Nextel filed regarding the order by the Commission's International Bureau granting ATC authority to ICO. The Application for Review is no longer relevant now that we have waived the commercial availability requirement for ICO.

#### IV. FURTHER NOTICE OF PROPOSED RULEMAKING

63. In this Further Notice of Proposed Rulemaking (Further Notice), we propose to modify our cost sharing requirements for the 2 GHz BAS band because the circumstances surrounding the BAS transition are very different than what was expected when the cost sharing requirements were adopted. Sprint Nextel has asked us to issue a declaratory ruling regarding the cost sharing obligations between itself and the MSS and AWS-2 entrants in the band, but we decline to do so at this time.<sup>137</sup> Instead, as we explain below, we believe that the best course of action is to propose new requirements that will address the ambiguity of applying the literal language of the current requirements to the changed circumstances, as well as balance the responsibilities for and benefits of relocating incumbent BAS operations among all new entrants in the band based on the Commission's relocation policies set forth in the *Emerging Technologies* proceeding.<sup>138</sup>

64. In the Report and Order and Order, we allowed MSS entrants to operate in markets where the BAS incumbents have not been relocated only if they successfully coordinate operations with the BAS incumbents. In this Further Notice we seek comment on whether MSS can operate on an unrestricted and secondary basis in nonrelocated BAS markets.

65. In this Further Notice, we also propose to modify the current rules regarding the MSS entrants' obligation to relocate the BAS incumbents to take into account our decision in the Report and Order and Order herein to eliminate the top 30 market rule. Under the current rules, after the top 30 markets are relocated, the MSS entrants are required to complete relocation of the BAS incumbents in markets 31 and above within either three or five years of beginning operations, depending on the size of the BAS market. We propose to maintain this independent obligation on MSS entrants to relocate BAS incumbents in all markets. The Further Notice also addresses the independent obligation of AWS entrants to relocate BAS incumbents in the band.

66. Finally, we also seek comment on whether we should further modify the BAS relocation rules to allow new entrants to begin unencumbered operations in the band before all BAS operations are relocated. The BAS transition is taking longer than initially anticipated and delaying the introduction of new services in the band. We seek comment on incentives to encourage BAS licensees to complete the relocation process promptly and without unnecessary delay.

##### A. Cost Sharing

67. *Background.* In 2003, when fifteen megahertz of spectrum in the 1990-2000 MHz and 2020-2025 MHz bands was reallocated from MSS to Fixed and Mobile services to be used for new terrestrial services, *i.e.*, AWS-2, the Commission decided that responsibility for BAS relocation would be shared between the MSS entrants and the other new entrants to the band.<sup>139</sup> In 2004, Sprint Nextel was assigned five megahertz of this spectrum in the 1990-1995 MHz band (as well as the paired 1910-1915 MHz band) in exchange for giving up spectrum it held in the 800 MHz band. Sprint Nextel also was given the obligation to relocate the BAS incumbents from the entire 35 megahertz of spectrum in the 1990-2025 MHz band, as well as the realignment of the 800 MHz band to resolve ongoing interference between public safety and commercial operations in that band. To ensure that Sprint Nextel did not receive an undeserved windfall by receiving the 1.9 GHz spectrum, Sprint Nextel was required to make an "anti-windfall" payment to the U.S. Treasury if the fair value of the spectrum it received, as determined by the Commission (\$4.86 billion), exceeded the total of (i) the value the Commission attributed to the 800 MHz

<sup>137</sup> Letter from Sprint Nextel, WT Docket No. 02-55, WT Docket No. 00-258, ET Docket No. 95-18, filed October 8, 2008, 13.

<sup>138</sup> See *supra* note 4.

<sup>139</sup> *AWS Third R&O* at ¶ 37.

spectrum Sprint Nextel was vacating (\$2.059 billion); (ii) the costs paid by Sprint Nextel to realign the 800 MHz band; and (iii) the costs paid by Sprint Nextel to clear incumbent users from the BAS spectrum (as well as the paired 1910-1915 MHz band).<sup>140</sup> The Commission required Sprint Nextel to pay any monies owed to the U.S. Treasury under this calculation as part of a “true-up” that was originally scheduled to be accomplished within six months of the end of the 36 month 800 MHz transition period.<sup>141</sup> The 36 month 800 MHz transition deadline was later established as June 26, 2008 with the true-up to occur by December 26, 2008. We note that Sprint Nextel was to complete the relocation of the BAS incumbents by September 7, 2007, prior to both the 800 MHz transition date and the subsequent true-up date.

68. In the 2004 *800 MHz R&O*, the Commission provided that the earlier entrant to the band who relocated BAS, whether Sprint Nextel or MSS, could receive reimbursement from a later entrant for the band clearing costs consistent with the *Emerging Technology* relocation principles.<sup>142</sup> However, the unique situation that led to the assignment of the 1.9 GHz spectrum to Sprint Nextel required the Commission to establish additional procedures for the band. Specifically, the Commission established in the *800 MHz R&O* that Sprint Nextel is “entitled to seek *pro rata* reimbursement . . . from MSS licensees that enter the band” prior to the end of the 800 MHz 36-month reconfiguration period, and it required Sprint Nextel to notify the MSS entrants of its intention to seek cost sharing.<sup>143</sup> The Commission provided that if Sprint Nextel receives a cost sharing reimbursement from the MSS entrants, the amount is to be deducted from the costs it can claim credit for as BAS relocation expenses in the 800 MHz true-up.<sup>144</sup> Sprint Nextel’s right to receive reimbursement from MSS was limited to the costs of clearing the top thirty markets and all fixed BAS facilities, regardless of market size, based on an MSS entrant’s *pro rata* share of the 1990-2025 MHz spectrum involved.<sup>145</sup> We note that when Sprint Nextel undertook its commitment to relocate the BAS licensees, the Commission did not, as discussed above, remove the obligation of the MSS entrants to relocate the BAS licensees, nor did it eliminate the procedures that had already been put in place for doing so. Indeed, the Commission provided an opportunity for the MSS entrants to relocate BAS incumbents, particularly in the top 30 markets, so that they would not be delayed in satisfying their entry requirements. Sprint Nextel, in turn, is required to reimburse MSS entrants for a *pro rata* share of any relocation costs MSS entrants incur if they participate in the relocation of BAS before Sprint Nextel has completed its clearing of the BAS band.<sup>146</sup> When the decision was made to permit Sprint Nextel to use the 1990-1995 MHz band, no BAS licensees had been relocated by the MSS entrants, and there is no evidence that the MSS entrants exercised their right to relocate any BAS incumbents subsequent to the Commission’s decision.

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<sup>140</sup> *800 MHz R&O* at ¶¶ 240, 249, 261, 297, 329-330, 357; Improving Public Safety Communications in the 800 MHz Band, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, *Supplemental Order and Order on Reconsideration*, 19 FCC Rcd 25120 at ¶ 36 (2004). Specifically, these relocation costs encompass the clearing of the 1910-1915 MHz band plus the costs of relocating the 1990-2110 MHz BAS licensees.

<sup>141</sup> *Id.* at ¶ 12, 330.

<sup>142</sup> *800 MHz R&O* at 252, 259-262; *see also* 47 C.F.R. §§ 27.1160-1190; 47 C.F.R. § 101.82.

<sup>143</sup> *800 MHz R&O* at ¶ 261.

<sup>144</sup> *Id.*

<sup>145</sup> Because there are two authorized MSS systems in the 2000-2020 MHz MSS band, each MSS operator is assigned 10 megahertz of spectrum. Thus, of the total 35 megahertz of spectrum that Sprint Nextel is clearing of BAS incumbents, 5 megahertz will be occupied by Sprint Nextel, 10 megahertz by AWS entrants, and 20 megahertz by the two MSS operators (10 megahertz each). The *pro rata* share of each MSS operator will be 2/7 of the total 35 megahertz of spectrum.

<sup>146</sup> *800 MHz R&O* at ¶ 262. Any reimbursement by Sprint Nextel to the MSS entrants must occur before the conclusion of the 800 MHz true-up.

69. In the *800 MHz MO&O* adopted in October 2005, the Commission affirmed its decision regarding the obligations of the MSS entrants to reimburse Sprint Nextel.<sup>147</sup> The Commission pointed out that “[Sprint] Nextel, as the first entrant, is entitled to seek *pro rata* reimbursement of eligible clearing costs from subsequent entrants, including MSS licensees.”<sup>148</sup> The Commission explained that “it decided to end the reimbursement obligations of other entrants to [Sprint] Nextel, and any reimbursement by [Sprint] Nextel to other entrants, at the end of the 800 MHz band true-up period for administrative efficiency in the accounting process and because of the unique circumstances in [Sprint] Nextel’s receipt of BAS spectrum.”<sup>149</sup> Finally, the Commission rejected a request that it move up the date by which MSS entrants had to “enter the band” in order for Sprint Nextel to obtain cost sharing from them, and instead decided to “maintain the schedule previously established, *i.e.*, the true-up period.”<sup>150</sup>

70. As noted above, ten megahertz of the 2 GHz BAS spectrum (1995-2000 MHz and 2020-2025 MHz) has been reallocated for use by future AWS-2 licensees. In the *AWS Sixth R&O*, the Commission established obligations for the future AWS licensees to reimburse Sprint Nextel for the BAS transition costs. As with the MSS entrants, Sprint Nextel “is entitled to seek *pro rata* reimbursement of eligible clearing costs incurred during its 36-month 800 MHz reconfiguration period from AWS licensees that enter the band prior to the end of that period.”<sup>151</sup> Sprint Nextel “is not entitled to reimbursement” from the AWS licensees “after receiving credit for its relocation cost at the 800 MHz true-up.”<sup>152</sup> The *AWS-2 Notice of Proposed Rulemaking (AWS-2 Service Rules NPRM)* for service rules for the AWS-2 licensees was issued concurrently with the *AWS Sixth R&O*. The *AWS-2 Service Rules NPRM* states that “we also note that if [Sprint] Nextel has received credit for BAS relocation costs in the 800 MHz true-up, late-entering AWS licensees will not have any reimbursement obligation to Nextel for such costs.”<sup>153</sup> The *AWS-2 Service Rules NPRM* sought comment on a number of issues regarding cost-sharing between the AWS entrants and other new entrants to the band. These issues include whether a timetable should be adopted for AWS entrants to relocate BAS; how the reimbursement rights and obligations of each AWS licensee could be most efficiently and equitably allocated, whether on the basis of the geographic area or population covered by each license, or the value of each license as indicated by the winning auction bid, or by some other means; how the relocation costs should be allocated if not all AWS licenses are issued; how later arriving AWS licensees should be treated; and how an accounting between MSS and AWS

<sup>147</sup> Improving Public Safety Communications in the 800 MHz Band, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, *Memorandum Opinion and Order*, 20 FCC Rcd 16015 ¶¶ 109-114 (2005) (*800 MHz MO&O*). The *800 MHz MO&O* denied a petition filed by TerreStar and TMI that requested that the date for determining if MSS operators incur a reimbursement obligation to Sprint be changed to the end of the 30-month BAS relocation deadline instead of the end of the 800 MHz 36-month reconfiguration period or, alternately, that the MSS obligation end 36-months after the effective date of the *800 MHz R&O* (January 21, 2008 instead of June 26, 2008).

<sup>148</sup> *800 MHz MO&O* at ¶ 111.

<sup>149</sup> *Id.* at ¶ 113.

<sup>150</sup> *Id.*

<sup>151</sup> Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, ET Docket No. 95-18, *Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order*, 19 FCC Rcd 20720 ¶ 72 (2004) (*AWS Sixth R&O*).

<sup>152</sup> *Id.* The Commission noted that AWS licensees who do not begin operation until after the spectrum is cleared “will not have any reimbursement obligation to [Sprint] Nextel, if [Sprint] Nextel has received credit for BAS relocation costs in the 800 MHz true-up.” *Id.* at ¶ 68. The Commission did not address what the AWS licensees’ liability to Sprint Nextel would be if Sprint Nextel does not receive credit for the BAS clearing cost at the true-up.

<sup>153</sup> Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands, WT Docket No. 04-356, WT Docket No. 02-353, *Notice of Proposed Rulemaking*, 19 FCC Rcd 19263 ¶ 59 (2004) (*AWS-2 Service Rules NPRM*). See also ¶¶ 50, 58, 61.

licensees should occur.<sup>154</sup>

71. Since the time the Commission adopted or proposed cost sharing procedures for Sprint Nextel, MSS, and AWS-2 in the 2 GHz BAS band, many of the assumptions underlying those procedures have not occurred. The 800 MHz transition, which was to be completed within 36 months (June 26, 2008) is not yet complete. The Commission has granted individual 800 MHz licensees waivers of the rebanding deadline, but has not modified the completion date itself.<sup>155</sup> The original “true-up date” for calculating the anti-windfall payment, which was linked to the completion of 800 MHz rebanding and set to occur by December 26, 2008, was modified by the Commission in December 2008.<sup>156</sup> The true-up is currently scheduled to occur by July 1, 2009, but it may be delayed further and could occur before 800 MHz rebanding is completed.<sup>157</sup> Sprint Nextel has not completed the BAS relocation, and the BAS transition deadline has been modified several times, most recently to June 10, 2009.<sup>158</sup>

72. In a letter filed June 25, 2008, Sprint Nextel asks the Commission to make a number of adjustments in deadlines and procedures that are tied to the June 26, 2008 end date of the 36-month 800 MHz reconfiguration period.<sup>159</sup> Sprint Nextel posits that these deadlines should be adjusted due to the extension of the BAS relocation deadline and the grant of a large number of waivers of the 800 MHz rebanding deadline to public safety licensees. In particular, Sprint Nextel notes that the *800 MHz R&O* contains references relating the June 26, 2008 rebanding date to the MSS reimbursement obligation to Sprint Nextel for BAS relocation costs, and it requests that these references be harmonized with the postponed true-up date.<sup>160</sup> On the same date, Sprint Nextel filed a lawsuit against ICO and TerreStar in the Eastern District of Virginia seeking *pro rata* reimbursement of its BAS relocation costs.<sup>161</sup> On August 29, 2008, the court referred the case to the Commission and stayed all proceedings pending further

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<sup>154</sup> *Id.* at ¶¶ 57, 60-63. In 2008, a Further Notice of Proposed Rulemaking (*FNPRM*) for service rules for the AWS licensees made no specific proposals regarding cost sharing between the AWS entrants and the other new entrants to the band. Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands, WT Docket No. 07-195, WT Docket No. 04-356, *Further Notice of Proposed Rulemaking*, 23 FCC Rcd 9859 (2008).

<sup>155</sup> *See* Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, *Order*, 23 FCC Rcd 9421 (PSHSB 2008); *Order*, 23 FCC Rcd 9430 (PSHSB 2008); *Order*, 23 FCC Rcd 9443 (PSHSB 2008); *Order*, 23 FCC Rcd 9454 (PSHSB 2008); *Order*, 23 FCC Rcd 9464 (PSHSB 2008); *Order*, 23 FCC Rcd 9476 (PSHSB 2008); *Order*, 23 FCC Rcd 9485 (PSHSB 2008); *Order*, 23 FCC Rcd 9491 (PSHSB 2008).

<sup>156</sup> Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, *Fourth Memorandum Opinion and Order*, 23 FCC Rcd 18512 ¶ 12 (2008) (*800 MHz Fourth MO&O*).

<sup>157</sup> The Commission declined to postpone the true-up until the conclusion of all rebanding as Sprint had requested. The Commission stated that in light of the fact that Sprint believes that it will avoid the need to make any windfall payment because of the extent of the relocation costs it will have expended (*i.e.*, since these costs will exceed the value by which its holdings increased as a result of the exchange of spectrum in the rebanding proceeding), Sprint could reach the break-even point before rebanding is complete, at which time there would presumably be no need delay the true-up. *Id.* at ¶ 11.

<sup>158</sup> *BAS Relocation MO&O* at ¶ 34; Improving Public Safety Communications in the 800 MHz Band, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, *Order*, 24 FCC Rcd 3340 (2009); *Order*, 24 FCC Rcd 5281 (2009); *Order*, FCC 09-48 (June 3, 2009).

<sup>159</sup> Letter from Sprint Nextel, WT Docket 02-55, filed June 25, 2008 at 1.

<sup>160</sup> Sprint cryptically explains in a footnote that the MSS licensees have privately disputed certain aspects of their reimbursement obligations, but that such disputes are outside the scope of the letter. *Id.* at 8 n.27.

<sup>161</sup> *Complaint to Enforce Orders of the Federal Communications Commission*, Sprint Nextel v. New ICO Satellite Services, Civil Action No. 1:08cv651 (E.D.Va. filed June 25, 2008).

decision by the Commission.<sup>162</sup>

73. TerreStar responded to Sprint Nextel's June 25, 2008 letter on September 8, 2008,<sup>163</sup> and ICO responded on September 9, 2008.<sup>164</sup> TerreStar and ICO both argue that the MSS entrants' reimbursement obligation to Sprint Nextel terminated on June 26, 2008. TerreStar and ICO also argue that the Commission limited Sprint Nextel's ability to recover costs from MSS as part of striking "an appropriate balance" between Sprint Nextel and the MSS entrants' interests.<sup>165</sup> ICO states that the Commission expected Sprint Nextel to complete the BAS relocation and MSS to begin operations long before reimbursement to Sprint Nextel was due on June 26, 2008. With the long delay in BAS relocation, ICO claims that MSS has no ability to earn revenue prior to the reimbursement due date or the certainty needed to plan to do so. TerreStar argues that, when the *800 MHz R&O* was adopted, Sprint Nextel could not have had a reasonable expectation of recouping expenses from TerreStar and TerreStar had a justifiable expectation that it would not have to pay these expenses because TerreStar's satellite operational milestone was after June 26, 2008; thus, it did not "enter the band" before the cost sharing obligation terminated. TerreStar claims that establishing a new date to terminate the cost sharing obligation would upset its settled expectations, reward Sprint Nextel for not completing the 800 MHz reconfiguration on time, and jeopardize TerreStar's initiation of service. ICO claims that because Sprint Nextel has delayed in completing the BAS relocation by the original date, the requirement that BAS in the top 30 markets be relocated before MSS can begin operations has not been satisfied, and thus ICO can not "enter the band" and incur a cost sharing obligation even though its satellite was successfully launched and found operational in May 2008.<sup>166</sup>

74. On October 8, 2008, Sprint Nextel filed a letter asking for a declaratory ruling affirming that TerreStar and ICO must reimburse Sprint Nextel for a *pro rata* share of the eligible BAS relocation costs.<sup>167</sup> Sprint Nextel argues that the reimbursement obligation did not end or "sunset" on June 26, 2008, as TerreStar and ICO claim, but extends at least through the end of the BAS and 800 MHz relocation projects. Sprint Nextel claims that the cost sharing obligation was connected to the end of the 800 MHz reconfiguration to avoid a windfall to Sprint Nextel and facilitate the accounting in the true-up, which has been extended, and the relevance of the June 26, 2008 date has been superseded by the extended BAS and 800 MHz deadlines.<sup>168</sup> Sprint Nextel points out that TerreStar and ICO have been on notice of their obligations for years and cannot have reasonably expected that they would be able to circumvent the Commission's long-standing cost sharing principles. Even if one assumed that the reimbursement obligation sunset on June 26, 2008, Sprint Nextel claims that both ICO and TerreStar have entered the band by that date: ICO by transmissions from its satellite and TerreStar through its licensing activities, system build out, testing, satellite construction, and ATC operations.<sup>169</sup> Sprint Nextel also requests that if it does not owe any payment to the U.S. treasury for the spectrum it is receiving, the Commission should

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<sup>162</sup> *Order*, Sprint Nextel v. New ICO Satellite Services, Civil Action No. 1:08cv651 (E.D.Va. issued August 29, 2008).

<sup>163</sup> Letter from TerreStar Networks, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed September 8, 2008.

<sup>164</sup> Letter from New ICO Satellite Services G.P., WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed Sept. 9, 2008.

<sup>165</sup> *Id.* at 3 (quoting the *800 MHz R&O* at ¶ 261).

<sup>166</sup> *Id.* at 3 n.11.

<sup>167</sup> Letter from Sprint Nextel, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed October 8, 2008, 13 (*Sprint Oct. 2008 Letter*).

<sup>168</sup> *Id.* at 6-7.

<sup>169</sup> *Id.* at 8.

establish 2015 as the BAS relocation reimbursement sunset date.<sup>170</sup>

75. *Discussion.* The requirements that the Commission adopted for cost sharing among Sprint Nextel, MSS and AWS-2 entrants were based on a number of assumptions regarding the transition of the 2 GHz and 800 MHz bands, MSS and AWS-2 entry, and the true-up. As reflected in the current requirements, the BAS relocation was contemplated to be complete within thirty months, and thus the Commission expected the BAS relocation to be finished by September 7, 2007, well before the end of the 800 MHz 36-month reconfiguration period, which was ultimately slated to end on June 26, 2008.<sup>171</sup> Because ICO's satellite operational milestone was July 2007 and TerreStar's was November 2008 when the requirements were adopted, the Commission also expected that one and possibly both MSS operators would participate in the BAS relocation process, especially in clearing the top 30 markets, so that they would be able to commence service quickly once their satellites were successfully launched, possibly before the end of the 800 MHz reconfiguration period.<sup>172</sup> Indeed, the Commission's requirements provided an opportunity for the MSS entrants to relocate BAS incumbents even while ordering Sprint Nextel to undertake the same task, and required that Sprint Nextel reimburse the MSS entrants for any relocation expenses they incurred. For its band clearing efforts, Sprint Nextel would have been able to seek reimbursement for a portion of the relocation costs from the MSS and AWS-2 entrants who entered the band prior to the end of the 800 MHz thirty-six month reconfiguration period on June 26, 2008. The Commission also expected that the total cost of the BAS relocation, 1910-1915 MHz band clearing, and 800 MHz transition would be such that Sprint Nextel would have to make an anti-windfall payment to the United States Treasury even after receiving credit for all of its band clearing and transition costs.<sup>173</sup> Consequently, even if the MSS entrants and AWS-2 licensees did not have to reimburse Sprint Nextel for BAS clearing costs because of delayed entry into the band, the Commission would have anticipated that Sprint Nextel would suffer no adverse financial consequence because the amount of the anti-windfall payment that Sprint Nextel would have to make would be reduced by the amount of any BAS relocation cost not reimbursed by the MSS entrants.

76. The circumstances now surrounding the 2 GHz band BAS transition are very different than what the Commission expected when the cost sharing requirements were adopted and explained in the *800 MHz R&O*. Neither the 800 MHz transition nor the BAS relocation has yet been completed. While the 800 MHz thirty-six month reconfiguration date of June 26, 2008 has never officially been extended, Sprint Nextel and numerous 800 MHz licensees have received waivers of that date.<sup>174</sup> Moreover, the 800 MHz true-up date, which was set to occur within six months after the 800 MHz reconfiguration date, has been extended to July 1, 2009 and may be delayed further. The expected relocation costs for the 800 MHz transition is so large that Sprint Nextel does not now expect to make an anti-windfall payment.<sup>175</sup>

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<sup>170</sup> *Id.* at 9-10. 2015 is ten years after Sprint's BAS relocation began. In past spectrum relocations, the relocation obligations have sunset either ten or fifteen years after the beginning of the relocation period.

<sup>171</sup> When the *800 MHz R&O* adopted the Sprint Nextel BAS relocation scheme, the actual start and end dates of the 800 MHz thirty-six month transition period were not known. Instead, the thirty-six month period was to begin with the release of a public notice announcing the start of the negotiation period in the first NPSAC region.

<sup>172</sup> When the order was adopted it was within the realm of possibilities that this period would have ended after TerreStar's operational milestone date.

<sup>173</sup> The Commission noted in the 800 MHz R&O that Sprint estimated that its combined band clearing and relocation costs would be \$2.184 billion. *800 MHz R&O* at ¶ 306. This amount plus the \$2.059 billion attributed to the value of the spectrum Sprint is giving up is less than the \$4.86 billion that the Commission valued the 1.9 GHz spectrum that Sprint is receiving.

<sup>174</sup> See *Improving Public Safety Communications in the 800 MHz Band*, WT Docket 02-55, *Order*, 23 FCC Rcd 15966 ¶¶ 1, 13, 15 (2008); see note 155, *supra*.

<sup>175</sup> Letter from Sprint Nextel, WT Docket 02-55, filed June 25, 2008, at 7 n.24.

77. In this context, the underlying assumptions of the approach taken by the Commission in the *800 MHz R&O* did not occur, such that a narrow, literal interpretation of certain language in the Commission's decision would not correspond to the stated purposes and structure of the cost sharing principles set forth in the *800 MHz R&O* and other decisions regarding the shared responsibilities of new entrants for BAS relocation. Certain specific language cannot be reasonably applied to the current circumstances.

78. On the one hand, a narrow literal interpretation of certain language in the *800 MHz R&O* could be argued as suggesting that Sprint Nextel may only be entitled to seek *pro rata* reimbursement to the extent that the MSS and AWS-2 licensees entered the 2 GHz band before the then-contemplated 36-month 800 MHz rebanding period ended,<sup>176</sup> a date later established to be June 26, 2008.<sup>177</sup> Moreover, because the Commission has never defined what "entered the band" means, applying this interpretation is problematic.

79. On the other hand, such an interpretation of the deadline would arguably undermine the stated purposes of the BAS cost-sharing regime set up by the Commission in the *800 MHz R&O*, where it discussed its decision as generally consistent with the cost-sharing principle that the licensees that ultimately benefit from the spectrum cleared by the first entrant shall bear the cost of reimbursing the first entrant for that benefit, though modified to fit the particular concerns raised in the 800 Rebanding proceeding.<sup>178</sup> Specifically, as stated in the 2005 *800 MHz MO&O*, the Commission modified the traditional *Emerging Technologies* cost-sharing policy that new entrants who ultimately benefit from having the spectrum cleared should pay their share of band-clearing costs only to the extent necessary to provide "administrative efficiency in the accounting process" and to take into account "the unique circumstances in Nextel's receipt of the BAS spectrum."<sup>179</sup> In other words, the Commission limited the time that Sprint Nextel could receive reimbursements from MSS entrants so that Sprint Nextel could not get a double benefit, *i.e.*, receive reimbursements from MSS after it had received credit for these expenses in the true up. The Commission clearly allowed for the possibility that the MSS entrants would incur a cost-sharing obligation, and Sprint Nextel was explicitly allowed to pursue cost sharing from the MSS entrants by giving them notice within one year of adoption of the *800 MHz R&O*.<sup>180</sup>

80. Nothing in the text of the relevant orders suggests that the Commission limited the time in which Sprint Nextel could seek reimbursements from MSS entrants to provide an independent benefit to MSS entrants, *e.g.*, to subsidize them or provide them certainty about their business costs.<sup>181</sup> Thus, we find that the MSS entrants' cost sharing obligations must be interpreted in light of the unanticipated changed circumstances, and these obligations should not be tied to a deadline that is no longer relevant. In short, MSS entrants should pay a *pro rata* share of the BAS relocation costs unless doing so would

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<sup>176</sup> *800 MHz R&O* at ¶ 261.

<sup>177</sup> The Commission has not extended the original 36-month rebanding period; rather, it has found that the 36-month rebanding period has "expired" and is granting waivers for licensees who make a "good cause" showing. See *800 MHz Fourth MO&O* at ¶¶ 5, 13.

<sup>178</sup> *800 MHz R&O* at ¶ 261. The Commission noted that it sought to adopt a reimbursement approach for the BAS relocation that struck an appropriate balance Sprint Nextel and the MSS entrants that was not unreasonably burdensome to either. *Id.*

<sup>179</sup> See *800 MHz MO&O* at ¶ 113; See note 4, *supra*.

<sup>180</sup> *800 MHz R&O* at ¶ 261.

<sup>181</sup> In fact, the Commission refused to shorten the reimbursement schedule after TerreStar requested the reimbursement cutoff date be moved up because it was "open-ended" and "unfair." Joint Request for Clarification, TMI Communications Co. and TerreStar Networks, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed Dec. 22, 2004 at 6-7; *800 MHz MO&O* at ¶ 113.

allow Sprint Nextel to be reimbursed twice (by both the Treasury and the MSS and AWS-2 licensees). Accordingly, the most logical and appropriate interpretation of the language in the 800 MHz orders is that the MSS entrants must pay their *pro rata* share of BAS relocation costs to the extent that they enter the band before the 800 MHz rebanding or true up is complete. The difficulty with applying this interpretation is that there is no future date certain for completing either the 800 MHz rebanding or the true up.

81. We thus decline to resolve the conflict between Sprint Nextel and the MSS entrants by issuing a declaratory ruling. We conclude that, given the changed circumstances surrounding the 2 GHz BAS relocation and the ambiguity between certain language in the *800 MHz R&O* and the overall purposes and structure of the BAS cost-sharing regime caused by the changed circumstances, the best course of action is to propose clearly delineated cost sharing requirements reflecting these changed circumstances to balance the responsibilities for and benefits of relocating incumbent BAS operations among Sprint Nextel, MSS, and AWS-2 based on the Commission's relocation policies set forth in the *Emerging Technologies* proceeding.<sup>182</sup>

82. This Further Notice provides an opportunity for us to address issues that are ambiguous or not specifically addressed by the current requirements. In particular, we reach the following tentative conclusions:

- Sprint Nextel may either obtain cost sharing for an eligible expense from MSS or AWS-2 entrants when those licensees “enter the band” *or* take credit for that expense against the anti-windfall payment to the Treasury (true-up) for the 5 megahertz of BAS spectrum (1990-1995 MHz) it obtained as part of the 800 MHz band realignment.<sup>183</sup>
- The attachment of the cost sharing obligation between Sprint Nextel and MSS and AWS-2 would follow traditional *Emerging Technologies* policies, *i.e.*, the obligation to share costs among new entrants would continue to the BAS sunset date (December 9, 2013); any entity that “enters the band” prior to that date would be obligated to reimburse the earlier entrant that incurred the relocation expense a proportional share of cost based on the amount of spectrum assigned to it.
- As in the current requirements, the MSS cost sharing obligation to Sprint Nextel would be limited to the top 30 markets by population and all fixed BAS links.<sup>184</sup>
- An MSS entrant would be deemed to have “entered the band” for incurring a cost sharing obligation when its satellite is found operational under its authorization milestone.
- For cost sharing purposes, Sprint Nextel would be required to share with other new entrants information on the relocation costs it has incurred as documented in its annual external audit of 2 GHz band clearing expenses and as provided to the 800 MHz Transition Administrator, as required by the *800 MHz R&O*.

83. The overall approach we propose seeks to balance the BAS relocation costs among all new entrants based on the benefit each receives of the total of 35 megahertz of cleared spectrum, consistent with our *Emerging Technologies* policies. Following BAS relocation, MSS will have access to 20 megahertz in the 2000-2020 MHz band (4/7), AWS-2 will have 10 megahertz in the 1995-2000 and 2020-

<sup>182</sup> See *supra* note 4.

<sup>183</sup> Sprint Nextel may obtain credit against the anti-windfall payment for the cost of relocating certain secondary BAS licensees, but may not obtain cost sharing from other new entrants for these costs. *800 MHz MO&O* at ¶ 107; Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, ET Docket 00-258, ET Docket 95-18, *Second Memorandum Opinion and Order*, 22 FCC Rcd 10467 at ¶¶ 63-66 (2007).

<sup>184</sup> As discussed below, however, given the unique circumstances in this case we do not propose a tentative conclusion regarding precisely when this reimbursement must be paid, but instead seek comment on various alternatives.

2025 MHz bands (2/7), and Sprint Nextel will have 5 megahertz in the 1990-1995 MHz band (1/7). These basic proportions inform our proposals below. As the Commission decided in the *800 MHz R&O*, this approach will follow the traditional relocation principle that the licensees that ultimately benefit from the spectrum cleared by the first entrant shall bear the cost of reimbursing the first entrant for the accrual of that benefit.<sup>185</sup>

84. As is the case with our current requirements, we tentatively conclude that Sprint Nextel may not both receive reimbursement from another new entrant and take credit for the same BAS relocation cost at the 800 MHz true-up. If another new entrant enters the band before the true-up and Sprint Nextel obtains reimbursement for relocation costs from the new entrant, Sprint Nextel may not obtain credit against the anti-windfall payment for the reimbursed costs. Further, we tentatively conclude that any new entrant to the band who incurs relocation cost will be able to obtain *pro rata* reimbursement from other new entrants who enter the band prior to the BAS band sunset date of December 9, 2013.<sup>186</sup> In other words, the cost-sharing obligation will no longer be linked to the 800 MHz thirty-six month reconfiguration period or the 800 MHz true-up date. Extending the relocation obligation to the BAS sunset date provides certainty to all new entrants, rather than linking the obligation to the 800 MHz thirty-six month reconfiguration period or the 800 MHz true-up date, since the timing of both of these events is less certain. Thus, we tentatively conclude that the attachment of the cost sharing obligation between Sprint Nextel and MSS and AWS-2 should follow the traditional *Emerging Technologies* policies in obligating new entrants to share the costs of relocating the BAS incumbents. A later entrant's cost-sharing obligation to the earlier entrant who cleared the spectrum shall be in proportion to the spectrum assigned to the later entrant. For example, if a future AWS licensee is assigned 5 megahertz of spectrum in the band on a nationwide basis, the licensee will be responsible for 1/7 of the total spectrum clearing costs if it enters the band before the sunset date.

85. In the *800 MHz R&O*, the MSS entrants' cost sharing obligation to Sprint Nextel was limited to the cost of clearing the thirty largest markets (by population) and all fixed BAS links. This was done because the MSS entrants were required to clear the thirty largest markets and all fixed BAS links before they could begin operations, but were not required to relocate BAS in the other markets until later.<sup>187</sup> Because this exception to the general cost-sharing principle was clearly established in the *800 MHz R&O* in 2004, we propose to continue to limit the MSS entrants' cost-sharing obligation in this way even though we are now eliminating the top 30 market rule.

86. Consequently, we tentatively conclude that Sprint Nextel's right to seek reimbursement from any MSS entrant entering before the sunset date will be limited to the costs Sprint Nextel incurred for clearing the top thirty markets and for relocating all fixed BAS facilities, regardless of market size,<sup>188</sup> and to an MSS entrant's *pro rata* share of the 1990-2025 MHz spectrum. Sprint Nextel claims that under this approach MSS would only be responsible for approximately 27 percent of the total BAS relocation expenses, which is substantially less than the 57 percent of the cleared BAS spectrum assigned to the two MSS entrants.<sup>189</sup> We also seek comment on whether we should require MSS entrants to pay a *pro rata* share of all BAS relocation costs, regardless of market size.

87. In addition, regarding MSS-to-MSS cost sharing, under the original requirements for MSS

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<sup>185</sup> *800 MHz R&O* at ¶ 261.

<sup>186</sup> 47 CFR §§ 74.690(e)(6), 78.40(f)(6).

<sup>187</sup> 47 CFR §§ 74.690(e)(1)(i); 74.690(e)(5); 78.40(f)(1)(i); 78.40(f)(5).

<sup>188</sup> As with the current rules, the top thirty markets will be Nielson Designated Market Areas 1-30 as they existed on September 6, 2000.

<sup>189</sup> See Notice of *Ex Parte* Communication, Sprint Nextel, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed Apr. 29, 2009 at 2.

entrants to relocate the BAS incumbents, all MSS entrants share in the relocation costs on a *pro rata* basis depending on the amount of spectrum each is assigned.<sup>190</sup> Later entering MSS operators are required to reimburse the earlier MSS entrants who clear the spectrum a *pro rata* share of the earlier MSS entrants' band clearing costs.<sup>191</sup> After the BAS transition is completed, all of the MSS entrants are to "true-up" their costs to ensure that each MSS entrant pays a *pro rata* share of the relocation costs based on the amount of spectrum assigned.<sup>192</sup> We propose to retain these MSS-to-MSS cost sharing requirements. We note that these inter-service and intra-service cost sharing requirements can work in tandem. For example, if Sprint Nextel was reimbursed from only one MSS entrant, that entrant could in turn seek reimbursement of what it owed Sprint Nextel from another MSS entrant. It appears that Sprint Nextel has asked both ICO and TerreStar to pay equal amounts of relocation costs based on their equal amount of assigned spectrum (*i.e.*, ten megahertz each), consistent with current requirements. We seek comment on whether Sprint Nextel should be allowed to request relocation costs for BAS operations in all of the 20 megahertz of spectrum allocated for MSS from a single MSS entrant that may, in turn, seek reimbursement from another MSS entrant.<sup>193</sup>

88. We also tentatively conclude that AWS-2 licensees will be responsible for reimbursing earlier entrants for relocating BAS operations in their assigned geographic areas, but determining how to apportion a licensee's *pro rata* share will depend on future Commission action to adopt service rules for the AWS licensees in the 1995-2000 MHz and 2020-2025 MHz band. These licenses may be issued either on a nationwide basis or for geographic areas, and could include all or only a portion of the allocated bandwidth. If licenses are issued for geographic areas, the geographic areas are not likely to coincide with the BAS market boundaries and licenses for geographic areas may be issued at different times.<sup>194</sup> Another factor that our service rules will have to address is apportioning the reimbursement costs fairly among AWS licensees. For example, some licensees' service areas cover cleared spectrum for which Sprint Nextel may claim a credit at the true-up, thus preventing Sprint from seeking cost sharing from those AWS licensees. Other AWS licensees' service areas may cover cleared spectrum not claimed by Sprint for a true up credit and thus subject to cost sharing. These factors will complicate the calculation of cost sharing for the AWS entrants to the band. In the 2004 AWS-2 *Notice of Proposed Rulemaking* (NPRM) on service rules for the AWS entrants to the band, the Commission sought comment on a number of issues regarding the licensing scheme for the AWS entrants and the cost-sharing obligations between the AWS entrants and other new entrants to the band.<sup>195</sup> Because the licensing scheme for the AWS entrants to the band has not yet been determined, we are not making proposals here

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<sup>190</sup> *MSS Second R&O* at ¶¶ 67-68

<sup>191</sup> *MSS Second R&O* at ¶ 67.

<sup>192</sup> *Id.* at ¶ 68.

<sup>193</sup> This approach also would allow Sprint Nextel to recover relocation costs for clearing all of the spectrum that could be used by MSS entrants, regardless of how many MSS entrants there are. We observe that originally there were eight MSS entrants, and the Commission redistributed the spectrum that was returned among the remaining MSS entrants. See *In the Matter of Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands*, IB Docket Nos. 05-220 and 05-221, 20 FCC Rcd 19696 (2005).

<sup>194</sup> If not all of the AWS-2 licenses are issued, the cost sharing rules will have to address whether Sprint Nextel can obtain cost sharing for the entire AWS-2 *pro rata* share of the BAS relocation costs from the issued licensees—*i.e.* would the licensees have to make up for the share of the cost for the unissued AWS-2 licenses. This issue would become especially complicated if some of the AWS-2 licenses are issued before the 800 MHz true-up. Sprint Nextel may try to take credit in the 800 MHz true-up for BAS relocation in areas where no AWS-2 licenses are issued while pursuing cost sharing for the issued licenses.

<sup>195</sup> Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands, WT Docket No. 04-356, WT Docket No. 02-353, *Notice of Proposed Rulemaking*, 19 FCC Rcd 19263 ¶¶ 58-62 (2004).

for apportioning an AWS licensee's *pro rata* share for cost-sharing with other new service entrants or between AWS-2 entrants beyond those made in the 2004 *AWS-2 Service Rules NPRM*. We intend to adopt specific cost-sharing procedures for the AWS entrants when service rules are adopted for the 1995-2000 MHz and 2020-2025 MHz bands.

89. The cost sharing scheme that the Commission adopted in 2004 required that MSS and AWS entrants reimburse Sprint Nextel for the BAS relocation costs after they "enter the band," but did not define the term. For clearing other bands under our *Emerging Technologies* policies, the Commission's rules usually make a distinction between determining when a new entrant must relocate an incumbent operation before it can operate and when a new entrant incurs a cost sharing obligation to an earlier entrant who relocated an incumbent. Generally, Commission rules rely on an interference analysis to determine when a new entrant must relocate an incumbent. On the other hand, a later entrant is generally required to share in the cost that an earlier entrant has incurred in relocating an incumbent if the subsequent entrant would have been in a position to have caused interference to the incumbent. Because the incumbent has already been relocated, the cost sharing determination is not usually based on a rigorous interference analysis but often on a simplified proximity test for ease in administration.<sup>196</sup> The rules may vary from these general principles depending on the technical characteristics of the specific services involved in the relocation.<sup>197</sup>

90. Because the Commission has already determined that MSS and AWS-2 entry in the 2 GHz band requires that all BAS operations in the band be relocated to avoid interference between the new and incumbent services, we only need to determine here when a new entrant "enters the band" for purposes of the attachment of the cost sharing obligation. In this regard, we are mindful that in other bands a new entrant incurs a cost sharing obligation at the time the subsequent entrant would be in a position to have caused interference to the now relocated incumbent.

91. With this principle in mind, we tentatively conclude to adopt the following requirements for determining when the MSS entrants have "entered the band." We propose that an MSS entrant will have

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<sup>196</sup> In the relocation of fixed microwave licensees by Personal Communications Service (PCS) licensees, whether relocation of an incumbent licensee was required was determined by an engineering analysis while cost sharing for later entrants was triggered using a proximity test (*i.e.* was the later entrant's base station close enough to the incumbent's fixed microwave path). 47 C.F.R. §§ 24.237, 24.239, 24.247. *See also* Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN. Docket No. 90-314, *Second Report and Order*, 8 FCC Rcd 7700 ¶¶ 141-174 (1993); *Memorandum Opinion and Order*, 9 FCC Rcd 4957 ¶ 186 (1994); Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, WT Docket No. 95-157, *First Report and Order and Further Notice of Proposed Rule Making*, 11 FCC Rcd 8825 at App. A ¶¶ 29-34 (1996). The same is true for the relocation of fixed microwave links by AWS licensees in the 2110-2150 MHz band. 47 CFR §§ 27.1131, 27.1160, 27.1168. Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, IB Docket No. 99-81, *Ninth Report and Order and Order*, 21 FCC Rcd 4473 at ¶ 79 (2006) (*AWS 9th R&O*).

<sup>197</sup> For example, for the MSS satellite operations in the 2180-2200 MHz band (this is the paired downlink band for the MSS at issue in this proceeding), an engineering analysis is used for both determining when relocation of fixed microwave incumbents is required and for determining whether later entrants are required to share the relocation cost with the earlier entrant who relocated the incumbent operations. 47 CFR § 101.82(b-c); *MSS Second R&O* at ¶¶ 78, 97. However, for MSS ATC operations in the same 2180-2200 MHz band, an engineering analysis is used for determining when a fixed microwave incumbent must be relocated while a proximity test is used to determine if there is a cost sharing obligation for an earlier entrant's relocation of incumbents. 47 CFR 27.1160, 27.1168, 101.82(d); *MSS Third R&O* at ¶¶ 70-71. For the relocation of incumbent BRS licensees in the 2150-2162 MHz band by AWS licensees, both an obligation to relocate an incumbent BRS system and a cost sharing obligation to an earlier AWS licensee who had relocated a BRS system are triggered when a new entrant constructs a base station within line-of-sight of an incumbent's BRS base station. 47 CFR §§ 27.1184, 27.1255; *AWS 9th R&O* at ¶¶ 51-54, 108-111.

entered the band and incurred a cost sharing obligation when it certifies that its satellite is operational for purposes of meeting its operational milestone.<sup>198</sup> For the 2000-2020 MHz band, a satellite is considered operational based upon the occurrence of transmissions between the satellite and an authorized earth station using the 2000-2020 MHz and 2180-2200 MHz bands.<sup>199</sup> The satellite systems which the MSS entrants are deploying are capable of providing nationwide coverage. The customer equipment transmitting to the satellites in this band are therefore capable of causing interference to any of the BAS incumbents in the local area in which that equipment is used. The MSS entrants having an operational satellite is therefore analogous to the Personal Communications Service (PCS) or AWS entrants building a base station in proximity to the incumbent fixed microwave links in the prior spectrum clearings.<sup>200</sup> Like the PCS and AWS entrants, an MSS entrant with an operational satellite is in a position to cause interference to the incumbents and therefore should incur a cost sharing obligation to an earlier entrant who has relocated the incumbents.<sup>201</sup> Simplicity of administration is especially important in the case of BAS because there is no clearinghouse to determine when a party has “entered the band” or to parse out the relocation costs on a BAS receiver site-by-site basis.

92. The AWS entrants will operate terrestrial networks and thus the definition of “enter the band” which we propose for the MSS entrants would not be appropriate for AWS. Although no service rules have been adopted for the AWS portions of the 1990-2025 MHz band, we expect that the AWS entrants will deploy terrestrial networks wherein fixed base stations communicate with mobile radios. Because both the AWS entrants and BAS incumbents will employ mobile radios, the interference scenarios will be more complicated than with the fixed point-to-point microwave incumbents being relocated in the PCS, AWS, and MSS downlink bands addressed by other relocation rules. Furthermore, there is no clearinghouse for the BAS relocation that will be able to determine when interference between the AWS entrants and previously relocated BAS incumbents would likely occur. These two facts—the complicated interference scenarios and lack of clearinghouse—require that the test for determining when AWS entrants incur a cost sharing obligation be simple and easy to apply.

93. As one option, we propose to specify that AWS entrants in the 1990-2025 MHz band be found to have “entered the band” and incur a cost sharing obligation upon grant of the long form applications for their licenses. This would provide a clear and easy-to-administer standard and provide certainty for all parties involved. While this proposed requirement does depart somewhat from other relocation rules, it is not entirely inconsistent. Because of the mobile nature of BAS, once the AWS entrant is licensed any deployment of its services could potentially have resulted in interference to mobile BAS incumbents.

94. We also seek comment on an alternate approach for when AWS entrants should be found to

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<sup>198</sup> Under this proposal, an MSS entrant will incur a cost sharing obligation prior to any commencement of ATC operations. This is because, under the ATC gating criteria, an MSS entrant can not commence ATC operations until after commencing commercial satellite service (which we propose as the trigger for cost sharing obligations). If a different test for an MSS entrant “entering the band” and incurring a cost sharing obligation is adopted, we seek comment on whether ATC operations should cause an MSS entrant to incur a cost sharing obligation.

<sup>199</sup> See *BAS Relocation MO&O* at ¶ 48 n.140 (discussing the different types of earth stations that ICO and TerreStar plan to operate with their satellite systems). In its final milestone certification, ICO indicated that it had completed two-way voice and data sessions using its satellite, North Las Vegas gateway, and mobile terminals. Final Milestone Certification and Selected Assignment Notification, New ICO Satellite Services G.P., filed May 9, 2008.

<sup>200</sup> See *supra* notes 196, 197.

<sup>201</sup> Under this approach, the fact that ICO has an operational satellite will mean that it has entered the band. We also note that ICO has objected that they can not have entered the band and incurred a cost sharing obligation to Sprint Nextel because the top 30 market rule has prevented them from beginning operations. Letter from New ICO Satellite Services G.P., WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed Sept. 9, 2008 at 3 n.11. We note that when the top 30 market rule is being eliminated, ICO’s objection will become moot.

“enter the band.” An AWS entrant in the 1990-2025 MHz band could be found to “enter the band” and incur a cost sharing obligation when it activates a base station in an AWS-2 license area that overlaps a cleared DMA. We note that this alternate approach presents a number of issues that could make it difficult to implement. Because there is no clearinghouse for the 1990-2025 MHz band, there currently is no entity that is responsible for tracking when the AWS-2 licensee activates a base station and for determining which DMA’s are overlapped by the base station. Each DMA will potentially have a separate “enter the band” date, and it is likely that, whatever service rules we ultimately adopt for this band, any given AWS-2 licensee would trigger numerous “enter the band” dates. Consequently, we seek comment on whether, under this approach, an AWS-2 licensee that activates a first base station should incur a cost sharing obligation only for relocating BAS in that DMA or should it incur its entire cost sharing obligation for all DMAs that overlap its service area. Also, under this approach AWS-2 licensees could potentially delay the initiation of service, and thus seek to avoid incurring a cost sharing obligation, until after the BAS sunset date of December 9, 2013, making it more difficult for Sprint Nextel to decide whether to take credit for BAS relocation cost in the 800 MHz true-up because of the uncertainty as to whether AWS-2 licensees will share in the cost of the BAS relocation. We seek comment on how, if we adopt this alternative approach, we could prevent AWS-2 licensees from avoiding their cost sharing obligation through delay. If AWS-2 licensee’s are able to avoid incurring a cost sharing obligation through delay, we also seek comment on how to make it easier for Sprint Nextel to determine whether to take credit for BAS relocation cost in the 800 MHz true-up despite the uncertainty as to whether the AWS-2 will share in the BAS relocation cost.

95. When we adopted the requirements allowing Sprint Nextel to pursue reimbursement of BAS relocation costs from MSS and AWS entrants, we did not specify when the MSS and AWS entrants would owe reimbursement to Sprint Nextel. Generally, in other band clearings the later new entrant has to pay its reimbursement costs when beginning operations or shortly thereafter. For example, in the relocation of fixed microwave links by AWS entrants in the 2110-2150 MHz band and by MSS entrants in the 2180-2200 MHz band (this is the paired downlink band for the MSS at issue in this proceeding), the AWS and MSS entrant must notify a clearinghouse prior to initiating operations.<sup>202</sup> The clearinghouse determines if the AWS or MSS entrant must reimburse a prior new entrant for moving an incumbent licensee, and the AWS or MSS entrant has 30 days to pay the reimbursement costs. Similar rules are followed for the relocation of BRS incumbents in the 2150-2162 MHz band by AWS entrants.<sup>203</sup>

96. As we discussed above, however, there are unique circumstances in this case that require additional consideration. We have already determined to permit MSS entrants to begin operations in the near term, even if this were to occur before they have actually satisfied the cost sharing reimbursement obligations that would attach under our proposals here. Here, we seek comment on various approaches that the Commission might take concerning when such reimbursements are owed.

97. If we were to apply a similar scheme as that followed by our relocation rules in other bands with the BAS transition in the 2 GHz band, once the later entrant has entered the band, it may not begin operations until it has reimbursed the earlier entrant that relocated BAS incumbents for the later entrant’s *pro rata* share of the relocation costs for all BAS markets that have been transitioned as of the date that the later entrant entered the band (or, in the case of MSS, the later of these two dates: the date MSS is determined to have entered the band or the earliest date MSS is permitted to begin operations under our rules). Thereafter, as the BAS relocation continues and each additional BAS market is transitioned to the new channel plan, the new entrant would have to pay its share of the cost of transitioning that market within thirty days of being notified of the market transitioning or cease operations in that band. Under this approach, it may be more reasonable to expect an MSS entrant to pay reimbursement costs only when a BAS market is cleared and it can operate on a primary basis, rather than to pay these costs on a per station

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<sup>202</sup> 47 C.F.R. § 27.1170.

<sup>203</sup> 47 CFR § 27.1186.

basis in nonrelocated BAS markets where it may operate only on a secondary basis. The entrant who is relocating the BAS incumbents could have the responsibility of notifying the other new entrants and the Commission of the transition of each BAS market. We seek comment generally on this approach, or variations to it.

98. We also seek comment, given the unique circumstances in this case, on alternative approaches for when MSS entrants should be required to reimburse Sprint Nextel for their *pro rata* share of the BAS relocation costs. Because the MSS entrants have not yet begun to provide commercial services, they do not have an established revenue stream. Consequently, it may be difficult for the MSS entrants to reimburse Sprint Nextel immediately for their *pro rata* share of costs for all of the markets that have transitioned when the MSS entrant enters the band or begins service, as proposed above. Rather than require that, when an MSS entrant is ready to begin operations, it pay its reimbursement share for all markets cleared when it either entered the band or was permitted to begin operations under the rules, should MSS entrants only initially have to pay reimbursement costs for those markets in which they choose to operate? If so, what schedule should they follow for reimbursing costs associated with the remaining markets – when they start providing service in those markets, or under a different timetable? We also seek comment on establishing a reimbursement scheme that is not specifically tied to MSS entry in each market. For example, should MSS entrants be allowed to delay payment of some portion of their *pro rata* share of reimbursement costs until the BAS relocation is complete, or some other date? Would this provide some needed certainty to MSS entrants that they could begin operating? Should the MSS entrants' payments be linked to the pace of the BAS transition — *e.g.*, as additional BAS markets are transitioned, should MSS entrants be required to make additional payments? We also seek comment how any of these approaches would affect the true-up, particularly if Sprint Nextel is owed monies that MSS entrants have not yet paid when the true-up occurs. More generally, we also seek comment on whether any of these approaches would undermine our goal of ensuring that later entrants reimburse, on a *pro rata* basis, the first entrant that paid for relocation, and on what actions we should take if MSS entrants fail to pay.

99. Finally, we tentatively conclude that, for cost sharing purposes, Sprint Nextel would be required to share with other new entrants information on the relocation costs it has incurred as documented in its annual external audit of 2 GHz band clearing expenses and as provided to the 800 MHz Transition Administrator, as required by the *800 MHz R&O*. As part of the financial reconciliation process in the 800 MHz true-up, Sprint Nextel is required to conduct an annual external audit of its 2 GHz band clearing expenses and to provide this audit to the Transition Administrator for the 800 MHz rebanding and true-up. Sprint Nextel also is to report to the Transition Administrator the amount of reimbursement it receives from other entrants to the band.<sup>204</sup> With this information, the Transition Administrator will be able to ensure that Sprint Nextel receives the proper amount of credit against the anti-windfall payment for BAS relocation. However, the annual external audit provides data on total expenses, rather than by market,<sup>205</sup> and the Transition Administrator is under no obligation to analyze, audit or verify the data that Sprint Nextel supplies on the cost of clearing the 2 GHz spectrum.<sup>206</sup> Furthermore, if an MSS or AWS licensee enters the band after the true-up occurs, the Transition Administrator will not be present to calculate the amount that Sprint Nextel claims the new entrant owes. To facilitate the cost sharing process, we propose to require that Sprint Nextel share with any other new entrant who owes it relocation reimbursement information about its relocation costs as documented in its annual external audit and as provided to the Transition Administrator. Similarly, if a new entrant other than Sprint Nextel relocates a BAS incumbent and seeks cost sharing from later entrants, the first entrant would be required to provide the later entrants with documented relocation costs. We seek comment.

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<sup>204</sup> *800 MHz R&O* at ¶ 330.

<sup>205</sup> See, *e.g.*, Sprint *Ex Parte* Letter, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed Jan. 5, 2009.

<sup>206</sup> See *800 MHz MO&O* at ¶ 115.

100. We seek comment on all of the proposed changes to the cost-sharing requirements for the 1990-2025 MHz BAS relocation. We seek comment on this proposal as well as alternative proposals.

### **B. BAS-MSS Spectrum Sharing**

101. In the accompanying Report and Order and Order, we eliminated the top 30 market rule which prevented the MSS entrants from beginning operations before the BAS incumbents in the thirty largest markets by population and fixed BAS links in all markets had been relocated. The MSS entrants are now able to operate with primary status in those markets where the BAS incumbents have been relocated to the new channel plan and with secondary status in nonrelocated markets subject to coordination.

102. We concluded that coordination was necessary in nonrelocated markets because we were not persuaded by the record that MSS could conduct unrestricted operations in these markets without causing interference to the BAS incumbents.<sup>207</sup> TerreStar asserts that, based on its probabilistic analysis, interference from MSS handsets to BAS operations is unlikely to occur, and thus suggests that coordination may not be necessary. Rather, it would cease operations if a BAS incumbent experiences interference. MSTV disputes these claims. We are concerned that if interference occurs to BAS licensees in nonrelocated markets, that interference will harm BAS operations and could prove difficult to resolve because the location of the handset which is the source of the interference may not be easily determined. Such interference could have a significant impact given the number of major markets that will transition toward the end of Sprint Nextel's relocation schedule. Nonetheless, we invite additional analysis on whether MSS can operate on an unrestricted and secondary basis in nonrelocated BAS markets. Commenters should include evidence on the likelihood of harmful interference occurring to the nonrelocated BAS incumbents from MSS operations.

103. In the Report and Order and Order we also recognize that interference could occur to BAS incumbents in a nonrelocated market from MSS operations in an adjacent market where BAS has been relocated. Consequently, we require that MSS may not operate mobile terminals within line-of-sight of BAS receive sites in markets where the BAS transition has not been completed, absent coordination.<sup>208</sup> We seek comment on whether this requirement continues to be necessary.

### **C. MSS Relocation Obligations**

104. *Background.* Our current rules provide that the MSS entrants may not begin operations until BAS in the top 30 markets and all fixed BAS links have been relocated.<sup>209</sup> Once an MSS entrant begins operations, all of the MSS entrants jointly have the responsibility to relocate the BAS incumbents in markets 31-100 within three years and the remaining markets (*i.e.*, 101 and above) within five years. The rule establishes a relocation obligation on MSS that is independent of other new entrants' relocation activity in the band, and provides a market tier approach for completing the BAS relocation that is pegged to beginning operations when the top 30 markets and fixed links are relocated.

105. The accompanying Report and Order and Order removes the requirement that BAS in the top 30 markets and all fixed BAS links must be relocated before MSS can begin operations, but maintains the obligation for the MSS entrants to relocate the BAS incumbents once an MSS entrant begins operations. Thus, this rule needs further modification to specify when an MSS entrant "begins operations" for purposes of completing BAS relocation and to account for the relocation of markets 1-30 along with markets 31-100.

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<sup>207</sup> See paragraphs 51-53, *supra*.

<sup>208</sup> See paragraph 54, *supra*.

<sup>209</sup> 47 CFR §§ 74.690(e)(1)(i), 78.40(f)(1)(i).

106. *Discussion.* We propose to trigger the obligation of an individual MSS operator to relocate BAS incumbents within three or five years, depending on market size—*i.e.*, markets 1-100 within three years, and the remaining markets within five years – on the later of these two dates: when the MSS operator certifies, prior to the BAS sunset date of December 9, 2013, that its satellite system is operational for purposes of meeting its operational milestone; or the date when the top 30 market rule is eliminated.<sup>210</sup> We believe that this is appropriate because once the satellite system is certified operational and the top 30 market rule has been eliminated, an MSS entrant will be in the position to make use of the spectrum.<sup>211</sup> Furthermore, the criteria will be easy to apply because the MSS entrant must notify the Commission when it accomplishes its operational milestone and the elimination of the top 30 market rule will be effective thirty days after publication of the Report and Order and Order in the *Federal Register*. We note that the obligation to relocate the BAS incumbents within three and five years, depending on market size, is a joint obligation of all the MSS entrants and not just the entrant who has begun operations.<sup>212</sup> Consequently, both MSS entrants will have an obligation to relocate the BAS incumbents in markets 1-100 within three years and the remaining markets within five years.

107. We also propose to specify that once the MSS entrants have incurred an obligation to relocate the BAS incumbents within the three and five year periods, the occurrence of the December 9, 2013 sunset date will not serve to terminate that obligation. We view this approach as appropriate to ensure that all eligible BAS incumbents who are entitled to relocation are fairly compensated.

108. Finally, we note that our rules currently are silent on what consequences the MSS entrants face for not meeting the three and five year relocation deadlines.<sup>213</sup> We seek comment on what consequences, if any, should be applied for failure to meet these deadlines.

#### **D. BAS Relocation Process**

109. *Background.* The bimonthly status reports which Sprint Nextel has filed on the progress of the BAS transition show that BAS relocation activity slows between the time when replacement equipment is ordered for installation by individual licensees, and when all licensees in a market retune to the new channel plan. The reports have cited a number of different reasons for the delays in completing relocation, such as weather conditions, the availability and scheduling of installers, and so on. However, some market delays are due to a single BAS licensee in a market that has lagged in cooperating with the BAS transition and a handful of BAS licensees that have failed to execute frequency relocation agreements.<sup>214</sup>

110. *Discussion.* We are concerned that some BAS licensees may not be making a good faith effort to complete the BAS transition in a timely manner. Because of the integrated nature of BAS, all BAS licensees in a market must transition as a group. Consequently, the failure of one BAS licensee to cooperate in the transition can delay many other BAS incumbents from completing the transition. Given

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<sup>210</sup> The top 30 market rule will be eliminated thirty days after publication of the accompanying Report and Order and Order in the Federal Register. See ¶ 45, *supra*.

<sup>211</sup> Although ICO certified that its satellite was operational starting in May 2008, it has not yet been able to begin operations due to the top 30 market rule.

<sup>212</sup> 47 CFR §§ 74.690(e)(5), 78.40(f)(5).

<sup>213</sup> One of the objections that MSTV has made to eliminating the top 30 market rule is that it would remove the MSS entrants independent obligation to relocate BAS—presumably because there is no consequence specified for MSS failing to relocate the BAS incumbents. MSTV *ex parte* Letter, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed April 8, 2009 at 3.

<sup>214</sup> Sprint Nextel *ex parte* Filing, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, filed June 1, 2009 at Appendix D and E.

that the BAS transition has taken far longer than anyone has expected, we seek comment on incentives we might apply to encourage all BAS incumbents to diligently work toward completing the BAS transition so as not to delay further the introduction of new services in the band.

111. Under our current rules, the BAS incumbents are primary until they are relocated, they refuse relocation, or the BAS relocation rules sunset on December 9, 2013.<sup>215</sup> Because individual BAS licensees may delay the transition, we seek comment on the following proposal. If a BAS licensee has not completed relocation by February 9, 2010, we could change its status for interference purposes, as discussed below, but continue to require that new entrants who incur a relocation and cost sharing obligation fulfill this obligation. Thus, Sprint Nextel, MSS and AWS-2 entrants would continue to have an obligation to relocate those BAS incumbents whose initial applications were filed prior to June 27, 2000 and who have primary status in the band.<sup>216</sup>

112. The interference status between a nonrelocated BAS licensee and a new entrant, whether Sprint Nextel, MSS, or AWS-2, could be modified in one of several different ways. First, nonrelocated BAS incumbents could become secondary in the 1990-2025 MHz band and Sprint Nextel, MSS and AWS entrants primary as of February 9, 2010. This would allow Sprint Nextel, MSS and AWS-2 entrants to provide unimpeded commercial service. The nonrelocated BAS incumbent would be able to continue operations in the band if the new entrants are not ready to begin using the band or if the BAS incumbent can operate without causing harmful interference to the new entrants. Second, we could require the nonrelocated BAS incumbent to cease operations in the 1990-2025 MHz band as of February 9, 2010. This proposal has similarities to the BAS relocation rules prior to 2004.<sup>217</sup> Third, we could make the nonrelocated BAS licensee and the new entrants co-primary in the 1990-2025 MHz band as of February 9, 2010. Because a later arriving co-primary licensee must protect the operations of an existing co-primary licensee, the new entrants, whether Sprint Nextel, MSS, or AWS-2, would have to avoid causing interference to the existing BAS systems and accept interference from the BAS licensee. We seek comment on these approaches, or possible alternative approaches.<sup>218</sup>

113. If we adopt either the first or second of the procedures described above, we seek comment on whether we should look favorably upon waiver request from individual nonrelocated BAS licensees to allow them to maintain their primary status and continue operations if enforcing the rule would cause

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<sup>215</sup> 47 C.F.R. §§ 74.690(b), 74.690(e)(6); 78.40(b), 78.40(f)(6).

<sup>216</sup> BAS licenses issued after June 27, 2000 are secondary in the 1990-2025 MHz band. 47 C.F.R. § 2.106 Footnote NG 156. *MSS Second R&O* at ¶ 59. Certain BAS licensees are secondary regardless of date of issuance and thus the new entrants have no obligation to relocate them. These include BAS licensed to low power TV and translator stations and short-term BAS facilities operating under Section 74.24 of our rules. *See* 47 C.F.R. §§ 74.24(c), 74.602(f).

<sup>217</sup> *800 MHz R&O* at ¶ 269; *MSS Second R&O* at ¶¶ 31-32. Under those rules, the MSS entrants were required to relocate BAS in the top 30 markets and all fixed BAS links before beginning operations. Once the top 30 markets were cleared the BAS incumbents in the remaining markets had to stop operating in a portion of the spectrum while the BAS relocation continued. In the accompanying Report and Order and Order, we have eliminated the requirement that MSS clear the top 30 markets and all fixed BAS links before beginning operations. Because MSS may now begin operations, requiring BAS to discontinue operations would be consistent with the previous rules.

<sup>218</sup> Under all of these proposals the BAS incumbents who have not been relocated would remain primary in the 2025-2110 MHz portion of the band. However, other BAS incumbents may have new equipment and desire to transition to the new band plan. Consequently, we seek comment on how the nonrelocated BAS licensees can coexist with relocated BAS licensees in the same market after the transition date. One possible approach is that nonrelocated BAS licensees operating on the “old” channel plan would be secondary to BAS operating on the “new” channel plan.

hardship or otherwise not serve the public interest.<sup>219</sup> The BAS licensee could, for example show that the BAS spectrum in its market is so heavily used that there is no other available channel or that circumstances beyond the incumbent's control have prevented the incumbent from completing the transition by the deadline.

## V. PROCEDURAL MATTERS

### A. Filing Requirements

114. *Ex Parte Rules.* The *Further Notice of Proposed Rulemaking* in this proceeding will be treated as a "permit-but-disclose" subject to the "permit-but-disclose" requirements under Section 1.1206(b) of the Rules.<sup>220</sup> *Ex parte* presentations are permissible if disclosed in accordance with Commission rules, except during the Sunshine Agenda period when presentations, *ex parte* or otherwise, are generally prohibited. Persons making oral *ex parte* presentations are reminded that a memorandum summarizing a presentation must contain a summary of the substance of the presentation and not merely a listing of the subjects discussed. More than a one- or two-sentence description of the views and arguments presented is generally required.<sup>221</sup> Additional rules pertaining to oral and written presentations are set forth in Section 1.1206(b).

115. *Comments and Reply Comments.* Pursuant to sections 1.415 and 1.419 of the Rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies.<sup>222</sup>

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>. Filers should follow the instructions provided on the website for submitting comments.
  - For ECFS filers, if multiple docket or rulemaking numbers appear in the caption of this proceeding, filers must transmit one electronic copy of the comments for each docket or rulemaking number referenced in the caption. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and include the following words in the body of the message, "get form." A sample form and directions will be sent in response.
- Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in

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<sup>219</sup> We will waive our rules if "[i]n view of unique or unusual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest ..." *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

<sup>220</sup> See 47 C.F.R. § 1.1206(b), as revised.

<sup>221</sup> See *id.* § 1.1206(b)(2).

<sup>222</sup> See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE, Suite 110, Washington, DC 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12<sup>th</sup> Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

116. *Paperwork Reduction Analysis*: This document contains proposed information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

#### **B. Final Regulatory Flexibility Analysis**

117. The Final Regulatory Flexibility Analysis, required by the Regulatory Flexibility Act, *see* 5 U.S.C. § 604, is contained in Appendix B.

#### **C. Initial Regulatory Flexibility Analysis**

118. The actions taken in the *Further Notice of Proposed Rule Making (NPRM)* may have a significant economic impact on a number of small entities. An Initial Regulatory Flexibility Analysis is included in Appendix C.

### **VI. ORDERING CLAUSES**

119. Accordingly, IT IS ORDERED, that, 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, this Report and Order and Order IS ADOPTED. Parts 74 and 78 of the Commission's Rules are AMENDED as specified in Appendix A, effective 30 days after publication in the Federal Register.

120. Accordingly, IT IS ORDERED, that, 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, this Further Notice of Proposed Rulemaking IS ADOPTED.

121. IT IS FURTHER ORDERED, pursuant to Sections 4(i) and (j) of the Communications Act of 1934, as amended, 47 C.F.R. §§ 154(i) and (j), and Section 1.3 of the Commission's Rules, 47 C.F.R. § 1.3, that the waiver of the deadline by which Sprint Nextel must complete relocation of the broadcast auxiliary service to frequencies above 2025 MHz adopted in FCC 08-73, IS EXTENDED until February 8, 2010.

122. IT IS FURTHER ORDERED that the Supplemental Request is GRANTED.

123. IT IS FURTHER ORDERED, pursuant to Sections 4(i) and (j) of the Communications Act of 1934, as amended, 47 C.F.R. §§ 154(i) and (j), and Section 1.3 of the Commission's Rules, 47 C.F.R. § 1.3, that the waiver of the requirement under 47 C.F.R. § 25.149(b)(3) that New ICO Satellite Services G.P. (New DBSD Satellite Services G.P.) have commercially available satellite service in accordance with its coverage requirements as a prerequisite to offering ATC services is GRANTED consistent with the terms of this order.

124. IT IS FURTHER ORDERED, pursuant to Sections 0.201, 0.203, 0.204, and 0.261 of the Commission's Rules, 47 C.F.R. §§ 0.201, 0.203, 0.204, 0.261, that authority to waive Section 25.149(b)(3) of the Commission rules, 47 C.F.R. 25.149(b)(3) for TerreStar Networks Inc. is hereby DELEGATED to the Commission's International Bureau.

125. IT IS FURTHER ORDERED, pursuant to Sections 4(i) and (j) of the Communications Act of 1934, as amended, 47 C.F.R. §§ 154(i) and (j), and Section 1.3 of the Commission's Rules, 47 C.F.R. § 1.3, that the Application for Review filed by Sprint Nextel of the grant of ATC authority to New ICO Satellite Services G.P. (New DBSD Satellite Services G.P.) is DISMISSED.

126. IT IS FURTHER ORDERED that New ICO Satellite Services G.P.'s (New DBSD Satellite Services G.P.'s) request that we waive 47 C.F.R. § 74.690(e)(1)(i) of the Commission's rules IS DISMISSED.

127. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order and Order and Further Notice of Proposed Rulemaking*, including the Final Regulatory Flexibility Analysis and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

128. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this *Report and Order and Order and Further Notice of Proposed Rulemaking* in a report to be sent to Congress and the General Accounting Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

## APPENDIX A

## Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Parts 74 and 78 to read as follows:

**PART 74 -- EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTION SERVICES**

1. Section 74.690 is amended by revising paragraph (e)(1) and (i) to read as follows:

**§ 74.690 Transition of the 1990-2025 MHz band from the Broadcast Auxiliary Service to emerging technologies.**

\* \* \* \* \*

(e) Subject to the terms of this paragraph (e), the relocation of Existing Licensees will be carried out by MSS licensees in the following manner:

(1) Existing Licensees and MSS licensees may negotiate individually or collectively for relocation of Existing Licensees to one of the channel plans specified in [§ 74.602\(a\)\(3\)](#) of this chapter. Parties may not decline to negotiate, though Existing Licensees may decline to be relocated.

(i) MSS licensees may relocate all Existing Licensees in Nielsen Designated Market Areas (DMAs) 1-30, as such DMAs existed on September 6, 2000, and all fixed stations operating in the 1990-2025 MHz band on a primary basis, except those Existing Licensees that decline relocation. Such relocation negotiations shall be conducted as “mandatory negotiations,” as that term is used in [§ 101.73](#) of this chapter. If these parties are unable to reach a negotiated agreement, MSS Licensees may involuntarily relocate such Existing Licensees and fixed stations after December 8, 2004.

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**PART 78 -- CABLE TELEVISION RELAY SERVICE**

Section 78.40 is amended by revising paragraph (f)(1) and (i) to read as follows:

**§ 78.40 Transition of the 1990-2025 MHz band from the Cable Television Relay Service to emerging technologies.**

\* \* \* \* \*

(f) Subject to the terms of this paragraph (f), the relocation of Existing Licensees will be carried out by MSS licensees in the following manner:

(1) Existing Licensees and MSS licensees may negotiate individually or collectively for relocation of Existing Licensees to one of the channel plans specified in [§ 74.602\(a\)\(3\)](#) of this part. Parties may not decline to negotiate, though Existing Licensees may decline to be relocated.

(i) MSS licensees may relocate all Existing Licensees in Nielsen Designated Market Areas (DMAs) 1-30, as such DMAs existed on September 6, 2000, except those Existing Licensees that decline relocation. Such relocation negotiations shall be conducted as “mandatory negotiations,” as that term

is used in [§ 101.73](#) of this chapter. If these parties are unable to reach a negotiated agreement, MSS Licensees may involuntarily relocate such Existing Licensees after December 8, 2004.

\* \* \* \* \*

## APPENDIX B

## Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>1</sup> an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Further Notice of Proposed Rule Making (FNPRM)*.<sup>2</sup> The Commission sought written public comment on the proposals in the *FNPRM*, including comment on the IRFA.<sup>3</sup> No commenting parties specifically addressed the IRFA.<sup>4</sup> This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.<sup>5</sup>

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

2. In this Report and Order and Order, we eliminate the rule requiring that BAS in the top 30 markets by population and all fixed BAS links be transitioned before 2 GHz MSS operators may begin operations.<sup>6</sup> This rule change is necessary because of the changed circumstances since the rule was first adopted. When the rule was adopted the MSS entrants were the only new entrants to the band and were expected to relocate BAS in the top 30 markets before they could begin operations. Sprint Nextel and future AWS licensees have subsequently been allocated spectrum in the band. Sprint Nextel was expected to relocate the BAS incumbents by September 7, 2007. However, the BAS transition has been delayed and Sprint Nextel is now required to relocate BAS by February 8, 2010. Despite the fact that BAS incumbents have been relocated in many markets, the top 30 market rule continues to prevent the MSS entrants from beginning operations anywhere—even in markets where the spectrum is currently not being used. Elimination of the top 30 market rule will allow the benefits from MSS—such as public safety service during disasters when terrestrial networks may be compromised and increased competition wireless services – to be provided sooner.

3. Because BAS is a critical part of the broadcasting system by which information and entertainment is provided to the American public, the Report and Order and Order implements a number of requirements to help prevent interference to nonrelocated BAS incumbents from MSS until the transition is complete. The MSS entrants will only be permitted to operate in markets where the BAS incumbents have not been relocated if the MSS entrants successfully coordinate with the BAS incumbents. This coordination requirement also applies to MSS operations in a market where BAS has been relocated that are within line-of-sight of BAS receiver sites in adjacent markets that have not yet been transitioned. Furthermore, to simplify the coordination process, MSS will not be able to operate ATC systems or market services to customers in markets where the BAS incumbents have not been

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<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. 857 (1996).

<sup>2</sup> See Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rulemaking*, 17 FCC Rcd 4873, 4927 (2002) (*NPRM*).

<sup>3</sup> See *id.* at 4920 ¶ 93.

<sup>4</sup> Business Autophones, Inc., Comments on IRFA (May 6, 2002) Skitronics, LLC, Comments on IRFA (May 6, 2002); Small Business in Telecommunications, Comments on IRFA (May 6, 2002).

<sup>5</sup> See 5 U.S.C. § 604.

<sup>6</sup> The Report and Order and Order also waives the deadline by which Sprint Nextel must relocate the BAS incumbents until February 8, 2010.

relocated.<sup>7</sup>

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

4. There were no comments filed that specifically addressed the rules and policies proposed in the IRFA.

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

5. 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>

6. 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.

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

8. 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

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<sup>7</sup> The Report and Order and Order does waive the commercial availability ATC gating requirement for ICO. This will allow ICO to operate ATC systems in transitioned BAS markets prior to its satellite service being available throughout its coverage area.

<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).

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

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.

9. **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.

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

11. *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

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<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).

<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).

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.

12. *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.

13. *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> 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

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<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.

<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).

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

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<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

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<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.

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<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

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<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 entrants 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

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<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

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<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>

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<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

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<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.

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<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

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<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.