DOCKET FILE COPY ORIGINAL

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

MAR 10 2008

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

MEMORANDUM OPINION AND ORDER AND FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: March 5, 2008 **Released:** March 5, 2008

Comment Date: (30 days after date of publication in the Federal Register)
Reply Comment Date: (60 days after date of publication in the Federal Register)

By the Commission:

I. INTRODUCTION

1. In this Memorandum Opinion and Order, we grant a waiver of the deadline by which Sprint Nextel Corporation (Sprint Nextel) is required to complete the transition of the broadcast auxiliary service (BAS) to frequencies above 2025 MHz until March 5, 2009, and set forth specific requirements in conjunction with this transition timetable, as discussed below.[1] We take this action in response to a joint Petition for Waiver (Joint Petition) of Sprint Nextel, the Association for Maximum Service Television, Inc. (MSTV), the National Association of Broadcasters (NAB), and the Society of Broadcast Engineers (SBE) that was filed on September 4, 2007, seeking a 29-month extension of the September 7, 2007 relocation deadline. We have also considered the record developed in this proceeding, including a plan submitted on December 6, 2007, that describes steps that could be taken to complete the BAS transition in

[1] Sprint Nextel's license for the 1990-1995 MHz spectrum was conditioned on relocation of the 2 GHz BAS by September 7, 2007. Specifically, we are waiving this license condition to the extent described herein.

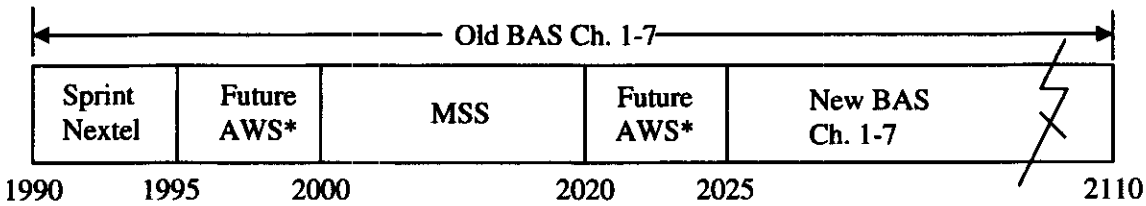
a timely and efficient manner.[2]

2. In the Further Notice of Proposed Rulemaking, we explore how to balance the needs of incumbent BAS licensees to provide service without suffering harmful interference during the transition and the introduction of new 2 GHz Mobile-Satellite Service (MSS) in a timely manner. We propose to eliminate, as of January 1, 2009, the requirement that BAS licensees in the thirty largest markets be transitioned before the MSS operators can begin offering service. We also seek comment on how to mitigate interference between new MSS entrants and incumbent BAS licensees who have not completed relocation by January 1, 2009.

II. BACKGROUND

3. The 1990-2110 MHz band is currently primarily used by the Broadcast Auxiliary Service (BAS).[3] The predominant application of BAS in this band is electronic news gathering (ENG) mobile units. Other uses include studio-transmitter links, which carry television signals from studios to broadcast antennas; and relay stations, which re-transmit television signals.

4. To promote more efficient use of this spectrum, and to permit the entry of new services, the Commission previously determined that these BAS licensees could be transitioned to a new, narrower bandplan.[4] By replacing existing analog BAS equipment with more spectrally efficient digital BAS equipment, licensees will be able to maintain their current level of operations within the 2025-2110 MHz band segment. This, in turn, will make the 1990-2025 MHz band segment available for new applications, as shown below.



*AWS = Advanced Wireless Services

5. We describe in greater detail, below, our decision to introduce new services into the 1990-2025 MHz band and the plans we established for the transition of the BAS incumbents. We then address the relocation activities that have taken place since our decision to permit Sprint Nextel to relocate BAS incumbents. Finally, we provide background on our decision to waive the original September 7, 2007, deadline by which Sprint Nextel was to complete the transition of BAS incumbent licensees, and summarize subsequent developments in the record.

[2] The filers of the Joint Petition requested a waiver of 29 months from the September 7, 2007 BAS relocation deadline. The plan submitted on December 6, 2007 would conclude the transition in 24 months from the September 7, 2007 BAS relocation deadline.

[3] 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."

[4] 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, 12, 20 (2000) (*MSS Second R&O*).

6. *Band Reallocation.* The transition of BAS dates 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.[5] This was based on actions taken at the 1995 World Radiocommunication Conference (WRC-95), as well as previous commitments the Commission made to support the adoption of MSS allocations in certain frequency bands. As part of its reallocation decision, the Commission: (1) obligated new MSS entrants to relocate any incumbent, co-primary licensee with which a MSS entrant was incapable of sharing spectrum, (2) decided that the policies established in the *Emerging Technologies* proceeding would apply to such relocations,[6] and (3) examined what specific relocation procedures would be necessary to account for the unique characteristics of BAS.

7. The Commission adopted a two-phase transition plan in 2000, by which the MSS entrants would realign the band by modifying or replacing the equipment of BAS licensees.[7] During the first phase, BAS use would be limited to the 2008-2110 MHz band segment. The second phase entailed rechannelization of BAS to the final bandplan at 2025-2110 MHz. This two-phase plan was designed to minimize the financial burden to the MSS entrants by spreading the costs over a number of years. 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.[8]

8. Under the terms of the plan adopted in 2000, MSS entrants were first required to relocate BAS facilities in the top 30 television markets (in terms of population) to allow BAS licensees to operate on all seven existing channels in the smaller 2008-2110 MHz "phase 1" bandplan. Once that happened, MSS entrants would be permitted to begin service.[9] Also, at that time, BAS stations in markets 31 and above would be required to cease operation on BAS channel 1 (1990-2008 MHz), and would have to use their existing equipment to operate solely on channels 2-7. The MSS entrants would then be obligated, within three years after beginning operation, to relocate the BAS licensees in markets 31-100 to allow BAS operation on all seven channels in the 2008-2110 MHz "phase 1" bandplan.[10] At a later time, when the

[5] 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,* 12 FCC Rcd 7388 (1997). Because this reallocation removed 35 megahertz from the total of 120 megahertz allocated to BAS, the Commission reallocated to BAS the 2110-2130 MHz band, currently allocated to FS microwave uses. This left BAS with 105 megahertz of spectrum at 2025-2130 MHz. This allocation was later modified to the 2025-2110 MHz band, affording BAS the current 85 megahertz spectrum block it will occupy after the transition.

[6] *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).

[7] *MSS Second R&O* at ¶¶ 29-33.

[8] 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(3)(1)(i). For convenience we shall refer to the DMAs as "markets" or "BAS markets."

[9] *MSS Second R&O* at ¶ 31.

[10] Markets above 100 would not be relocated during phase 1. If phase 2 never occurred, then BAS licensees in these markets would be without the use of channel 1 indefinitely.

MSS operations had grown to the point that the MSS systems needed more spectrum than was available in the phase 1 bandplan (*i.e.* they needed use of the 2008-2025 MHz spectrum), the MSS operators would first have to relocate BAS licensees in the top 30 markets to permit operation on all seven channels in the 2025-2110 MHz "phase 2" channel plan.[11] At that time, BAS stations in markets 31 and above would be restricted to using only those channels they could operate within the 2025-2110 MHz band.[12] The MSS systems would then have three years after beginning operation to relocate BAS in markets 31-100 to the final bandplan and five years to relocate the BAS licensees in the remaining markets. The BAS relocation plan specified that a two-year mandatory negotiation period between the MSS entrants and BAS licensees in the top 30 markets be commenced September 30, 2000.[13]

9. In January 2003, the Commission recognized that not all applicants originally authorized to provide 2 GHz MSS service 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.[14] 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, but decided to defer the details on how these inter-service BAS relocation obligations would be implemented to a later proceeding.[15] 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 by eliminating "phase 1" of the two-phase MSS-BAS relocation plan.[16] Under the revised plan, the BAS licensees would transition from the current bandplan to the final bandplan in one step. As with the previous relocation plan, the MSS systems would be unable to begin operation until the relocation of BAS in markets 1-30 and fixed BAS links in all markets was complete.[17] Then the MSS operators would have to transition markets 31-100 within three years and the remaining markets within five years. 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).

10. In 2004, the Commission determined that five megahertz of this 15 megahertz allocation

---

[11] *Id.* at ¶ 32.

[12] This would require the BAS licensees that were still operating on the original bandplan to cease use of both channels 1 and 2, and for BAS licensees that had been relocated to the "phase 1" bandplan to cease use of channel 1.

[13] *Id.* at ¶ 46.

[14] 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 ¶ 35 (2003) (*AWS Third R&O*). This decision maintained the MSS allocation in the 2000-2020 MHz segment.

[15] *Id.* at ¶ 37.

[16] 47 C.F.R. § 74.690(e); 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, *Third Report and Order and Third Memorandum Opinion and Order*, 18 FCC Rcd 23638, ¶ 35 (2003) (*MSS Third R&O*). Phase 1 was eliminated because only a small portion of the revised MSS allocation from 2000-2020 MHz would have become available under the phase 1 bandplan. *Id.* at ¶¶ 30-31.

[17] *Id.* at ¶ 38. Fixed BAS links in all markets must be relocated before MSS can 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 above 30 can avoid interference from MSS by switching to BAS channels that do not conflict with the MSS spectrum.

should be licensed to Sprint Nextel (which, at that time, was known as Nextel).[18] 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. Sprint Nextel agreed to relocate public safety licensees to the lower end of the 800 MHz band and commercial licensees using a cellular architecture to the upper end of the 800 MHz band during a 36-month transition period to resolve interference issues. In exchange for undertaking the expense of this realignment and as compensation for giving up some of its 800 MHz band spectrum, Sprint Nextel was granted the use of the 1990-1995 MHz band and a paired band at 1910-1915 MHz.[19] However, and as discussed in greater detail below, Sprint Nextel also committed to the relocation of BAS incumbents in the larger 1990-2025 MHz band.

11. When the decision was made to permit Sprint Nextel to use the 1990-1995 MHz band, no BAS licensees had 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 for phase 1 of the relocation plan between MSS and BAS, which had been scheduled to end on September 6, 2003, had already been extended several times.[20]

12. 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, MSTV, and the NAB, and required Sprint Nextel to relocate all BAS licensees in the 1990-2110 MHz band within 30 months of the effective date of the *800 MHz R&O* – subsequently extended by 45 days, to September 7, 2007.[21] 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 market until all BAS licensees in that market have been relocated. The Commission directed Sprint Nextel to clear the BAS incumbents in two stages: during stage one, Sprint Nextel was to relocate all BAS incumbents in markets where Sprint Nextel elected to deploy service immediately, and in any adjacent markets that raise BAS inter-market coordination and interference problems, as well as any fixed BAS facilities; and during stage two, Sprint Nextel was to relocate BAS in all remaining markets. While Sprint Nextel was given freedom to select which markets were appropriate for each stage, the Commission did establish an eighteen month framework for the completion of stage one.[22] The *800 MHz R&O* also

[18] Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, ET Docket 00-258, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, 19 FCC Rcd 14969 ¶¶ 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, *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.

[19] 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.

[20] 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) (*Suspension Order*); 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 18353 (OET, 2003); *Order*, DA 03-3543 (OET, rel. Nov. 4, 2003).

[21] *See* Commission Seeks Comment on *Ex Parte* Presentations and Extends Certain Deadlines Regarding the 800 MHz Public Safety Interference Proceeding in WT Docket No. 00-55, *Public Notice*, 19 FCC Rcd 21492 (2004).

[22] *800 MHz R&O* at ¶ 251. Stage two had to be completed by the end of the overall 30-month BAS relocation deadline.

specified that the mandatory negotiation periods for the stage one and stage two relocations would extend to May 31, 2005, and March 31, 2006, respectively.[23] The Commission rejected a later request by NAB, MSTV, and SBE, which was supported by Sprint Nextel, that would have extended these dates.[24] Sprint Nextel filed its BAS relocation schedule and implementation plan, which identified the stage one and stage two markets, on April 6, 2005.[25] In addition, the *800 MHz R&O* required Sprint to file status reports 12 and 24 months into the relocation process. It did so on March 7, 2006 and March 7, 2007.[26]

13. We note that when Sprint Nextel undertook its commitment to relocate the BAS licensees, the Commission did not remove the obligation of the MSS entrants to relocate the BAS licensees, nor the procedures that had already been put in place for doing so. Because MSS entrants may not begin operation until BAS in the top 30 television markets and all fixed BAS links in all markets have been relocated, the *800 MHz R&O* recognized that MSS systems might wish to begin operation before Sprint Nextel had relocated BAS licensees in the top 30 markets.[27] Accordingly, 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 in stage one (*i.e.* 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 that had not been identified by Sprint Nextel.[28]

14. 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 in markets 31 and above that had not been relocated had to cease using a portion of the band once MSS operators began service.[29] 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.[30] 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

[23] *800 MHz R&O* at ¶ 258.

[24] The Commission rejected this request because adequate time had been allocated for the negotiations and granting the request would place the negotiation deadlines within six months of the deadlines for actual completion of the BAS relocation itself. *See* Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, ET Docket 00-258, *Memorandum Opinion and Order*, 20 FCC Rcd 16015 ¶¶ 103-104 (2005) (*2005 MO&O*).

[25] BAS Relocation Schedule and Implantation Plan, Sprint Nextel Corp., WT Docket 02-55, April 6, 2005.

[26] BAS Relocation Status Report, Sprint Nextel Corp., WT Docket 02-55, April 7, 2006 (12-Month Status Report); BAS Relocation Status Report, Sprint Nextel Corp., WT Docket 02-55, April 7, 2007 (24-Month Status Report).

[27] *800 MHz R&O* at ¶ 257. *See also* 47 C.F.R. § 74.690(i) (describing this relocation obligation).

[28] BAS Relocation Schedule and Implementation Plan, Nextel Communications, Inc., WT Docket 02-55, ET Docket 00-258, April 6, 2005.

[29] *See supra* ¶¶ 8-9 (describing this process).

[30] *800 MHz R&O* at ¶ 270. The 2000-2020 MHz band will be used by MSS for transmissions from MSS handsets to MSS satellites and MSS ancillary terrestrial component (ATC) basestations. Transmissions from the MSS handsets can interfere with BAS receivers. BAS transmitters can cause interference to receivers in the MSS satellites and ATC basestations. *See MSS Second R&O* at ¶ 22; 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 ¶¶ 107-108 (2003).

interference from the remaining BAS users until they are relocated."[31]

15. As a general rule, the Commission's traditional cost-sharing principles are applicable to the 1990-2025 MHz band. Under these procedures, the first new entrant into the band that incurs relocation expenses for the relocation of incumbents from portions of the band that the new entrant will not occupy is, as a general matter, eligible to obtain reimbursement from subsequent entrants in the band.[32] However, the unique situation that led to the grant of spectrum to Sprint Nextel required the Commission to establish additional financial procedures for the band. Specifically, to ensure that Sprint Nextel did not receive an undeserved windfall by receiving the 1990-1995 MHz spectrum (as well as the paired 1910-1915 MHz band), Sprint Nextel was required to make a "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 spectrum Sprint Nextel was vacating ($1.607 billion); (ii) the costs paid by Sprint to realign the 800 MHz band; and (iii) the costs paid by Sprint to clear incumbent users from the BAS spectrum (as well as the paired 1910-1915 MHz band).[33]

16. The Commission required Sprint Nextel to pay any monies owed to the U.S. Treasury under this calculation as part of a "true-up" to be accomplished within six months of the end of the 800 MHz realignment (*i.e.* by December 26, 2008).[34] Prior to the true-up, and consistent with the Commission's overall band relocation cost-sharing principles, Sprint Nextel is entitled to seek a *pro rata* reimbursement of its eligible BAS band-clearing costs incurred during the 800 MHz 36-month transition period from any MSS entrant that enters the band during the transition period. This amount is to be deducted from the costs Sprint Nextel can claim credit for as BAS relocation expenses.[35] Sprint Nextel's MSS reimbursement rights are 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.[36] Sprint Nextel, similarly, 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.[37] At the conclusion of the true-up, there is no continuing obligation for MSS operators to reimburse Sprint Nextel for any expenses related to the relocation of

---

[31] *Id.*

[32] 47 C.F.R. §§ 27.1160-1174; 47 C.F.R. § 101.82.

[33] *800 MHz R&O* at ¶¶ 240, 249, 297, and 329. Specifically, these relocation costs encompass the clearing of the 1910-1915 MHz band plus the costs of relocating the 1990-2110 MHz BAS licensees.

[34] *Id.* at ¶ 11. The December 26, 2008 true-up date is based on the June 26, 2008 end date for the 36-month 800 MHz transition period. We note, for timing purposes, that Sprint Nextel was originally to have completed the relocation of the BAS incumbents by September 7, 2007, prior to both the 800 MHz transition date and the subsequent true-up date.. Nevertheless, Sprint Nextel has not requested any change to the December 26, 2008 true-up date in the Joint Petition, and we take no action with respect to the true-up date in this order.

[35] *Id.* at ¶ 261. After the *800 MHz R&O* was adopted, TMI Communications and TerreStar Networks jointly petitioned the Commission to end the MSS BAS relocation obligation at the end of the 30-month BAS transition or 36 months after the BAS transition begins rather than at the end of the 36-month 800 MHz transition period. The Commission rejected this petition. Improving Public Safety Communications in the 800 MHz Band, *Memorandum Opinion and Order*, WT Docket 02-55, ET Docket 00-258, 20 FCC Rcd 16015 ¶¶ 109-113 (2005).

[36] Because there are two authorized MSS systems in the 2000-2020 MHz MSS band, each MSS operator is assigned 10 MHz of spectrum. Thus, of the total 35 MHz 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. The *pro rata* share of each MSS operator will be 2/7 of the total 35 megahertz of spectrum.

[37] *Id.* at ¶ 262.

BAS incumbents. Also, any new entrants in the band – such as AWS licensees in the 1995-2000 MHz and 2020-2025 MHz segments – will not have the relocation reimbursement obligations that otherwise would have existed under the traditional cost-sharing approach.

17. *Relocation Activities.* In its 12-month status report filed in March 2006, Sprint Nextel described how it had dedicated "extensive resources" to the BAS relocation effort, noted that it had pre-funded BAS relocation equipment to enable BAS manufactures to begin stockpiling the necessary replacement equipment, and discussed how it was prepared to verify BAS equipment inventories and undertake relocation activities in multiple markets and regions simultaneously.[38] However, Sprint Nextel also reported that only 17 of the more than 1000 BAS licensees who must retune their operations had entered into Frequency Relocation Agreements – a key step in the relocation process – and claimed that complex disputes over taxation and relocation agreements between Sprint Nextel and BAS licensees were impeding the negotiation process.[39] While Sprint Nextel indicated that it was "improbable" that it would meet its stage one relocation schedule, it also said that it would "continue to work in good faith and take all the steps within its power to complete BAS relocation by the Commission's 31.5 month deadline."[40]

18. In March 2007, Sprint Nextel reported that it had resolved many of the negotiation disagreements with BAS licensees that had limited its ability to reach Frequency Relocation Agreements, and its 24-month status report reflected a more positive environment in which "Sprint Nextel, BAS equipment manufacturers, systems integrators, BAS licensees and the broadcast community have worked together in good faith and have made strong progress since last year's report."[41] The report recounted significant commitments of time and resources by Sprint Nextel, and noted that all BAS stations were engaged in the transition process, with 80 percent of all equipment inventories verified, and agreement reached between Sprint Nextel and the licensees as to which items will be replaced or upgraded. Nevertheless, only 22 percent of all Frequency Relocation Agreements had been completed, and 4.7 percent of the BAS markets had been relocated.[42] Sprint Nextel reported that both it and the broadcast industry had encountered "unanticipated complexities in almost every phase of relocation."[43] Specifically it described how each BAS licensee operated a unique network of fixed and portable equipment. Because each BAS network was unique, the inventory of equipment and the negotiation of plans to replace the BAS equipment was a lengthy process. Once a plan was completed, several amendments to the plan were often required as additional equipment was located or technical difficulties required changes. It also claimed that regulatory uncertainty, such as the relocation eligibility of LPTV and translator BAS licensees, and the process for relocating BAS near international borders, resulted in further delays.[44] Finally, a shortage of BAS equipment and qualified installation personnel, as well as a desire to minimize the disruption to broadcast stations news gathering operations, has further restricted the replacement

[38] 12-Month Status Report at 3.

[39] *Id.* at 5.

[40] *Id.* at 7

[41] 24-Month Status Report at 4. Also, for the first time, Sprint Nextel reported that it had engaged in discussions with one of the MSS entrants, TMI Communications Company and TerreStar Networks, to identify ways in which the parties could better coordinate the relocation efforts. *Id.* at 22.

[42] *Id.*

[43] *Id.* at 8.

[44] The Commission will allow but not require Sprint Nextel to relocate the BAS facilities associated with LPTV and translator stations. Sprint Nextel may receive credit for relocating these facilities against the costs of the spectrum it will receive. Improving Public Safety Communications in the 800 MHz Band, *Second Memorandum Opinion and Order*, WT Docket 02-55, ET Docket 00-258, 22 FCC Rcd 10467 ¶¶ 55-66 (2007).

process. As such, Sprint Nextel reported that it would need from 12-24 additional months beyond the September 7, 2007, deadline to complete the BAS relocation.[45]

19. The filing of the 24-month Status Report prompted reactions from the two remaining prospective MSS operators.[46] On April 2, 2007, TMI Communications Company and TerreStar Networks (TerreStar) petitioned the Commission to expedite the BAS relocation process.[47] TerreStar described its efforts to develop an emergency response network in conjunction with Federal Government officials by the 2008 hurricane season, and expressed its concern that a delay in Sprint Nextel's ability to relocate BAS incumbents could jeopardize its ability to deploy valuable services. TerreStar is required as a condition of its license to have an operational satellite system by November 2008.[48] On April 13, 2007, New ICO Satellite Services (ICO) filed a request for expedited relief asking that we require Sprint to relocate the BAS licensees in the top 30 markets and all fixed BAS facilities by December 31, 2007.[49] ICO is required as a condition of its license to have an operational satellite system by December 31, 2007, although it has a pending request to extend this milestone to May 15, 2008.[50]

20. On September 4, 2007, Sprint Nextel, MSTV, NAB, and the SBE filed their Joint Petition, which sought a waiver of the September 7, 2007 BAS relocation deadline for 29 months, until February 7,

---

[45] *Id.* at 25.

[46] In addition, AT&T Inc., filed an *ex parte* presentation on April 19, 2007, that, in discussing the overall 800 MHz rebanding process, suggested that the Commission revise the conditions attached to the grant of the 1.9 GHz spectrum, which includes the BAS bands at issue herein.

[47] Request for Proceeding to Expedite the BAS Relocation Process, TMI Communications and Company and TerreStar Networks Inc., WT Docket 02-55, filed April 2, 2007. In the petition TerreStar requested that we initiate a proceeding that would provide a legal basis for making modifications in the rights and responsibilities of the parties authorized to operate in the 2 GHz BAS spectrum. TerreStar did not suggest how these party's rights and responsibilities should be modified or make other specific suggestions for actions that we should take to expedite the BAS relocation process.

[48] The November 2008 date reflects a Commission decision that extended TerreStar's original operational milestone. *See* TerreStar Networks, Inc., Request for Milestone Extension, *Memorandum Opinion and Order*, File No. SAT-MOD-20070608-00080, DA 07-4148, (2007); TMI Communications and Company, Limited Partnership and TerreStar Networks Inc. Application for Review and Request for Stay, Memorandum Opinion and Order, File Nos. SAT-LOI-19970926-00161, SAT-AMD-20001103-00158, ¶¶ 50-52 (2004). TerreStar has publicly announced that launch of its satellite could be delayed by up to three months and that its launch contractor has confirmed a December 2008-February 2009 launch window. *See* Press Release, TerreStar announces strategic investment by Echostar, Harbinger & other investors—Transaction facilitates funding through satellite launch and will enhance TerreStar's nationwide spectrum footprint (Feb. 7, 2008) (available at http://www.terrestar.com/news/index.html).

[49] Comments and Request for Expedited Relief, New ICO Satellite Services G.P., WT Docket 02-55, filed April 13, 2007. Sprint Nextel filed an opposition to this petition, reiterating its contention that the BAS relocation process has proven to be far more complicated than initially anticipated and claiming that ICO had done little during the past seven years to facilitate BAS relocation. Sprint Nextel Corporation Opposition to New ICO Comments and Request for Expedited Relief, WT Docket 02-55, filed April 26, 2007. ICO subsequently submitted a responsive *ex parte* filing recognizing the complexity associated with the BAS relocation and supporting relief for Sprint Nextel, but nevertheless seeking an expedited process for the relocation of BAS incumbents. New ICO Satellite Services G.P., *ex parte* filing in WT Docket 02-55, filed June 14, 2007.

[50] New ICO Satellite Services G.P. Application to Extend Milestones, *Memorandum Opinion and Order*, File No. SAT-MOD-20061109-00137, DA 07-522, (2007). *See* Modification Application to Extend Milestones August 2007, New ICO Satellite Services G.P., filed August 6, 2007 (requesting an extension of its launch milestone to April 15, 2008 and an extension of its operational milestone to May 15, 2008). *See also* 47 C.F.R. § 25.161(a)(2)(staying automatic termination of an authorization where "a request for an extension of time has been filed with the Commission but has not been acted on").

2010.[51] According to the Joint Petition, circumstances beyond the control of Sprint Nextel and the BAS licensees have delayed the relocation process in ways that could not have reasonably been anticipated. These circumstances include the complexity of existing BAS systems, the oversight required to document the expenses so that credit may be claimed in the 800 MHz true-up, tax issues, a shortage of equipment installers, the need for extensive equipment testing, and the need to work around broadcasters' newsgathering schedules.[52] In January of this year, Sprint Nextel reported that ten percent of the replacement BAS equipment had been installed.[53] We also note that both 2 GHz MSS entrants are required under their current milestones to have operational systems in place well before the February 7, 2010 date for completion of the BAS relocation process that the Joint Petition requests.

21. *Subsequent Developments.* On September 7, 2007, the Commission on its own motion waived the deadline by which Sprint Nextel must complete relocation of the broadcast auxiliary service to frequencies above 2025 MHz for a period of 60 days (*i.e.*, the new deadline became November 6, 2007) so as to provide the time to consider the issues raised by the Joint Petition.[54] On November 6, 2007, we extended this deadline for an additional sixty days – until January 5, 2008.[55] In the *Waiver Extension Order*, we recognized that the issues raised by the Joint Petition were especially complex, but noted that the record indicated that the filers of the Joint Petition and the MSS operators had initiated discussions in an effort to devise an approach to the BAS transition that will meet the needs of 2 GHz MSS systems, Sprint Nextel, and the 2 GHz BAS licensees. As such, we looked to the filers of the Joint Petition to continue consulting with other interested parties to develop a detailed plan for completing the transition of the 2 GHz BAS licensees, and required Sprint Nextel, MSTV, NAB, and SBE to report to the Commission the plans or proposals that are generated by such discussions within 30 days of the current deadline – December 6, 2007. We subsequently extended the waiver of the deadline by which Sprint Nextel is required to complete the BAS transition for two additional thirty day periods beyond the January 5, 2008 date established by the *Waiver Extension Order*.[56] The waiver of the BAS transition deadline currently expires on March 5, 2008.

22. The record contains a number of *ex parte* filings that support the Joint Petition and bolster the filers' contention that the BAS relocation has been considerably more difficult than had first been anticipated. Several manufacturers of BAS equipment explained that the complexity of replacing custom BAS facilities at a large number of television stations was underestimated when the plan was developed.[57]

---

[51] 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 02-55, September 4, 2007 (*Joint Petition*).

[52] *Id.* at 8-12.

[53] Sprint Nextel *ex parte* in WT Docket No. 02-55, filed Jan. 28, 2008 at 3.

[54] Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, ET Docket 00-258, *Order*, 22 FCC Rcd 17151 (2007).

[55] Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, ET Docket 00-258, *Order*, 22 FCC Rcd 19730 (2007).

[56] Improving Public Safety Communications in the 800 MHz Band, *Order*, WT Docket 02-55, ET Docket 00-258, FCC 08-2, 23 FCC Rcd 575 (2008); Improving Public Safety Communications in the 800 MHz Band, *Order*, WT Docket 02-55, ET Docket 00-258, FCC 08-30 (rel. February 4, 2008)

[57] *See* Response of Nucomm, Inc. in Support of the Joint Petition for Waiver of Sprint/Nextel, NAB, MSTV, and the Society of Broadcast Engineers, Nucomm, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 25, 2007, at 5; Comments of Microwave Radio Communications in Support of the Joint Petition for Waiver, Microwave Radio Communications, WT Docket 02-55, ET Docket 00-258, Oct. 30, 2007, at 2; Troll Systems Comments in Support of Joint Petition for Waiver of Sprint Nextel Corp., MSTV, NAB, and SBE, Troll Systems Corp., WT Docket 02-

(continued....)

These manufacturers note that Sprint Nextel took steps to speed the BAS transition such as stockpiling equipment and contracting to expand manufacturer's capacity.[58] DSI, a contractor hired by Sprint Nextel to verify BAS equipment inventories at television stations and install BAS equipment at a number of stations, notes that BAS relocation has taken longer than expected because of a longer than expected equipment inventory process, equipment supply issues, communications problems between new and existing BAS equipment, and a shortage of qualified personnel.[59]

23. We note that T-Mobile, in an *ex parte* comment filed October 1, 2007, has alleged that there are unresolved interference issues between existing BAS operations and the systems it is attempting to deploy in the adjacent AWS-I spectrum.[60] T-Mobile claims that a solution to the interference issues needs to be addressed in conjunction with the BAS transition plan; has asked that we seek comments on the Joint Petition; and seeks to be included in the development of the plan or proposals required by our Order extending the BAS transition deadline.[61] Sprint Nextel states its intent to work with T-Mobile in an effort to find technical solutions to the AWS-BAS interference issues, but emphasizes that it cannot support any additional costs or delay to its BAS transition process.[62]

24. On December 6, 2007, the filers of the Joint Petition filed a plan for completing the BAS transition.[63] This plan was created after a comprehensive series of discussions and a day-long conference between the filers of the Joint Petition, several independent broadcasters, BAS system integrators, BAS installation firms, BAS equipment manufacturers, T-Mobile USA, TerreStar, and ICO.[64] The Sprint

(Continued from previous page)
55, ET Docket 00-258, Nov. 2, 2007, at 5. Troll notes that significant delays can occur during the BAS equipment installation process because of interoperability and equipment incompatibility problems that don't become evident until installation is attempted. *Troll Systems Corp. Comments* at 5.

[58] *Response of Nucomm* at 3-4. Nucomm expresses its belief that Sprint Nextel and the broadcasters have worked diligently to complete the BAS transition and that there is no cognizable "fault" involved in the inability to complete the transition on time. *Response of Nucomm* at 9.

[59] Comments in Support of Joint Petition for Waiver, DSI RF Systems, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 26, 2007, at 2.

[60] T-Mobile USA, Inc., *ex parte* notice in WT Docket No. 02-55, ET Docket No. 00-258, filed October 1, 2007. AWS-I spectrum consists of the 1710-1755 MHz band paired with the 2110-2150 MHz band. T-Mobile holds 93 licenses for the 2110-2115 MHz AWS "A" block, which is adjacent to the BAS Channel A7.

[61] *Id.* at 8. T-Mobile, Inc., *ex parte* notice in WT Docket No. 02-55, ET Docket No. 00-258, filed November 8, 2007. T-Mobile also asked to be included in an "acceleration summit" proposed by Sprint Nextel to identify additional efficiencies in the BAS relocation process. Sprint Nextel Corp. *ex parte*, in WT Docket No. 02-55, ET Docket No. 00-258, and ET Docket No. 95-18, Oct. 30, 2007.

[62] Sprint Nextel, *ex parte* presentation, "Interference to News, Sports, Weather, and Other Remote TV Programming," WT Docket No. 02-55, ET Docket No. 00-258, October 16, 2007, at 8. Sprint Nextel notes that under the Commission's rules AWS licensees have the responsibility to protect previously licensed BAS licensees. *Id.* at 6. Sprint Nextel claims that the interference is due to overload resulting from the operation of high power AWS base stations near BAS receive sites while T-Mobile expresses concern that there isn't sufficient basis for this conclusion. *Id.* at 4. T-Mobile, Inc., *ex parte* notice in WT Docket No. 02-55, ET Docket No. 00-258, filed November 8, 2007.

[63] 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 02-55, ET Docket 00-258, filed December 6, 2007 (*Sprint Nextel et al. Plan*).

[64] *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, only the filers of the Joint Petition have submitted the plan. Consequently, we are unable to determine if the other parties agree with all aspects of the plan.

Nextel *et al.* plan proposes 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. This acceleration of the BAS transition is accomplished by taking a number of actions. Several benchmarks were established for the process of obtaining price quotes for BAS equipment and the development of frequency relocation agreements between Sprint Nextel and the BAS licensees.[65] These benchmarks should result in completion of frequency relocation agreements with all BAS licensees by July 1, 2008. The process required to change BAS equipment orders and amend the frequency relocation agreements was simplified to save substantial time and resources.[66] Acceleration teams made up of representatives of Sprint Nextel and the broadcasting industry will be appointed to be aggressive advocates of completing the BAS transition in each market.[67]

25. The Sprint Nextel *et al.* plan includes a schedule showing when each BAS market will be transitioned. The schedule calls for the transition of most BAS markets on the east coast—excluding New York and Philadelphia—as well as markets around the Great Lakes and a number of western states by December 2008.[68] By June 2009, the BAS transition will be complete in most of the country except in the northern states west of Lake Michigan and the upper Ohio and Mississippi valleys.[69] The remaining markets would then be transitioned by August 2009. The last three of the top 30 markets, which under the Commission' rules must be transitioned before the 2 GHz MSS operators can provide service, will not be transitioned until August 2009.

26. According to the filed Sprint Nextel *et al.* plan, the transition schedule takes into account the MSS systems' highest priority market access needs as well as many of T-Mobile's market-clearing objectives.[70] According to the plan, the MSS operators identified a number of markets around Las Vegas, Nevada; Salt Lake City, Utah; Raleigh, North Carolina; Washington, DC; and Houston, Texas as high priorities that must be transitioned no later than July 2008.[71] The Sprint Nextel *et al.* plan transitions all of these identified markets by August 2008, with the exception of Salisbury, Maryland. The Sprint Nextel *et al.* plan also recognizes that ICO has indicated that it needs to conduct satellite spot beam calibration testing with beacons originating in four different locations and operating continuously as soon as April 2008, and that the MSS entrants have proposed coordination of such in-orbit testing with local BAS licensees.[72] The filed Sprint Nextel *et al.* plan also notes that the MSS operators desire unfettered access to all the MSS frequencies between 2000-2020 MHz by January 1, 2009. However, the BAS licensees remain concerned with allowing the MSS entrants access to this spectrum prior to BAS markets

[65] *Id.* at 16-20. Quote packages for replacement BAS equipment are due by March 18, 2008. Sprint Nextel reviews and signs the quote packages within 45 days after receiving them. Within 7 days after signing a quote package, Sprint Nextel sends a frequency relocation agreement to the BAS licensee. The broadcaster then has 45 days to negotiate and sign the frequency relocation agreement. Sprint Nextel then signs the frequency relocation agreement within 7 days. Finally, within 14 days after Sprint Nextel signs the agreement, the BAS licensee submits a purchase order for the BAS equipment to Sprint Nextel.

[66] *Id.* at 21-23.

[67] *Id.* at 20-21.

[68] *Id.* at 14.

[69] *Id.* at 15.

[70] *Id.* at 10-11.

[71] *Id.* at 7-8.

[72] *Id.* at 7. These locations are Las Vegas, NV; South Easton, MA; Brewster, WA; and Ellenwood, GA.

being transitioned because of potential harmful interference to BAS.[73]

27. Both MSS operators addressed the Sprint Nextel *et al.* plan in separate filings, submitted by TerreStar on December 18, 2007, and by ICO on December 19, 2007. TerreStar and ICO individually describe similar three-phased plans that would culminate in their provision of commercial service. Under each plan, phase one involves satellite testing[74] and phase two entails limited market tests.[75] Both parties discuss how phase one satellite testing can be accommodated in conjunction with the Sprint Nextel *et al.* plan, and how the Sprint Nextel *et al.* plan would provide for timely BAS relocations in the markets they have identified for phase two market testing.[76] During phase three, which would begin no later than January 1, 2009, both TerreStar and ICO seek the ability to offer service on a nationwide basis. The MSS operators discuss possible means of accommodating their deployment needs during the eight month period in which BAS licensees are still being relocated, including by means of coordination with incumbent BAS licensees,[77] having BAS licensees operate on a narrower channel width prior to relocation,[78] and by reconfiguring BAS use away from channels 1 and 2 in markets with five or fewer BAS operators.[79] TerreStar contends that it will be able to share with unrelocated BAS operations, and it has offered to conduct ongoing coordination with these BAS incumbents.[80] TerreStar requests that the Commission issue another short extension of the BAS relocation deadline to permit the parties additional time to reach agreement on phase three to allow the MSS operators to begin providing service by January 1, 2009.[81] ICO, which has also indicated a willingness to coordinate with BAS as it initiates nationwide service, nevertheless asks that we ensure that MSS operators can access the band on a primary basis, nationwide, by no later than January 1, 2009.[82] ICO also suggests that the BAS relocation process could

[73] *Id.* at 9. The filed Sprint Nextel *et al.* plan notes that TerreStar has provided the filers of the Joint Petition a summary of a technical study addressing the potential interference between MSS systems and BAS, and ICO has offered to perform a similar study. On January 30, 2008, TerreStar placed the complete study into the docket and indicated that it had provided a copy to the filers of the Joint Petition. TerreStar *ex parte* in WT Docket No. 02-55, filed Jan. 30, 2008.

[74] TerreStar describes test communications between the satellite and various ground stations, and indicates this can be accomplished in areas where BAS channels 1 and 2 have been cleared or where such testing can be coordinated with individual BAS licensees. TerreStar *ex parte*, filed Dec. 18, 2007, at 5. ICO discusses in-orbit testing from its ground control station in Las Vegas, and the operation of transmit beacon stations on a continuous basis from its Las Vegas, South Easton, Brewster and Ellenwood sites. ICO *ex parte* in WT Docket No. 02-55, filed Dec. 19, 2007, at 3-4.

[75] TerreStar states that it plans these tests in markets that would be cleared under the Sprint Nextel *et al.* plan by July 2008 (long before it is expected to launch its satellite). ICO plans to conduct tests in the Las Vegas and Raleigh-Durham by no later than July 2008. More recently, ICO described these market trials as being planned for June. ICO *ex parte* in WT Docket No. 02-55, filed Feb. 26, 2008 at 2.

[76] TerreStar *ex parte*, filed Dec. 18, 2007 at 6; ICO *ex parte* in WT Docket No. 02-55, filed Dec. 19, 2007 at 4-5. We note that ICO would prefer a larger geographic area in which to conduct its tests, and asks that Sprint Nextel "prioritize markets adjacent to or near" Las Vegas and Raleigh-Durham for BAS relocation. *Id.*

[77] TerreStar *ex parte* in WT Docket No. 02-55, filed Dec. 18, 2007 at 8. ICO *ex parte* in WT Docket No. 02-55, filed Dec. 19, 2007 at 5, n7.

[78] ICO *ex parte* in WT Docket No. 02-55, filed Dec. 19, 2007 at 5.

[79] *Id.* These last two proposals were not incorporated into the Sprint Nextel *et al.* plan.

[80] TerreStar *ex parte* in WT Docket No. 02-55, filed Dec. 18, 2007 at 6-8. It submitted an engineering study to support its claims, and says it has offered to coordinate "24/7" with BAS licensees in uncleared markets. *Id.* at 8.

[81] TerreStar *ex parte* in WT Docket No. 02-55, filed Dec. 18, 2007 at 9.

[82] ICO *ex parte* in WT Docket No. 02-55, filed Dec. 19, 2007 at 3.

be accelerated if Sprint Nextel were to invoke involuntary relocation procedures under the rules.[83]

28. ICO filed an *ex parte* on February 26, 2008 requesting that the Commission take a number of actions.[84] First, ICO asks that the Commission impose specific conditions on any waiver of the BAS relocation deadline.[85] These conditions include that: (1) a number of limited geographic areas in South Easton, Massachusetts; Brewster, Washington; and Ellenwood, Georgia be cleared or coordinated to allow ICO to begin satellite testing by April 2008; (2) the Las Vegas and Raleigh-Durham market cluster be cleared or coordinated by June 2008 to allow ICO to perform market testing; (3) Sprint must file monthly status reports on the status of the BAS relocation; (4) the Commission provide strict oversight of the transition process to ensure that deadlines set by the Sprint Nextel *et al.* plan are achieved; and (5) the 2 GHz MSS licensees may access their spectrum nationwide by January 2009. ICO notes that when MSS begins operations after January 2009, BAS will be protected from harmful interference through a coordination process.[86] ICO also requests that after August 31, 2009 (the scheduled end of the BAS transition in the Sprint Nextel *et al.* plan) any BAS licensees who have not yet been relocated be required to accept interference from the 2 GHz MSS licensees.[87] ICO believes that it may begin operation in January 2009 despite the requirement in the Commission's rules that BAS in the top 30 markets and all fixed BAS links be relocated prior to MSS beginning operations.[88] If the top 30 market rule does prevent ICO from commencing operations, ICO requests that the Commission waive this rule and allow ICO to begin operations nationwide in January 2009 regardless of whether the BAS licensees in the top 30 markets and all fixed BAS licensees have been relocated.[89] ICO believes this waiver would "advance the Commission's policy objective of striking an appropriate balance between MSS and BAS interest."[90] In a responsive *ex parte* filing submitted March 4, 2008, the filers of the Joint Petition generally do not object to certain of ICO's requests.[91] In addition, they agree to work with ICO to conduct system testing by April 2008 at four sites.[92] However, the filers indicate that they do not believe that ICO has provided sufficient technical information about the ability of ICO's planned system to coexist with unrelocated BAS licensees, and therefore object to ICO's request that it be allowed access to the 2 GHz BAS

[83] ICO *ex parte* in WT Docket No. 02-55, filed Dec. 18, 2007 at 6-8 (citing 47 C.F.R. § 101.75).

[84] ICO *ex parte* in WT Docket No. 02-55, filed Feb. 26, 2008.

[85] *Id.* at 2-3.

[86] *Id.* at 7.

[87] *Id.* at 4 n.5. This request would in effect make the unrelocated BAS licensees secondary to the MSS licensees. ICO states that they would remain committed to working with the broadcasters to minimize interference.

[88] *Id.* at 5-6.

[89] *Id.* at 6. Specifically, ICO request a waiver of 47 C.F.R. § 74.690(e)(1)(i).

[90] *Id.* at 7.

[91] Sprint Nextel, NAB, MSTV, SBE *ex parte*, filed March 4, 2008. Specifically, all parties appear to be in concurrence with respect to filing relocation status reports and in ensuring that BAS incumbents in the vicinity of Raleigh-Durham and Las Vegas are cleared by the time ICO wishes to begin market testing.

[92] Because three of the sites (Brewster, Washington, Ellenwood, Georgia, and South Easton, Massachusetts) are located in markets where BAS has not been relocated , the petitioners indicate that they are still determining the potential for interference at the proposed sites, and request that tests not exceed sixty days without approval by the petitioners and include methods to cease testing if harmful interference were to occur. *Id* at 2.

spectrum starting in January 2009.[93]

III. MEMORANDUM OPINION AND ORDER

29. As further described below, we conclude that the public interest is served by waiving the deadline by which Sprint Nextel must complete relocation of the broadcast auxiliary service to frequencies above 2025 MHz until one year from release of this order (*i.e.* March 5, 2009). We hold open the option of extending this waiver upon further consideration.

30. 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 ..."[94] We do not think it would serve the public interest to strictly enforce the September 7, 2007 deadline. Sprint Nextel has taken the lead in the BAS relocation efforts to date, and we 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.[95] As ICO notes in its June 14, 2007 *ex parte* letter, "Sprint, despite its delays, has now substantially engaged most BAS incumbents in the relocation process, and duplicating those efforts would be enormously inefficient – not to mention counterproductive and frustrating to the BAS incumbents that have already invested substantial time and effort with Sprint."[96] We conclude that the public interest is best served by affording Sprint Nextel the ability to continue its relocation efforts.

31. Moreover, we conclude that the record illustrates many valid reasons why Sprint Nextel was unable to achieve timely relocation of the BAS incumbents. Specifically, Sprint Nextel claims that the BAS transition has proven to be far more complicated than was first anticipated, and comments in the record from equipment manufacturers, transition facilitators, broadcasting groups, and others who have been involved in the process support this assertion. As an initial matter, we note that the BAS transition is based on our *Emerging Technologies* relocation principles, which were first employed in the relocation of incumbent fixed-point-to-point microwave links.[97] These facilities typically consisted of paired transmitters and receivers providing a communications link between two fixed locations. By contrast, the BAS relocation involves an entirely different service with many complexities that have not been encountered in the relocation of fixed microwave facilities. Moreover, many of these complexities became known only during Sprint Nextel's efforts to implement the relocation plan. Specifically, we note

[93] *Id.* at 3 (objecting to the grant of a waiver to permit MSS access to the band, but stating that if a waiver were to be granted, it be conditioned on a demonstration that ICO will not cause interference to BAS and that ICO meet its financial obligations with respect to the cost of transitioning BAS licensees).

[94] 47 C.F.R. § 1.925(b)(3)(ii). *See WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

[95] For example, it appears that equipment manufactures have already obligated their resources to Sprint Nextel for the manufacturing of replacement BAS equipment. Also, the time that has been spent in such initial planning steps such as approving inventories could be lost.

[96] New ICO Satellite Services G.P., *ex parte* filing in WT Docket 02-55, filed June 14, 2007 at 2.

[97] *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).

that the BAS facilities of each licensee typically consists of a collection of receive sites, mobile equipment, and control equipment put into operation over a period of thirty or more years, which has made the evaluation of and transition planning for each system a unique undertaking.[98] The equipment is made by a handful of manufacturers who had to ramp up production for this project.[99] There is a shortage of qualified equipment installers and tower climbers, whose schedules must be coordinated with separate work being undertaken as part of the digital television (DTV) transition,[100] and whose ability to install equipment can be hampered by weather events.[101] Unexpected coordination problems between the new radio equipment and the preexisting controllers have arisen.[102] The initial negotiation complications between Sprint Nextel and the broadcasters involving detailed tax and legal considerations significantly retarded Sprint Nextel's ability to maintain its relocation timetable.[103] Finally, because there was no record of meaningful negotiations or relocation activities having taken place between MSS and BAS at the time the Sprint Nextel relocation plan was adopted, the assumptions incorporated into the plan could not be shaped by any actual relocation experiences.

32. The relocation of BAS licensees is a necessary step for the introduction of new services throughout the 1990-2025 MHz band, including those services that will be deployed by the prospective 2 GHz MSS operators. As described above, TerreStar is required to have an operational satellite system by November 2008 and ICO is planning to have an operational satellite system by May 2008.[104] Waiving the BAS transition deadline for twenty-nine months, without further action, would delay the ability of MSS operators to provide commercial service until long after their satellite systems are expected to be operational.[105] The fact remains that Sprint Nextel did agree to undertake the BAS transition by September 7, 2007 and the BAS transition has not been completed. The MSS operators, who appear to have placed great faith in Sprint Nextel's ability to achieve the original BAS clearing timeframe because they did not act independently to clear any BAS markets, now express concern that an extended delay in clearing BAS incumbent licensees could jeopardize their ability to offer commercial service and have asked for relief.[106] We agree that, in light of the MSS operators' claims, a 29-month waiver extension is

[98] 24-Month Status Report at 8-9; *Joint Petition* at 2; Comments in Support of Joint Petition for Waiver, DSI RF Systems, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 26, 2007 at 5.

[99] 24-Month Status Report at 18; Response of Nucomm, Inc. in Support of the Joint Petition for Waiver of Sprint/Nextel, NAB, MSTV, and the Society of Broadcast Engineers, Nucomm, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 25, 2007 at 1-2, 4-5.

[100] Television broadcast stations are required to convert from using analog broadcast technology to digital broadcast technology by February 17, 2009. *See See* 47 U.S.C. § 309(j)(14)(A), as amended by § 3006(a) of the Digital Television Transition and Public Safety Act of 2005, Title III of the Deficit Reduction Act of 2005, Pub. L. No. 109-171, 120 Stat. 4 (2006) (establishing February 17, 2009 as the "hard date" for the digital television transition).

[101] Comments in Support of Joint Petition for Waiver, DSI RF Systems, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 26, 2007 at 6.

[102] Comments in Support of Joint Petition for Waiver, DSI RF Systems, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 26, 2007 at 7-8; Troll Systems Comments in Support of Joint Petition for Waiver of Sprint Nextel Corp., MSTV, NAB, and SBE, Troll Systems Corp., WT Docket 02-55, ET Docket 00-258, Nov. 2, 2007 at 3, 5-6.

[103] 12-Month Status Report at 6; 24-Month Status Report at 11.

[104] The May 2008 date is based on ICO's pending request to extend the current December milestone. *See supra* n.48. Terrestar has indicated that its satellite launch may be delayed up to three months. *See supra* n.46.

[105] This assumes that ICO's pending milestone extension is granted.

[106] In April 2007, TerreStar reported that it had been working cooperatively with Sprint Nextel to support its BAS relocation efforts. Request for Proceeding to Expedite the BAS Relocation Process, TMI Communications and Company and TerreStar Networks Inc., WT Docket 02-55, filed April 2, 2007 at 4-5.

not warranted. The inability of MSS systems to begin operation under the current rules until the top 30 markets are cleared, the enormous up-front build and launch costs that make rapid initiation of income-producing service vital to the success of a satellite venture, and, in the case of TerreStar, the potential public safety benefits associated with its federal government contract obligations all serve to necessitate a quicker conclusion of the BAS relocation process.

33. We do not believe that it is necessary to require Sprint Nextel to complete the BAS relocation before the MSS operators' satellites are launched and need to be tested. First, we expect that even once the MSS satellites are launched, the MSS systems will have to undergo a significant period of testing before ubiquitous service can be offered. In addition, MSS still must clear incumbent licensees from the corresponding MSS downlink band at 2180-2200 MHz before service can be offered.[107] A more challenging situation is presented with the initiation of nationwide MSS service, which ICO has indicated it wants to be able to provide as soon as January 2009. 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 this date. The obstacles that Sprint Nextel continues to face in transitioning BAS are daunting, and it would be unrealistic to expect that they will be resolved simply or easily.

34. For these reasons, while we conclude that a grant of the Joint Petition's request for a waiver of the original September 7, 2007, relocation deadline is warranted, it does not automatically follow that a grant of the 29-month extension requested by the parties serves the public interest. More specifically, we act at this time to waive this deadline until March 5, 2009.[108] Because of the delay in the relocation of BAS, a new and significant element of this proceeding is the balancing of our interest in finding a means of permitting MSS operators to begin to deploy nationwide service as soon as January 1, 2009 with a realization that some unrelocated BAS operators may still be operating in the band after that date. As such, we are particularly concerned about managing the interference environment during the period in which both MSS and BAS operate in the band, and in minimizing the time in which MSS and BAS must co-exist. In addition, we must also consider that broadcast entities are already heavily involved in preparing for the DTV transition, which will occur on February 17, 2009. We believe it is prudent to set a date beyond the DTV transition date for the completion of the BAS relocation.

35. We emphasize that the action we take herein has no impact on any other aspect of the rebanding timetable set forth in the Commission's orders in this proceeding, and in particular does not alter the 36-month timetable for completing rebanding in the 800 MHz band. Moreover, we note that our public interest analysis in favor of extending the BAS transition involves different factors than those present in the 800 MHz rebanding process. Most importantly, this waiver of the BAS relocation deadline does not affect our paramount goal in this proceeding of resolving the problem of interference to public safety licensees in the 800 MHz band.

36. We recognize that the Sprint Nextel *et al.* plan represents the most recent and most comprehensive proposal in the record for completing the relocation of BAS. Although we are not adopting the proposal outlined in the Sprint Nextel *et al.* plan, that the BAS relocation be completed no later than September 7, 2009, we recognize that the plan was crafted to recognize the interests of all interested parties and that it incorporates many meaningful elements that are designed to promote the rapid transition of BAS. Specifically, the plan includes benchmarks for completing frequency relocation

[107] *MSS Third R&O* at ¶¶ 65-67. According to our records there are currently 2397 microwave licensees in the 2180-2200 MHz band as of November 29, 2007.

[108] In doing so, we grant in part the waiver request filed by the Joint Parties and, in all other respects hold the request in abeyance pending resolution of issues raised as part of the *Further Notice*.

agreements between BAS licensees and Sprint Nextel, streamlined processes for amending frequency relocation agreements, and the establishment of acceleration teams to aggressively advocate for completing the BAS transition in each market.[109] The plan also proposes a market-by-market schedule for the BAS transition.[110] Furthermore, while we are not adopting the Sprint Nextel *et al.* plan or approving its provisions, we believe that it is a useful tool and we plan to consider how successfully it is implemented if we consider whether and for how long we should extend a waiver of the BAS relocation process beyond March 5, 2009. In addition to evaluating Sprint Nextel's progress in its relocation efforts, we could also account for any additional relocation efficiencies that might be realized in the interim,[111] and consider whether Sprint Nextel, BAS licensees and MSS operators have continued to act in good faith to ensure that BAS relocation is completed as quickly and efficiently as possible.

37. Because we are extending the waiver until March 5, 2009, we otherwise deny TerreStar's petition to expedite the BAS relocation process and ICO's petition to require Sprint Nextel to complete the relocation of certain BAS markets by December 31, 2007.[112] While we believe that permitting MSS operation by that date serves the public interest, the necessary rule modifications and adoption of provisions to manage the interference environment are best addressed within the context of the *Further Notice*. Regarding ICO's suggestion that the BAS relocation process could be accelerated if Sprint Nextel were to invoke involuntary relocation procedures, we observe that ICO provides no evidence that invoking these procedures would accelerate the process given the complexities involved.[113] Finally, as discussed below, we clarify that the current rules will not hinder the MSS operators' ability to conduct initial satellite and market testing in 2008.

38. We realize that there is much work yet to be done before the completion of the BAS transition, and we note that there are incentives for all interested parties to work with Sprint Nextel to complete the BAS relocation as quickly as possible. For MSS systems, a rapid transition provides greater opportunities to initiate service. As discussed above, the inability of Sprint Nextel to meet its obligations carries the risk of severe regulatory jeopardies. Finally, failure of the process would leave BAS licensees operating in an incompletely transitioned BAS environment and would interject uncertainty as to how the transition would be completed or whether it would even be accomplished before BAS licensees become secondary in the 1990-2025 MHz band.[114] We find it especially encouraging that

[109] *Sprint Nextel et al. Plan* at 17, 20-23.

[110] *Id.* at Appendix B.

[111] It appears that the experience that the parties have gained in conducting individual transition transactions will contribute to the establishment of more streamlined procedures and best practices – which, in turn, will serve to continue to accelerate the overall transition process. For example, DSI has noted the steps it has taken to streamline the transition process by assembling and pre-testing BAS equipment before transporting it on-site and the development of an installation toolkit Comments in Support of Joint Petition for Waiver, DSI RF Systems, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 26, 2007 at 9.

[112] We also reject Terrestar's request, made in its December 18, 2007 *ex parte* filing, that we issue another short extension of the BAS relocation deadline to permit the parties additional time to reach agreement on phase three to allow the MSS operators to begin providing service January 1, 2009. Subsequent to Terrestar making this request, we granted two 30 day waivers of the BAS relocation deadline.

[113] *Id.*

[114] The BAS relocation rules sunset on December 9, 2013. After this date new entrants to the band will have no obligation to relocate the incumbent BAS licensees. 47 C.F.R. § 74.690(e)(6); *MSS Third R&O* at ¶ 47. After the rules sunset, BAS licensees still operating between 1990-2025 MHz will be required to vacate the band within six months after receiving a written demand from a new licensee in the band. *MSS Second R&O* at ¶ 53. We also recognize that the record contains evidence that some of the BAS licensees have been slow to embrace the BAS (continued....)

representatives of the BAS licensees were active in the development of the Sprint Nextel *et al.* plan.

39. ICO requests that we waive, to the extent necessary, the "top 30 market rule," which requires that BAS in the top thirty markets by population and all fixed BAS links be relocated before MSS can begin operations, so that the MSS entrants can begin operations in January 2009.[115] ICO asserts that the top 30 market rule does not prevent it from commencing operations because the rule applies only if an MSS operator initiates involuntary relocation of BAS incumbents.[116] ICO argues that when the Commission established the BAS relocation obligations for Sprint Nextel, the MSS licensees had the option of refraining from involuntary relocation of the BAS licensees and allowing Sprint Nextel to relocate all the BAS incumbents. ICO argues that this requirement is predicated on the MSS entrants initiating involuntary relocation of the BAS incumbents,[117] and thus, because ICO chose not to initiate involuntary relocation of any BAS licensees, the top 30 market requirement does not apply. We disagree. In 2004 when the Commission established BAS relocation obligations for Sprint Nextel, we did not alter "the underlying relocation rules that we established for MSS entrants to undertake the relocation of BAS incumbents[.]"[118] Our rules clearly require the 2 GHz MSS entrants to relocate the BAS incumbents in the top thirty markets and all fixed BAS links prior to beginning operations.[119] This obligation is not changed by the fact that another party, Sprint Nextel, has also undertaken the obligation to relocate the BAS licensees.[120]

40. In light of our decision to consider changes in the top 30 market rule, as discussed in the Further Notice, we hold in abeyance ICO's requests to waive the top 30 market rule. ICO seeks to provide nationwide MSS by January 2009 even if some BAS markets are not yet relocated. ICO suggests that it would operate on a secondary basis between January and August 2009. ICO further suggests that, after August 2009, when relocation under the Sprint Nextel *et al.* plan is expected to be completed, MSS operations should be primary. We note that the current rules provide that BAS licensees maintain primary status in the 1990-2025 MHz band until they are relocated by a new entrant; they decline

(Continued from previous page)
transition, and broadcasters' concerns about interference with weekday programming, sweeps periods, holidays, elections, sporting events, or news events have sharply limited the time in which equipment installations have been permitted to take place. *See, e.g.*, Response of Nucomm, Inc. in Support of the Joint Petition for Waiver of Sprint/Nextel, NAB, MSTV, and the Society of Broadcast Engineers, Nucomm, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 25, 2007 at 8 (claiming that some broadcasters have been "on the fence" regarding the BAS transition and are just now choosing replacement equipment); *See* Comments in Support of Joint Petition for Waiver, DSI RF Systems, Inc., WT Docket 02-55, ET Docket 00-258, Oct. 26, 2007 at 6-7; 24-Month Status Report at 14.

[115] 47 C.F.R. § 74.690(e).

[116] ICO *ex parte*, filed Feb. 26, 2008 at 6. ICO claims this result follows from the amendments the Commission made to the BAS relocation rules to allow Sprint Nextel to relocate the BAS incumbents.

[117] We note that the "top 30 market" requirement in the rules is part of the negotiation process for BAS relocation by MSS, not the involuntary relocation procedure as ICO asserts. 47 C.F.R. § 74.690 (e).

[118] *800 MHz R&O* at ¶ 250. As we noted in the *800 MHz R&O*, "except as discussed below, those rules will remain in effect." *Id.* at 264 (referring to the MSS-BAS relocation rules). At no place in our rules, the *800 MHz R&O*, or subsequent orders have we stated that MSS was no longer obligated to relocate BAS in the top 30 markets and all fixed BAS prior to beginning operations.

[119] 47 C.F.R. § 74.690(e)(1)(i).

[120] Of course, if the BAS licensees are relocated by another party, such as Sprint Nextel, then the 2 GHz MSS operators can enter the band since BAS in the top 30 markets and all fixed links will have been relocated. However, this has not occurred, and the obligation of MSS under the top 30 market rule therefore still applies.

relocation by a new entrant; or the BAS relocation rules sunset on December 13, 2013.[121] The Further Notice, as discussed below, tentatively concludes that the top 30 market rule should be eliminated to allow the MSS entrants to begin nationwide service by January 1, 2009. In addition, the Further Notice seeks comment on the interference status of MSS and BAS during the period in which both may be operating in the band. Seeking comments through this rulemaking provides two advantages over addressing ICO's concerns via waiver. First, using the rulemaking process will permit the interested parties time to continue discussions on how the 2 GHz BAS spectrum may be shared between the MSS operators and the unrelocated BAS licensees.[122] Second, this will allow us to develop a complete record for deciding what rules should govern the possible interference between MSS and BAS in shared spectrum after January 1, 2009. Because the Further Notice tentatively concludes that we will eliminate the top 30 market rule to allow the MSS operators to enter the band in January 2009, there is no reason to consider ICO's waiver request at this time. We therefore hold ICO's request to waive the top 30 market rule in abeyance.[123] We anticipate that through the rulemaking process we will develop a more complete record that will allow us to decide these issues prior to January 1, 2009.

41. During the development of the Sprint Nextel *et al.* plan, Sprint Nextel consulted with T-Mobile in order to help minimize interference between T-Mobile's AWS A block facilities and BAS.[124] We believe this represents an important step in addressing T-Mobile's concerns. We encourage Sprint Nextel to work with the BAS licensees and T-Mobile to determine the causes and solutions of interference between AWS A block licensees and BAS. However, we do not want these efforts to further delay the BAS transition. We note that AWS licensees are required to protect previously licensed BAS operations from interference.[125] As the exact mechanism by which interference is occurring and the degree of interference problems are not clear from the record before us, we see no reason to intervene at this time.[126]

42. We believe it is important to ensure that Sprint Nextel and all other interested parties focus on taking the additional steps that are necessary to complete the BAS transition in a reasonable, prudent, and timely matter. We therefore conclude that it is in the public interest to adopt several additional benchmarks to provide guidance to all the stakeholders and enhance our ability to monitor and enforce progress as the transition moves forward.

---

[121] 47 C.F.R. § 74.690 (b).

[122] The record contains evidence that the interested parties have discussed sharing of the spectrum prior to completion of the BAS transition. *Sprint Nextel et al. Plan* at 8-9. ICO *ex parte* WT Docket 02-55, ET Docket 00-258, filed Dec. 19, 2007 at 5. Terrestar *ex parte* WT Docket 02-55, ET Docket 00-258, filed Dec. 18, 2007 at 7-9. We encourage the parties to continue to work together to formulate a mutually acceptable plan for sharing the spectrum until the BAS transition is complete.

[123] We anticipate that we will address ICO's request for waiver in conjunction with taking action on the Further Notice. Because we are not granting ICO a waiver of the top 30 market rule or granting ICO nationwide access to the BAS band (other than as currently allowed under our rules), we do not further address herein the requests made by the filers of the Joint Petition in their March 4, 2008 *ex parte* filing.

[124] *Sprint Nextel et al. Plan* at 6. According to the Sprint Nextel *et al.* plan, T-Mobile has indicated that simply converting BAS channel A7 to digital operations will materially improve the interference environment between AWS and BAS. *Id.* at n.14. The Sprint Nextel *et al.* plan indicates that the relocation schedule accommodates many of T-Mobile's market-clearing objectives. *Id.* at 10-11.

[125] Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, *Report and Order*, WT Docket 02-353, 18 FCC Rcd 25162, ¶ 130 (2003).

[126] *See supra* n.59.

43. We will require Sprint Nextel to meet one interim benchmark for the relocation of BAS incumbents so as to not delay the ability of MSS operators to launch and test their systems.[127] Specifically, we will require Sprint Nextel to transition the markets identified in the Sprint Nextel *et al.* plan as high priority by the MSS operators no later than September 30, 2008, with the exception of the Salisbury, Maryland DMA.[128] Because these markets are considered high priority by MSS, requiring that they be relocated quickly will help alleviate the hardship imposed on MSS by the prospect of continued BAS operations in the band after January 1, 2009. Furthermore, all of these markets are scheduled to be completed by September 2008 in the Sprint Nextel *et al.* plan, so imposing this requirement should help keep the BAS transition on schedule for timely completion.

44. We also adopt reporting requirements to track the progress of the BAS transition so that we can amass a comprehensive and meaningful record of the BAS transition progress.[129] As such, we will require Sprint Nextel to file status reports every two months on the progress of the BAS transition starting on April 1, 2008, containing the following information: (1) the BAS markets for which the transition has been completed; (2) the status of each market that has not yet been transitioned including a good faith estimate of when the market will be transitioned, and the status of each BAS licensee in the market (*i.e.* is the inventory verified, has a frequency relocation agreement been signed, has the equipment order been submitted, has the equipment been installed, *etc.*); and (3) the identity of BAS licensees who have not signed frequency relocation agreements and, starting with the third status report (August 1, 2008), an explanation of why each incomplete frequency relocation agreement has not been signed.

45. We recognize that, once the MSS satellites are in orbit, they will require testing long before commercial services can be offered. Specifically, ICO and TerreStar state that they will need to do phase one in-orbit testing of their satellites shortly after they are launched, and anticipate conducting a series of test communications between the satellite and specific earth stations to ensure proper operation of the satellites. The record strongly suggests that some of this satellite system testing will be able to be accomplished using ground stations located in the high priority markets that, at the time the satellite is launched, will have already been cleared or will be cleared shortly thereafter.[130] We recognize, however, that ICO has indicated that it anticipates needing to undertake phase one testing as soon as this April, and that three of the transmit beacon sites it plans to use – those in Massachusetts, Georgia, and Washington

[127] We require Sprint Nextel to meet these two benchmarks as a condition for granting the waiver of the BAS transition deadline. We do not believe that these benchmarks will create a large burden for Sprint Nextel because they do not require more than what the petitioners' proposed Sprint Nextel *et al.* plan requires.

[128] These are the markets listed on page 8 of the Sprint Nextel *et al.* plan, and that are scheduled in the Sprint Nextel *et al.* plan to be transitioned by August 2008. The Salisbury, Maryland, DMA which Sprint Nextel has identified as part of the Washington, D.C. market, is not scheduled to be transitioned until June 2009. Because this portion of Maryland and Delaware has not been identified as a high priority area for MSS operators, we see no reason to require its relocation as part of the September 1, 2008 benchmark. *See Sprint Nextel et al. Plan* at Appendix B.

[129] We require Sprint Nextel to meet these reporting requirements as a condition for granting this waiver of the BAS transition deadline. We do not believe that a large burden is imposed on Sprint Nextel by these requirements because they track much of this information on a weekly basis. *Sprint Nextel et al. Plan* at 20-21.

[130] TerreStar characterizes this "phase one" testing as a series of test communications between the satellite and various ground stations. While TerreStar does not explicitly identify the location of these ground stations, it indicates it can accomplish the necessary tests in areas where BAS channels 1 and 2 have been cleared or where such testing can be coordinated with individual BAS licensees . Comments of TerreStar Networks Inc., WT Docket No. 02-55, filed Dec. 19, 2007, 5. ICO refers to this testing as "in-orbit testing/certifying systems operational" and indicates that it will use a ground station in Las Vegas, Nevada (a market that has already been relocated) as well as transmit beacon stations in Las Vegas, South Easton, MA, Brewster, WA, and Ellenwood, GA. Comments on Sprint/BAS Relocation Proposal, New ICO Satellite Services G.P., WT Docket No. 02-55, filed Dec. 19, 2007, 3-4.

State – are located in markets that are not scheduled to be cleared until much later. Even if these markets have yet to be cleared when ICO launches its satellite, ICO believes that the use of these three specific sites could successfully be coordinated in order to allow ICO to conduct its phase one testing in conjunction with any remaining BAS operations.[131] Accordingly, we expect ICO and the BAS licensees in these areas to work together to successfully coordinate these test sites. Doing so will satisfy a waiver condition ICO requested in its February 26 *ex parte* filing: that the specified geographic areas will be cleared or coordinated by April for purposes of phase one testing.[132]

46. In addition to the in-orbit testing discussed above, ICO and TerreStar also state that they would like to do phase two market testing before the top 30 markets are relocated.[133] The record strongly suggests that this phase two testing can be accomplished using mobile and fixed stations located in the high priority markets that will have already been cleared before the testing is scheduled to commence or shortly thereafter. The markets where TerreStar intends to conduct phase two testing are scheduled to be cleared under the Sprint Nextel *et al.* plan well before TerreStar's satellite is scheduled to be launched.[134] The markets where ICO plans to conduct phase two testing will either be cleared by June 2008, when ICO intends to conduct the test, or within several months afterwards.[135] Consequently, we expect that the MSS entrants will be able to accomplish phase two testing in markets where the BAS transition has occurred and the potential for interference to BAS licensees will be minimal. For those markets where ICO plans to do testing where BAS has not yet been relocated, we expect ICO and the BAS licensees in these areas to continue to work together to coordinate so that testing can be accomplished. Doing so will satisfy a second waiver condition that ICO requests in its February 26 *ex parte* filing: that the Las Vegas and Raleigh-Durham markets be cleared or coordinated by June 2008 in order to permit phase two testing.[136]

47. The prospect of phase one and two testing raises the issue of the "top 30 market rule," which

---

[131] This issue has been the subject of ongoing discussions between MSS operators and the broadcasters, and we note that, in discussing the prospect of making the areas around these sites available for this initial satellite testing, ICO recently indicated that it "believes that in this regard it is in substantial agreement with the Sprint/BAS Parties." ICO *ex parte* filed Feb. 26, 2008, at 3. The filers of the Joint Petition note that they are still awaiting certain technical information necessary for successful coordination, but they have agreed to permit limited tests at these locations with adequate safeguards to incumbent BAS operations. Sprint Nextel, NAB, MSTV, SBE *ex parte*, filed March 4, 2008 at 2. We are confident that the parties will work together to allow this limited testing to proceed.

[132] ICO *ex parte* filed Feb. 26, 2008, 2.

[133] Phase two testing involves the need to access large geographic areas for both satellite and ATC operations, in contrast to the small number of ground stations associated with the phase one tests for satellite system testing.

[134] The areas where TerreStar intends to do phase two testing are scheduled to be cleared by July 2008 under the Sprint Nextel *et al.* plan. Terrestar *ex parte* filed Dec. 18, 2007.

[135] ICO anticipates beginning phase two testing in the Las Vegas, NV and Raleigh-Durham, NC areas in June 2008. ICO *ex parte* Feb. 26, 2008 (we note that ICO has apparently recently moved this date forward one month from the date it represented when the Sprint Nextel *et al.* Plan was developed. *See* ICO *ex* parte filed Dec. 19, 2008, at 4; Sprint Nextel *et al.* Plan at Appendix B, page 7). The Las Vegas market has been cleared and the Sprint Nextel *et al.* plan schedules Raleigh-Durham to be cleared this April. *Sprint Nextel et al. Plan* at App. B p.1-3. ICO has also stated that it would prefer a larger geographic area in which to conduct its tests. ICO *ex parte* in WT Docket No. 02-55, filed Feb. 26, 2008 at 2. We recognize that the Sprint Nextel *et al.* plan anticipates that nearby areas will be cleared by August 2008, thereby satisfying ICO's request that Sprint Nextel "prioritize markets adjacent to or near" Las Vegas and Raleigh-Durham. *Id.*

[136] ICO has indicated that it has reached "substantial agreement with the Sprint/BAS Parties" that coordination can permit phase two testing to occur in these markets. ICO *ex parte* Feb. 26, 2008, 2-3.

requires that BAS in the top 30 markets and fixed BAS links in all markets be relocated "prior to MSS beginning operations."[137] While, at one time, it could have been expected that such band clearing would have been accomplished before the MSS systems had launched their satellites, this is now unlikely to occur. Specifically, while ICO is planning to launch a satellite by May 2008 and TerreStar by November 2008, the Sprint Nextel *et al.* plan does not anticipate the relocation of all of the top 30 markets prior to these dates. Neither our rules nor the orders in this proceeding address the issue of whether testing in general, and phase one testing and phase two testing in particular, would constitute "operations" for purposes of the top 30 market rule. We clarify that phase one and phase two testing would not constitute "operations" for purposes of this rule because it is being done solely for testing purposes as a necessary precondition to commencing normal operations, and it is limited in scope.[138] Moreover, because we are permitting these transmissions only under conditions that will not cause interference between BAS and MSS (either because BAS will have been relocated in the affected markets and locations or because the tests will be coordinated in order to permit MSS testing without interference to BAS operations), the testing avoids violating the spirit of the top 30 market rule.

48. Both ICO and TerreStar must comply with FCC milestone requirements that they certify by a specified date that their satellite systems are operational, and both have expressed concern that any delay in the BAS relocation process would negatively impact their ability to make this certification.[139] While the milestone requires a certification that the satellite system is operational, the top 30 market rule prohibits operations until the top 30 BAS markets and all fixed BAS links have been transitioned. We note that for purposes of certifying that a satellite system is operational, we have not required that the certification be based upon commencement of full commercial operations. Nevertheless, it is typically the case that such operations begin as quickly as possible after launch. Given the unusual circumstances presented here, where commencement of full commercial service may be delayed for a significant period of time, and in order to remove any uncertainty on this matter, we hereby clarify 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.[140] Thus, the certification can be based upon transmissions limited so as to avoid interference to yet-to-be relocated BAS and fixed stations, and does not require commencement of full commercial operations.

---

[137] The Commission's rules require that BAS in the top 30 markets and fixed BAS links in all markets be relocated "prior to [MSS] beginning operations[.]" 47 C.F.R. § 74.690(3)(1)(i); *800 MHz R&O* at ¶ 257.

[138] To the extent that the waiver request embodied in ICO's February 26, 2008 *ex parte* filing also seeks a waiver of the top 30 market rule for purposes of conducting phase one and phase two testing, this request is moot because the rule does not apply to such testing.

[139] *See* Comments and Request for Expedited Relief, New ICO Satellite Services, G.P., WT Docket No. 02-55, filed April 13, 2007, at 2; *see also* Request for Proceeding to Expedite the BAS Relocation Process, TMI Communications and Company, Limited Partnership and TerreStar Networks Inc., WT Docket Nol. 02-55, filed April 2, 2007, at 2 ("almost any extension could [ ] seriously complicate [TerreStar]'s milestone requirements").

[140] The Commission has not granted authorizations for earth stations to operate with either system, although ICO and TerreStar have filed applications for some of the earth stations that will operate with their satellite systems. *See* File Nos. SES-LIC-20061206-02100 (TerreStar mobile earth stations), SES-LIC-20071203-01646 (ICO mobile earth stations), SES-LIC-20071221-01753 (ICO application for earth stations in South Easton, MA; Ellenwood, GA; Brewster WA; and North Las Vegas, NV), SES-LIC-20080212-00153 (ICO application for earth station in Las Vegas, NV).. Both TerreStar and ICO have also indicated that they will require authorizations for fixed earth stations transmitting at 2000-2020 MHz to accommodate network infrastructure needs; applications for these earth stations have not yet been filed.

IV. FURTHER NOTICE OF PROPOSED RULEMAKING

49. In this Further Notice of Proposed Rulemaking, we tentatively conclude to eliminate, starting on January 1, 2009, the rule that 2 GHz MSS systems may not begin operation until the relocation of BAS in markets 1-30 and fixed BAS links in all markets is complete (top 30 market rule).[141] In addition, we seek comment on the potential for interference that may occur if the 2 GHz MSS entrants begin operations prior to relocation of the BAS incumbents as well as means that interference may be avoided or corrected.

50. MSS operations in the 2 GHz MSS band will consist of both satellite uplink and ancillary terrestrial component (ATC) operations. Because these MSS facilities are licensed in the same spectrum as existing BAS operations, the Commission has had to adopt policies, such as the top 30 market rule, that take into account the likelihood of MSS and BAS interference. If MSS begins operation before BAS operations are relocated, MSS "would have to accept interference from the remaining BAS users until they are relocated."[142] Such interference could be caused by BAS transmitters to both ATC base stations and satellite receivers. MSS operations also would have to avoid causing interference from MSS handset transmitters (satellite and ATC) to BAS receivers that are not yet relocated.[143] Under the current rules, BAS licensees maintain primary status in the 1990-2025 MHz band until they are relocated by a new entrant; they decline relocation by a new entrant; or the BAS relocation rules sunset on December 13, 2013.[144]

51. The MSS operators' ability to offer ATC service is tied to their ability to offer satellite service. Specifically, section 25.149 of the Commission's rules places several conditions on 2 GHz MSS systems that provide ATC services, including: (a) providing space segment service covering all 50 states, Puerto Rico and the U.S. Virgin Islands one-hundred percent of the time, unless it is not technically possible, and (b) offering MSS for a fee (*i.e.*, commercially available) in accordance with the coverage requirements that pertain to each band as a prerequisite to offering ATC service.[145]

52. For the reasons discussed below, we tentatively conclude to eliminate the top 30 market rule as of January 1, 2009. This change would allow the 2 GHz MSS operators to begin offering nationwide service, both satellite and ATC, once the Commission has determined that they have met their operational milestones and even if the BAS relocation is not completed. Even in the absence of the top 30 market rule, MSS would be primary in those TV markets where BAS relocation is completed but secondary in those TV markets where BAS is not yet relocated.[146] However, if we were to retain the top 30 market rule and BAS relocation were to follow the Sprint Nextel *et al.* plan and extend beyond January 1, 2009, the 2 GHz MSS operators would not be able to offer service until September 2009, well beyond the dates by which ICO and TerreStar are required as a condition of their licenses to have operational satellite

---

[141] 47 C.F.R. § 74.690(e)(1)(i).

[142] *See supra* paragraph 14.

[143] 47 C.F.R. § 74.690(b).

[144] 47 C.F.R. § 74.690(b).

[145] 47 C.F.R. § 25.149(b). The Commission's rules also allow MSS licensees, without further authority from the Commission and at its own risk, to engage in pre-operational build-out and testing of ATC. Prior to doing so, the MSS licensee must notify the Commission of its intent to construct and test ATC, specifying the frequency band and operator contact information. 47 C.F.R. § 25.136(g). *See* File Nos. SES-AMD-20080118-00075 (ICO modification of mobile earth terminal application to add authority to operate ATC) and SES-AMD-20070907-01253 (Terrestar modification of mobile earth terminal application to request authority to operate ATC).

[146] BAS relocation is completed when those operations are no longer operating in the 2 GHz MSS spectrum.

systems. Under the Sprint Nextel *et al.* plan, approximately half of the top 30 markets would be completed by January 2009 when the MSS satellites should already be operational and these systems would be looking to provide service, but approximately half of the top 30 markets would not be completed until after that date and as late as September 2009. We seek comment on this tentative conclusion to eliminate the top 30 market rule. We also seek comment on whether we should modify other requirements to facilitate MSS entry into the 2 GHz MSS band, as discussed below.

53. In addition to the top 30 market rule, MSS operations cannot begin until all fixed BAS links in all markets are relocated.[147] Fixed BAS links, unlike mobile BAS operations that can often be switched to other available BAS channels, can't easily change frequencies which may make it more challenging to avoid interference. Because MSS operations, including ATC, could begin nationwide before the BAS relocation has been completed in many markets, interference between the services could occur. Because only those fixed links in the MSS band (2000-2020 MHz) could potentially receive co-channel interference, we seek comment on requiring only fixed BAS links in the MSS band in all markets to be relocated before MSS can begin operations. If we decide not to adopt this modified requirement for relocating fixed BAS links prior to MSS beginning operations in the MSS band, we seek comment on maintaining the current interference requirement in order to minimize service disruptions, *i.e.*, require that MSS not cause interference to BAS in markets where BAS has not yet relocated, and MSS would have to accept interference caused by BAS in markets where BAS has not yet relocated.

54. Even if we were to eliminate the top 30 market rule by Jan. 1, 2009, we do not propose to alter the current rule that BAS licensees maintain primary status in the 1990-2025 MHz band until they are relocated by a new entrant; they decline relocation by a new entrant; or the BAS relocation rules sunset on December 13, 2013.[148] We seek comment on whether we should maintain this requirement or alter it in some way.

55. The MSS operators may be able to share spectrum with BAS licensees that are not relocated if the 2 GHz MSS operators were to begin offering nationwide service by January 1, 2009. Sharing may be possible through coordination between the MSS operators and BAS licensees or BAS may be able to operate with reduced bandwidth using digital equipment where possible.[149] The MSS operators have been discussing these issues with the broadcast entities, and we encourage them to continue such discussions. We seek comment on the likelihood and extent of interference between MSS and BAS. We also seek comment on how, if MSS was secondary to BAS in a market, MSS could avoid or correct interference that might occur.

56. In order to develop a complete record on approaches other than the top 30 market rule that would allow 2 GHz MSS operators to begin operations in the MSS band by January 1, 2009, we also seek comment on a market-by-market approach for MSS entry. Under a market-by-market approach, MSS could begin providing service, both satellite and ATC, in a market once all BAS operations, including fixed BAS links there have been relocated, rather than wait until BAS in the top 30 markets and all fixed BAS links in all markets are relocated. MSS deployment would be incremental and tied to BAS

[147] 47 C.F.R. § 74.690(e). Unlike mobile BAS stations that can often switch to other available BAS channels, fixed BAS links usually cannot change frequencies. Thus, the relocation of all fixed BAS links prior to MSS operation would avoid interference to the fixed BAS links.

[148] 47 C.F.R. § 74.690(b).

[149] ICO ex parte, filed Dec. 19, 2007, at 5; TerreStar ex parte, filed Dec. 18, 2007, at 6-9. In those markets where some BAS licensees have installed digital equipment but not yet relocated the BAS channels to new center frequencies outside the MSS band, the BAS channel bandwidth using digital equipment is narrower than an analog channel using the same center frequency. This "narrow in place" scenario results in narrow swaths of spectrum between BAS channels that could be used for MSS operations.

relocation, rather than a nationwide cut-over at a specific date. This approach may be feasible because ICO's and TerreStar's satellites are designed with multiple spot beams that can operate independently of each other. Each spot beam can concentrate the signals from the satellite to an area on the ground with a radius of several hundred miles. Although the footprint of a spot beam may not exactly match a TV market, many of the BAS operations are being relocated in market clusters according to the Sprint Nextel *et al.* plan. The result is that BAS relocation will be occurring in large regional areas of the country, which should allow the satellites' spot beams to provide service in many places while effectively avoiding BAS operations that are not yet relocated.[150] The market-by-market approach also would facilitate ICO's and TerreStar's ability to conduct market trials of their satellite and ATC networks in different areas of the country as BAS operations are relocated but before the top 30 markets are relocated. Although a market-by-market approach would reduce the likelihood of interference between MSS and BAS, interference between the two services would not be completely avoided. Because ATC stations could not be operational in a market until BAS there was relocated, co-channel interference from BAS transmitters to ATC base station receivers and from MSS handsets (operating with ATC base stations) to BAS receivers will be avoided. However, because the spot beam footprint may not match exactly the BAS market areas, co-channel interference from BAS transmitters to satellite receivers and from MSS handsets (transmitting to MSS satellites) to BAS receivers still may occur, although it is unlikely.[151] We seek comment on the likelihood and extent of interference between MSS and BAS if we were to adopt a market-by-market approach.

V. PROCEDURAL MATTERS

A. Filing Requirements

57. *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.[152] *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.[153] Additional rules pertaining to oral and written presentations are set forth in Section 1.1206(b).

58. *Comments and Reply Comments.* Pursuant to sections 1.415 and 1.419 of the Rules, 47 CFR

[150] ICO's satellite should be operational by the end of 2008 and TerreStar's satellite should be operational in early 2009. If the Sprint Nextel *et al.* plan were fully implemented, by the end of 2008 BAS operations in 105 TV markets would be relocated, encompassing approximately 55 percent of the nation's territory and 50 percent of the population. *Sprint Nextel et al. Plan* at 13. By June 2009, 169 markets encompassing approximately 75 percent of the nation's territory and 88 percent of the population would be relocated. *Sprint Nextel et al. Plan* at 14.

[151] Such interference could occur from BAS and MSS transmitters located within the spotbeam, but just outside the relocated area. However, presumably, the MSS operators will avoid aiming their satellite spotbeams at market areas where BAS has not been transitioned so any interference from BAS that they receive will be greatly attenuated. MSS handsets are not likely to transmit in areas where BAS has not been transitioned because, presumably, the satellite spotbeams on both the uplink and downlink will not be aimed at these market areas. When a MSS handset receives no control signals from the satellite because the downlink spotbeam is not aimed where the handset is located, the handset is unlikely to attempt transmission to the satellite.

[152] *See* 47 C.F.R. § 1.1206(b), as revised.

[153] *See id.* § 1.1206(b)(2).

§§ 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.[154]

- 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, 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 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 12th 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 or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

59. *Availability of Documents*. Comments, reply comments, and *ex parte* submissions will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12th Street, S.W., CY-A257, Washington, D.C., 20554. Persons with disabilities who need assistance in the FCC Reference Center may contact Bill Cline at (202) 418-0267

[154] *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

(voice), (202) 418-7365 (TTY), or bill.cline@fcc.gov. These documents also will be available from the Commission's Electronic Comment Filing System. Documents are available electronically in ASCII, Word 97, and Adobe Acrobat. Copies of filings in this proceeding may be obtained from Best Copy and Printing, Inc., Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C., 20554; they can also be reached by telephone, at (202) 488-5300 or (800) 378-3160; by e-mail at fcc@bcpiweb.com; or via their website at http://www.bcpiweb.com. 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 or call the Consumer and Governmental Affairs Bureau at (202) 418-0531 (voice), (202) 418-7365 (TTY).

B. INITIAL REGULATORY FLEXIBILITY ANALYSIS

60. 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 A.

C. Paperwork Reduction Act Analysis

61. This document contains proposed new or modified 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. Public and agency comments are due 60 days after date of publication in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002,155[1] we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

62. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Nicholas A. Fraser, Office of Management and Budget (OMB), (202) 395-5887, or via fax at 202-395-5167, or via the Internet at Nicholas_A._Fraser@omb.eop.gov and to Judith-B.Herman@fcc.gov, Federal Communications Commission (FCC). To submit your comments by email send them to: PRA@fcc.gov.

VI. ORDERING CLAUSES

63. Accordingly, IT IS 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 07-162, IS EXTENDED until March 5, 2009.

64. IT IS FURTHER ORDERED that the Joint Petition is GRANTED IN PART consistent with the terms of this order and otherwise HELD IN ABEYANCE.

65. IT IS FURTHER ORDERED that, as a condition of receiving a waiver of the deadline for relocation of the broadcast auxiliary service to frequencies above 2025 MHz adopted in FCC 07-162, Sprint Nextel Corporation shall comply with the benchmark and reporting requirements set forth herein.

66. IT IS FURTHER ORDERED that TMI Communications and Company and TerreStar Networks Inc.'s Request for Proceeding to Expedite the BAS Relocation Process, filed April 2, 2007, and New ICO Satellite Services G.P.'s Comments and Request for Expedited Relief, filed April 13, 2007, ARE DENIED.

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

68. IT IS FUTHER ORDERED that the effective date of this Memorandum Report and Order IS THE DATE upon which this Memorandum Report and Order is released by the Commission, and the effective date of the Further Notice of Proposed Rulemaking IS THIRTY DAYS after publication in the Federal Register.

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

70. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this *Memorandum Report 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

Marlene H. Dortch
Secretary

APPENDIX A

INITIAL REGULATORY FLEXIBILITY ANALYSIS

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] 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* (*NPRM*). 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 58 of this *FNPRM*. The Commission will send a copy of this *NPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[2] In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the Federal Register.[3]

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

2. In this Further *Notice of Proposed Rulemaking*, we seek comment on a tentative conclusion to modify the requirement that BAS licensees in the thirty largest markets be transitioned before the two 2 GHz Mobile-Satellite Service (MSS) operators (ICO and TerreStar) can begin offering service. Because the transition of the 2 GHz BAS licensees may be completed beyond the dates by which the 2 GHz MSS systems are expected to be operational, we explore alternative ways of balancing the needs of incumbent Broadcast Auxiliary Services (BAS) licensees to provide service without suffering harmful interference and the introduction of new MSS operations in a timely manner.

3. In this Further *Notice of Proposed Rulemaking*, we request comments on a tentative conclusion to eliminate, as of January 1, 2009, 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 offering service. In addition, we seek comment on whether and how to modify the requirement that fixed BAS links in all markets be relocated before MSS operations can commence. We also seek comment on whether we should maintain the requirement that BAS licensees maintain primary status in the 1990-2025 MHz band until they are relocated; they decline relocation by a new entrant; or the BAS relocation rules sunset on December 13, 2013. Furthermore, we seek comment on what would be the extent and likelihood of interference between MSS and BAS, if MSS operators enter the band before the completion of the BAS transition. We seek comment on how, if MSS was secondary to BAS in a market, MSS could avoid or correct any interference that might occur. Finally, we seek comment on using a market-by-market approach for MSS entry to the band as an alternative to modifying the top 30 market rule. Under a market-by-market approach, MSS could begin providing service, both satellite and ATC, in a market once all BAS operations have been relocated, rather than wait until the top 30 market rule is satisfied.

B. Legal Basis.

4. The proposed action is taken 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.

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

[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601 - 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996).

[2] *See* 5 U.S.C. § 603(a).

[3] *Id.*

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.[4] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[5] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[6] 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.[7]

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"). BAS services involve a variety of transmitters, generally used to relay broadcast programming to the public (through translator and booster stations) or within the program distribution chain (from a remote news gathering unit to the studio). The CARS service includes transmitters generally used to relay cable programming within cable television system distribution systems. The Commission has not developed a definition of small entities applicable to Broadcast Auxiliary Service, Local Television Transmission Service or Cable Television Relay Service. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to radiotelephone companies.

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). There are approximately 712 TV BAS licensees in the 1990-2110 MHz band, and these licensees will ultimately be required to use only the 2020-2110 MHz portion of that band. It is unclear how many of these will be affected by our new rules.

8. The Commission has not developed a definition of small entities specific to BAS licensees. The U.S. Small Business Administration (SBA) has developed small business size standards, as follows: For TV BAS, we use the size standard for Television Broadcasting, which consists of all such companies having annual receipts of no more than $12.0 million.[8] According to Census Bureau data for 1997, there were 906 Television Broadcasting firms, total that operated for the entire year.[9] Of this total, 734 firms had annual receipts of $9,999,999.00 or less and an additional 71 had receipts of $10 million to $24,999,999.00.[10] Thus, under this standard, the majority of firms can be considered small.

9. ***CARS.*** There are nine CARS mobile licensees in the 1990-2110 MHz band, and these licensees will ultimately be required to use only the 2020-2110 MHz portion of that band. It is unclear how many of these will be affected by our new rules. The SBA has developed a small business size

[4] 5 U.S.C. § 603(b)(3).

[5] 5 U.S.C. § 601(6).

[6] 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).

[7] Small Business Act, 15 U.S.C. § 632 (1996).

[8] 13 C.F.R. § 121.201, NAICS code 515120.

[9] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Receipts Size of Firms Subject to Federal Income Tax: 1997," Table 4, NAICS code 515120 (issued Oct. 2000).

[10] *Id.* The census data do not provide a more precise estimate.

standard for Cable and other Program Distribution, which consists of all such companies having annual receipts of no more than $12.5 million.[11] According to Census Bureau data for 1997, there were 1,311 firms within the industry category Cable and Other Program Distribution, total, that operated for the entire year.[12] Of this total, 1,180 firms had annual receipts of $9,999,999.00 or less, and an additional 52 firms had receipts of $10 million to $24,999,999.00.[13] Thus, under this standard, the majority of firms can be considered small.

10. *LTTS.* There are 34 LTTS licensees in the 1990-2110 MHz band, and these licensees will ultimately be required to use only the 2020-2110 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 Cellular and Other Wireless Telecommunications – *i.e.*, an entity with no more than 1,500 persons.[14] According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.[15] 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.[16] Thus, under this size standard, the majority of firms can be considered small.

11. *MSS.* The appropriate SBA size standard for mobile satellite service is for the category of "Other Telecommunications." This category "comprises establishments primarily engaged in (1) providing specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations; or (2) providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems."[17] Under this category, such a business is small if it has $13.5 million or less in average annual receipts.[18] For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.[19] Of this total, 303 firms had annual receipts of under $10 million and 15 firms had annual receipts of $10 million to $24,999,999.[20] Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action. The proposed rule changes would affect two 2 GHz MSS operators. While we do not believe these two MSS operators to be small due to the high costs associated with launching their service, we have nonetheless included them in this analysis.

---

[11] *Id.* at NAICS code 515120.

[12] *Id.*

[13] *Id.* The census data do not provide a more precise estimate.

[14] 13 C.F.R. §§ 121.201, NAICS code 517212.

[15] 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).

[16] *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."

[17] U.S. Census Bureau, 2002 NAICS Definitions, "517910 Other Telecommunications"; http://www.census.gov/epcd/naics02/def/NDEF517.HTM.

[18] 13 C.F.R. § 121.201 , NAICS codes 517410.

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

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

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

12. The interest of BAS licensees would be affected by the proposed rule changes by either subjecting them to the threat of increased interference from MSS or by making their licenses secondary to MSS in a portion of the spectrum. The potential harm to BAS will depend on the particular changes made to the rule. If MSS is allowed to enter the band on a market-by-market basis only where BAS has been transitioned, BAS would likely suffer little or no interference. If MSS is allowed to enter the band before BAS has been transitioned, but is required to cause no interference to BAS, then BAS would also likely suffer little or no interference. However, if BAS licensees are made secondary when MSS enters the band, those BAS licensees who have not been relocated could suffer interference. If such interference does occur, the BAS licensee may be able to avoid the interference by operating on another BAS channel. Moreover, this interference would be temporary because all the BAS licensees are scheduled to relocate by September 7, 2009 to spectrum that does not conflict with MSS.

13. The proposed rule changes would also affect the interest of the two 2 GHz MSS operators, TerreStar and ICO. Under the current rules TerreStar and ICO cannot begin operations in this band until after the top 30 markets have been relocated. Consequently, modifying the top 30 market rule to allow them to enter the band sooner would provide the 2 GHz MSS operators with a benefit and not a burden.

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

14. 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. If the Sprint Nextel *et al.* plan for BAS relocation is successfully implemented, ICO's and TerreStar's ability to begin operation in the 2 GHz MSS band could be delayed until September 2009 under the current rules. On the other hand, if BAS relocation of the top 30 markets and fixed BAS links in all markets is completed earlier than is now anticipated but before all BAS markets are relocated, interference between MSS, including ATC, and BAS is likely to occur in those markets not yet relocated. In the latter case, MSS would have to accept interference from the remaining BAS users until they are relocated. If we decide to retain the top 30 market rule, we seek comment on whether to retain this non-interference requirement under these circumstances. We also seek comment on whether we should modify other requirements for MSS entry into the 2 GHz MSS band.

15. We also seek comment on whether market testing, which ICO and TerreStar desire to provide prior to offering nationwide service, is, or should be, permitted prior to the completion of the BAS relocation in the top 30 markets; what, if any, other conditions should be met before the MSS operators begin market testing; and whether we need to modify the top 30 market rule and, if so, to what extent.

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

16. None.