

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

In the Matter of
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

EIGHTH REPORT AND ORDER, FIFTH NOTICE OF PROPOSED RULE MAKING AND ORDER

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By the Commission: Commissioners Copps and Adelstein issuing a joint statement.

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I. INTRODUCTION

1. In this Eighth Report and Order ("Eighth R&O") in ET Docket No. 00-258, we continue our ongoing efforts to promote spectrum utilization and efficiency with regard to the provision of new

services, including Advanced Wireless Services (AWS).¹ Advanced wireless systems could provide, for example, a wide range of voice, data and broadband services over a variety of mobile and fixed networks. Specifically, we reallocate the 2155-2160 MHz band for Fixed and Mobile services and designate the 2155-2175 MHz band for AWS use.

2. Concurrently, in this *Fifth Notice of Proposed Rule Making* (“*Fifth Notice*”) in ET Docket No. 00-258, we seek comment on the specific relocation procedures applicable to Broadband Radio Service (BRS) operations in the 2150-2160/62 MHz band, which the Commission recently decided will be relocated to the newly restructured 2495-2690 MHz band.² We also seek comment on the specific relocation procedures applicable to Fixed Microwave Service (FS) operations in the 2160-2175 MHz band. We propose to generally follow our relocation policies delineated in our *Emerging Technologies* proceeding and as modified by subsequent decisions, as described below.³ Finally, in the *Order* in ET Docket No. 00-258, we will require BRS licensees in the 2150-2160/62 MHz band to provide information on the construction status and operational parameters of each incumbent BRS system that would be the subject of relocation.

II. BACKGROUND

3. Over the course of this proceeding, we have considered whether various spectrum bands should be used for AWS and, if so, what relocation mechanisms would be appropriate to relocate existing services in the bands. The 2160-2165 MHz band is currently used in the United States for non-Federal Government fixed services and mobile services licensed under the Domestic Public Fixed Radio Services in Part 21 of the Rules,⁴ the Public Mobile Services under Part 22 of the Rules, and the Fixed Microwave

¹ Advanced Wireless Services is the collective term we use for new and innovative fixed and mobile terrestrial wireless applications using bandwidth that is sufficient for the provision of a variety of applications, including those using voice and data (such as internet browsing, message services, and full-motion video) content. Although AWS is commonly associated with so-called third generation (3G) applications and has been predicted to build on the success of such current-generation commercial wireless services as cellular and Broadband PCS, the services ultimately provided by AWS licensees are only limited by the fixed and mobile designation of the spectrum we allocate for AWS and the service rules we ultimately adopt for the bands.

² The Multipoint Distribution Service (MDS) was renamed the Broadband Radio Service (BRS) in the *BRS R&O*. See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 MHz and 2500-2690 MHz Bands, WT Docket No. 03-66, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004) (“*BRS R&O and FNPRM*”), *recon. pending*. Therefore, all former MDS licensees will now be referred to as BRS licensees. As noted in para. 5, *infra*, BRS uses 2160-2162 MHz only in the top 50 markets.

³ 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 *Teledesic, LLC v. FCC*, 275 F.3d 75 (D.C. Cir. 2001) (affirming modified relocation scheme for new satellite entrants to the 17.7 – 19.7 GHz band). 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); *Memorandum Opinion and Order on Reconsideration*, 15 FCC Rcd 13999 (2000) (collectively, “*Microwave Cost Sharing* proceeding”).

⁴ These services are now licensed under Miscellaneous Wireless Communications Services in Part 27 of the Rules.

Services in Part 101 of the Rules.⁵ The Commission originally identified the 2160-2165 MHz band for new advanced fixed and mobile services in the 1992 *Emerging Technologies* proceeding and adopted rules and procedures to permit new licensees to relocate existing fixed microwave services from this spectrum band.⁶ In addition, in the *AWS Notice*, the Commission proposed to make the 2160-2165 MHz band available for advanced mobile and fixed communication services.⁷ Further, in the *AWS Third R&O*, the Commission reallocated the 2165-2180 MHz band to Fixed and Mobile services on a primary basis in order to promote the introduction of new advanced services, including AWS.⁸ The 2165-2175 MHz band, which is part of the larger 2160-2200 MHz band, is currently used by commercial and private FS licensees. These licensees provide telephone communications, communications for industry, and public safety communications.⁹ The FS operations in these bands are typically configured to provide two-way microwave communications between paired links. In this case, the FS links in the 2160-2200 MHz band are paired with the links in the 2110-2150 MHz band. We note that the 2110-2150 MHz band was part of the 90 MHz reallocated for AWS in the *AWS Second R&O*.¹⁰

4. In the *AWS Further Notice*, the Commission requested comment on whether the entire 2150-2160/62 MHz band, which is currently used by BRS, should be reallocated for AWS, and if so, how this band might be used with other spectrum being considered for AWS.¹¹ We also proposed that, in the event that we reallocated frequency bands used by BRS, we would look to our *Emerging Technologies* principles, by which new entrants were obligated to provide incumbents with comparable facilities in the event relocation was deemed necessary.¹² In the *AWS Second R&O*, the Commission reallocated and designated a 5 megahertz portion of the BRS band at 2150-2155 MHz for AWS use. There, the

⁵ See 47 C.F.R. Parts 22, 27, and 101.

⁶ See *Emerging Technologies First Report and Order and Third Notice of Proposed Rule Making*, 7 FCC Rcd at 6889-90, ¶ 21 (“*Emerging Technologies First R&O and Third NPRM*”).

⁷ See 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, *Notice of Proposed Rule Making and Order*, 16 FCC Rcd 596 (2001) (“*AWS Notice*”).

⁸ See 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, *Third Report and Order, Third Notice of Proposed Rule Making, and Second Memorandum Opinion and Order*, 18 FCC Rcd 2223 at 2238, ¶ 28 (2003) (“*AWS Third R&O, Third NPRM and Second MO&O*”).

⁹ See Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, ET Docket No. 95-18, *Third Report and Order and Third Memorandum Opinion and Order*, 18 FCC Rcd 23638 at ¶ 65 (2003) (“*MSS Third R&O*”).

¹⁰ See 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, *Second Report and Order*, 17 FCC Rcd 23193 (2002) (“*AWS Second R&O*”).

¹¹ See 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, *Memorandum Opinion and Order and Further Notice of Proposed Rule Making*, 16 FCC Rcd 16043 at 16060-61, ¶¶ 38-41 (2001) (“*AWS Further Notice*”).

¹² See *AWS Further Notice*, 16 FCC Rcd at 16061, ¶ 40.

Commission also recognized that the reallocation of the 5 megahertz spectrum block to AWS raised a number of issues, including the establishment of a relocation plan for incumbent licensees, but left these for future decisions within the proceeding.¹³ Subsequently, in the *AWS Third NPRM*, we further explored the relocation needs for the BRS licensees in the 2150-2160/62 MHz band.¹⁴ On July 29, 2004, the Commission released the *BRS R&O and FNPRM* in WT Docket No. 03-66 that initiated a fundamental restructuring of the 2495-2690 MHz band.¹⁵ This decision, which was intended to provide existing and new licensees with enhanced flexibility to provide high-value services, also included provisions by which existing BRS licensees in the 2150-2160/62 MHz band would be included in the newly established band plan, allowing these licensees to be integrated with similar operations.¹⁶

5. BRS operations in the 2150-2160/62 MHz band consist of two channels - channel 1 (2150-2156 MHz) and channel 2A (2156-2160 MHz).¹⁷ Licensees may also use channel 2 (2156-2162 MHz) on a limited basis in 50 cities.¹⁸ BRS operations in the band are now regulated under Part 27 of our

¹³ See *AWS Second R&O*, 17 FCC Rcd at 23212-13, ¶¶ 40-41.

¹⁴ See *AWS Third NPRM*, 18 FCC Rcd at 2256-57, ¶¶ 71-73.

¹⁵ See *BRS R&O and FNPRM*, 19 FCC Rcd at 14169-70, ¶ 6. The Commission had previously considered but rejected the use of the 2500-2690 MHz band for AWS. See 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, *First Report and Order and Memorandum Opinion and Order*, 16 FCC Rcd 17222 (2001) ("*AWS First R&O and MO&O*"). The Commission adopted a primary Fixed and Mobile (except aeronautical mobile) allocation for the 2495-2500 MHz band so that this spectrum could be integrated with the revised BRS band plan in the 2500-2690 MHz band. See Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands; Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, IB Docket No. 02-364, ET Docket No. 00-258, *Report and Order, Fourth Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 13386 (2004) ("*Big LEO Spectrum Sharing Order*"), recon. pending.

¹⁶ See *BRS R&O*, 19 FCC Rcd at 14177-78, ¶¶ 23-24. There are other BRS channels in the 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz, and 2674-2680 MHz bands, as well as response channels in the 2686-2690 MHz band. See *AWS First R&O and MO&O*, 16 FCC Rcd 17222 (2001).

¹⁷ Historically, the 2150-2162 MHz and 2500-2690 MHz bands were predominantly used for one-way analog video transmission. Increasingly, BRS operators are using these bands for two-way digital broadband services. In October 1996, the Commission decided to allow high-speed digital data applications on BRS operations, including Internet access. Then, in 1998, the Commission approved the use of two-way transmissions by the BRS, effectively enabling the provision of voice, video and data services. In 2001, a mobile, except aeronautical mobile, service allocation was added to the 2500-2690 MHz band. See *AWS First R&O and MO&O*, 16 FCC Rcd 17222 (2001). Under an informal agreement among BRS licensees, the principal use of the 2150-2160/62 MHz band is for response stations transmitting to hub stations, which are generally known as upstream communications. A response station in a two-way system is a customer-premises transceiver used for the reception of downstream and transmission of upstream signals as part of a large system of such stations licensed under the authority of a single license. A downstream maximum e.i.r.p. of 33 dBW (2000 watts) per 6 MHz is permitted. A hub station is a receive-only station licensed as part of a system of response stations in a two-way system and used for the purpose of receiving the upstream transmissions of those response stations. See *AWS Third NPRM*, 18 FCC Rcd at 2253-54, ¶ 66, n.163.

¹⁸ The Commission provided the BRS service with an extra 2 megahertz in the 50 largest metropolitan areas so that there would be sufficient bandwidth (6 MHz) for a second analog television channel. The 2 megahertz at 2160-2162 MHz can only be assigned where there is evidence that no harmful interference would occur to any (continued....)

Rules.¹⁹ In 1992, when the 2160-2165 MHz band was reallocated to emerging technologies,²⁰ the Commission implemented a policy by which incumbent BRS licensees that were using the 2160-2162 MHz band would continue such use on a primary basis.²¹ However, any BRS station that applied for use of this band after January 16, 1992 would be granted a license only on a secondary basis to emerging technology use.²² In 1996, the Commission auctioned licenses for BRS channels on a Basic Trading Area (BTA) basis but noted that BRS channel 2 licenses using the 2160-2162 MHz band were secondary to emerging technology licenses.²³

6. In the *BRS R&O*, the Commission adopted a band plan in which existing BRS channel 1 (2150-2156 MHz) would transition to the new BRS channel 1 at 2496-2502 MHz and existing BRS channel 2/2A (2156-2162 MHz) to the new BRS channel 2 at 2618-2624 MHz.²⁴ We note that new entrants for spectrum now occupied by part of BRS channel 1 will be licensed in an upcoming AWS auction of the 2110-2155 MHz band.²⁵ With respect to the 2155-2160/62 MHz band, which consists of BRS channels 2 and 2A and the upper one megahertz of BRS channel 1, we have not yet established new service rules for this band.²⁶

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authorized co-frequency point-to-point facility. See 47 C.F.R. § 27.5(i)(1); *BRS R&O and FNPRM*, 19 FCC Rcd at 14171-72, ¶ 11.

¹⁹ See 47 C.F.R. Part 27 – Miscellaneous Wireless Communications Services (2004); *BRS R&O and FNPRM*, 19 FCC Rcd 14165 (2004).

²⁰ See *Emerging Technologies First R&O and Third NPRM*, 7 FCC Rcd at 6889-90, ¶ 21.

²¹ In the *AWS Third NPRM*, the Commission noted that there were 27 BRS licenses for the 2160-2162 MHz band on a primary basis. See Appendix E, attached to the *AWS Third NPRM*.

²² See 47 C.F.R. § 2.106, footnote NG153.

²³ See <http://wireless.fcc.gov/auctions/06/> for information on Auction 6. This auction made available a maximum of 78 MHz of primary spectrum in each BTA, but with the caveat that BTA licensees would protect incumbent stations. In the MDS Bidder Information Package, the Commission noted: “In 1992, the 2160-2162 MHz frequency was reallocated to emerging technologies, and thus, any subsequent MDS use of these 2 MHz will be secondary.” See FCC Auction [for] Multipoint and/or Multichannel Distribution Service (MDS) Authorizations for Basic Trading Areas, Bidder Information Package (1995), at 21 (available at <http://wireless.fcc.gov/auctions/06/releases.html>). In the *AWS Third NPRM*, the Commission noted that there were 16 BRS stations operating with secondary status. See Appendix E, attached to the *AWS Third NPRM*.

²⁴ See *BRS R&O*, 19 FCC Rcd at 14183-84 ¶ 37-38. We note that petitions for reconsideration of the *BRS R&O* are currently pending.

²⁵ See FCC to Commence Spectrum Auction that will Provide American Consumers New Wireless Broadband Services, *News Release*, (rel. Dec. 29, 2004). We previously adopted service rules for this band. See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Report and Order*, 18 FCC Rcd 25162 (2003) (“*AWS 1.7 and 2.1 GHz Service Rules R&O*”); *Order on Reconsideration*, FCC 05-149 (rel. August 15, 2005).

²⁶ In the *Eighth R&O*, discussed *infra*, we are reallocating this band for Fixed and Mobile services in order to promote AWS use.

III. EIGHTH REPORT AND ORDER

7. *Proposals.* The 2155-2175 MHz band is a subset of a larger band at 2155-2180 MHz that the Commission has identified as ideally suited for new fixed and mobile services, including AWS.²⁷ In the *AWS Third NPRM*, the Commission tentatively concluded that spectrum in the 2155-2180 MHz band should be designated for AWS use because it is adjacent to the 2110-2155 MHz band that was allocated and designated for AWS use in the *AWS Second R&O* and because this allocation would closely complement the international allocation for a terrestrial component of advanced services at 2110-2170 MHz.²⁸ In addition, the contiguous spectrum created by such a designation would create synergies in equipment design and facilitate the introduction of multiple AWS licensees using large spectrum blocks, possibly providing opportunities for asymmetric spectrum usage.²⁹ Thus, in the *AWS Third NPRM*, the Commission proposed that the BRS spectrum at 2155-2160/62 MHz and the emerging technology spectrum at 2160-2165 MHz, in conjunction with the former Mobile Satellite Service (MSS) spectrum at 2165-2180 MHz, be designated for new Fixed and Mobile services, including AWS.³⁰ The Commission designated the 2175-2180 MHz band for AWS use in the *AWS Sixth R&O*, but deferred a decision on the 2155-2175 MHz band to a later proceeding.³¹ In addition, consistent with this plan, the Commission proposed in the *AWS Third NPRM* to reallocate the 2155-2160 MHz band for Fixed and Mobile services, in order to promote AWS use.³²

8. *Comments.* Our proposal to designate the 2155-2175 MHz band for new and advanced services, including AWS, has generated considerable support, as commenters indicate that this band could be best used to promote new technologies, such as AWS in paired or unpaired configurations.³³ For example, CTIA recommends that larger blocks in this band be paired asymmetrically with smaller blocks in the 1710-1755 MHz band already allocated for AWS, while ArrayCom advocates unpaired AWS use of this spectrum.³⁴ Although some commenters suggest alternative uses for portions of the 2155-2175

²⁷ See *AWS Third R&O, Third NPRM and Second MO&O*, 18 FCC Rcd at 2255, ¶ 68.

²⁸ *Id.* See also *AWS Second R&O*, 17 FCC Rcd at 23212, ¶ 40.

²⁹ See *AWS Third NPRM*, 18 FCC Rcd at 2255, ¶ 68.

³⁰ *Id.*

³¹ As part of our decision to redesignate the 2020-2025 MHz and 2165-2180 MHz bands for Fixed and Mobile services in the *AWS Third R&O*, we also proposed options for pairing the 5 megahertz of spectrum being made available in the 2020-2025 MHz band with 5 megahertz of spectrum in the 2155-2180 MHz band for new Fixed and Mobile services, including AWS. See *AWS Third NPRM*, 18 FCC Rcd at 2255 ¶¶ 69-70 (2003). As a result, in the *AWS Sixth R&O*, the Commission paired the 2020-2025 MHz band with the 2175-2180 MHz band and designated these bands for AWS use. See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, ET Docket Not. 95-18, *Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order*, 19 FCC Rcd 20720 (2004) ("*AWS Sixth R&O, Third MO&O, and Fifth MO&O*").

³² See *AWS Third NPRM*, 18 FCC Rcd at 2255, ¶ 68.

³³ See, e.g., Ad Hoc MDS Alliance Reply Comments to *AWS Third NPRM* at 3-4; ArrayCom Comments to *AWS Third NPRM* at 3-5; and Cingular Comments to *AWS Third NPRM* at 3. As noted above, the 2175-2180 MHz band was designated for AWS use in the *AWS Sixth R&O*. See *supra* note 31.

³⁴ See CTIA Comments to *AWS Third NPRM* at 6; see also ArrayCom Comments to *AWS Third NPRM* at 3.

MHz band, such as low-power unlicensed use on a non-interfering basis or use by Ancillary Terrestrial Component (ATC)-enabled Mobile Satellite Service (MSS) networks,³⁵ the majority of commenters support our tentative conclusion that we should extend the AWS designation from the 2110-2155 MHz band to encompass the band from 2110-2180 MHz.³⁶ For example, Ericsson states that extending the AWS designation from 2110-2155 MHz to 2110-2180 MHz would increase spectrum efficiency by designating bands that are compatible with adjacent services, thereby creating valuable contiguous spectrum.³⁷

9. *Decision.* Based on our determination that additional spectrum is needed for AWS use, and because the characteristics of the 2155-2175 MHz band make it well suited for such use, we conclude that designating this band for AWS will promote efficient use of the spectrum and allow for the rapid introduction of high-value services in the band. Because the 2155-2175 MHz band is adjacent to the 2110-2155 MHz and 2175-2180 MHz bands that have already been designated for AWS, an AWS designation for this band will create 70 MHz of contiguous spectrum that will promote the rapid introduction of new technologies and service offerings, and will foster the use of the highest potential spectrum. Furthermore, designation of the 2155-2175 MHz band for AWS use is consistent with our previous decisions to designate spectrum for AWS on a primary basis to support the types of high powered mobile applications associated with AWS and Broadband PCS expansion. In addition, as proposed, we allocate the 2155-2160 MHz band to Fixed and Mobile services in order to allow the provision of AWS in this band. Although commenters did not explicitly address our proposal to add a Mobile allocation to the 2155-2160 MHz band, such support is implicit in their support for redesignating the 2155-2175 MHz band for AWS use because a Mobile allocation is essential for the provision of AWS.

10. We note that we do not decide here how to assign this new AWS spectrum at 2155-2175 MHz but will consider this issue in a separate service rules proceeding at a later date. We also note that a current bilateral agreement in the 2155-2160/62 kHz band between the United States and Canada provides for coordinated use of BRS and EBS along the common border. The sharing of the 2160/62-2175 MHz band between the United States and Canada is covered by Arrangement A of the *Agreement Concerning the Coordination and Use of Radio Frequencies Above Thirty Megacycles per Second*, with Annex, as amended. There are no agreements with Mexico in the 2155-2175 MHz band. Accordingly, we note that there may be a need to negotiate new or modified agreements to provide for more flexible use of the spectrum with Canada and Mexico along the common borders.

IV. FIFTH NOTICE OF PROPOSED RULE MAKING

11. The relocation policy we adopted in our *Emerging Technologies* proceeding was designed to allow early entry for new technology providers by allowing providers of new services to negotiate financial arrangements for reaccommodation of incumbent licensees. Our relocation policy was also designed to allow gradual relocation of incumbents on a link-by-link basis during a geographical build-out period, based on an interference analysis. The Commission has used *Emerging Technologies* policies in establishing relocation schemes for new entrants, such as Personal Communications Service

³⁵ See, e.g., Cingular Wireless Comments to *AWS Third NPRM* at 3; ICO Global Communications Comments to *AWS Third NPRM* at 6; and ICO Reply Comments to *AWS Third NPRM* at 7.

³⁶ See, e.g., CTIA Comments to *AWS Third NPRM* at 6; Verizon Comments to *AWS Third NPRM* at 2; AT&T Wireless Reply Comments to *AWS Third NPRM* at 7-8; Ad Hoc MDS Alliance Comments to *AWS Third NPRM* at 5; and WCA Comments to *AWS Third NPRM* at 27-28.

³⁷ Ericsson Comments to *AWS Third NPRM* at 7. See also Ericsson Reply Comments to *AWS Third NPRM* at 4.

(PCS) licensees, Mobile Satellite Service (MSS) licensees, 18 GHz Fixed Satellite Service (FSS) licensees, and Nextel, in frequency bands currently occupied by incumbent operations.³⁸ We note that we have previously sought comment on the use of *Emerging Technologies* policies in this docket in different contexts.³⁹ In this *Fifth Notice*, we seek to establish a new record, specifically with respect to relocation issues for the 2150-2160 MHz and 2160-2175 MHz bands as proposed herein.⁴⁰

12. Our earlier decision to accommodate AWS entrants into the 2150-2160 MHz and 2160-2175 MHz bands does not alter our need to minimize the disruption to incumbent BRS and FS operations during the transition. We continue to believe that our relocation policy, with minor modifications to accommodate the type of incumbent operations that are the subject of relocation and to maintain consistency within the entire band at issue, is the best approach to meet our goal of providing an opportunity for early entry to the 2150-2160 MHz and 2160-2175 MHz bands for new AWS licensees. We therefore propose that we generally apply our relocation policy, as delineated in our *Emerging Technologies* proceeding and subsequent decisions, to the spectrum designated for AWS in this proceeding, as discussed below.⁴¹

A. Relocation of BRS in the 2150-2160/62 MHz Band

13. In the *Eighth R&O* above, we reallocated and designated the 2150-2160 MHz band for AWS. We now seek comment on the relocation procedures new AWS entrants should follow when relocating BRS incumbent licensees from this band.⁴² BRS operators are providing four categories of service offerings today: 1) downstream analog video; 2) downstream digital video; 3) downstream digital data; and 4) downstream/upstream digital data.⁴³ Licensees and lessees have deployed or sought to

³⁸ See, e.g., note 3, *supra*; 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 (2000) ("*MSS Second R&O*"); Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use, IB Docket No. 98-172, *Report and Order*, 15 FCC Rcd 13340 (2000) ("*18 GHz Relocation Proceeding*"), *aff'd sub nom., Teledesic LLC v. FCC*, 275 F.3d 75 (D.C. Cir. 2001); and Improving Public Safety Communications in the 800 MHz Band, Consolidating the 800 and 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket 02-55, 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, *Report and Order, Fourth Report and Order, Fourth Memorandum Opinion and Order, and Order*, 19 FCC Rcd 14969 (2004) ("*800 MHz R&O*").

³⁹ See, e.g., *AWS Further Notice*, 16 FCC Rcd 16043; *AWS Third NPRM*, 18 FCC Rcd 2223.

⁴⁰ We ask that parties file new comments on the issues in this *Fifth Notice*, rather than incorporate by reference previously filed comments in this docket.

⁴¹ See *supra* note 3.

⁴² Comments on issues regarding the Commission's new BRS band plan and its suitability as replacement spectrum for BRS incumbents currently occupying the 2150-2160/62 MHz band are outside the scope of this *Fifth Notice* and should be addressed in the appropriate proceedings. See generally, *BRS R&O and FNPRM* in WT Docket No. 03-66; *Big LEO Spectrum Sharing Order* in IB Docket No. 02-364 and ET Docket No. 00-258.

⁴³ See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 MHz Band, WT (continued....)

deploy these services via three types of system configuration: high-power video stations, high-power fixed two-way systems, and low-power, cellularized two-way systems.⁴⁴ Traditionally, BRS licensees were authorized to operate within a 35-mile-radius protected service area (PSA) and winners of the 1996 MDS auction were authorized to serve Basic Trading Areas (BTAs) consisting of aggregations of counties.⁴⁵ In the proceeding that restructured the BRS band at 2495-2690 MHz, the Commission adopted a geographic service area (GSA) licensing scheme for existing BRS incumbents.⁴⁶ Therefore, BRS relocation procedures must take into account the unique circumstances faced by the various incumbent operations and the new AWS licensees.

1. Relocation Process

14. *Transition Plan.* We anticipate that an AWS licensee will likely use a terrestrial network that is comprised of several discrete geographic areas served by multiple base stations.⁴⁷ Thus, the nature of an AWS licensee's service allows for the gradual relocation of incumbents during a geographically-based build-out period. We propose to require the AWS entrant to relocate BRS operations on a link-by-link basis, based on interference potential as discussed below. We further propose to allow the AWS entrant to determine its own schedule for relocating incumbent BRS operations so long as it relocates incumbent BRS licensees before beginning operation in a particular geographic area and subject to any other build-out requirements that may be imposed by the Commission on the AWS entrant. We recognize that this build-out period may take time because of the large service areas to be built out for new AWS networks but expect that the AWS licensees and the incumbent BRS licensees will work cooperatively to ensure a smooth transition for incumbent operations.⁴⁸

15. In some instances relocation of BRS operations on a link-by-link basis may be infeasible (*e.g.*, where a transmitter serves numerous receive sites, only some of which may pose an interference issue), and thus in order to meet the comparable facility requirement for relocating BRS operations, discussed below, it may be necessary for the AWS licensee to relocate more BRS facilities than an interference analysis conducted on a link-by-link basis might indicate as technically necessary. We also recognize that the AWS licensee is likely to deploy its service in some locations in a manner that does not correspond to the geography of the BRS service areas. For example, a BRS licensee's operations may extend beyond the AWS licensee's service area (*e.g.*, discrete transmit/receive combinations), and thus in order to meet the comparable facility requirement for relocating BRS operations, discussed below, the AWS licensee may need to relocate BRS operations in the adjacent service area even though an AWS licensee does not have license coverage in that area.⁴⁹ We therefore propose to require that the AWS

(Continued from previous page) _____
Docket No. 03-66, *Notice of Proposed Rule Making and Memorandum Opinion and Order*, 18 FCC Rcd 6722 at 6734, ¶ 23 (2003) ("*BRS NPRM*").

⁴⁴ *Id.*

⁴⁵ *BRS NPRM*, 18 FCC Rcd at 6734-35, ¶ 24.

⁴⁶ *See BRS R&O*, 19 FCC Rcd at 14189-94, ¶¶ 52-67 (*recon. pending*).

⁴⁷ Many parties that have filed comments in this proceeding have proposed such systems, and, in many cases, operate similarly configured systems in the cellular and PCS bands that could be readily upgraded to incorporate new AWS spectrum.

⁴⁸ *See AWS 1.7 and 2.1 GHz Service Rules R&O*, 18 FCC Rcd 25162; *Order on Reconsideration*, FCC 05-149 (rel. August 15, 2005).

⁴⁹ In this case, the AWS licensee may be able to share the cost of relocating BRS operations in an area adjacent to its service area with an AWS licensee authorized in the adjacent area, as discussed below.

licensee relocate all incumbent BRS operations that would be affected by the new AWS operations, in order to provide BRS operators with comparable facilities.⁵⁰ We seek comment on these transition plan proposals.

16. *Comparable Facilities.* In the *AWS Third NPRM*, the Commission proposed that if relocation were deemed necessary, BRS incumbents would be entitled to comparable facilities.⁵¹ In the *Emerging Technologies* proceeding, the Commission allowed new entrants to provide incumbents with comparable facilities using any acceptable technology.⁵² Under this policy, incumbents must be provided with replacement facilities that allow them to maintain the same service in terms of: (1) throughput – the amount of information transferred within the system in a given amount of time; (2) reliability – the degree to which information is transferred accurately and dependably within the system; and (3) operating costs – the cost to operate and maintain the system.⁵³ Thus, the comparable facilities requirement does not guarantee incumbents superior systems at the expense of new entrants.⁵⁴ We continue to believe that, to minimize disruption to existing services and to minimize the economic impact on licensees of those services, a similar approach is warranted for BRS. We note that our relocation policies do not dictate that systems be relocated to spectrum-based facilities or even to the same amount of spectrum as they currently use, only that comparable facilities be provided.⁵⁵ Comparable facilities can be provided by upgrading equipment to digital technology and making use of efficient modulation and coding techniques that use less spectrum to provide the same communications capabilities. Given advances in technology, *e.g.*, changing from analog to digital modulation and the flexibility provided by our existing relocation procedures to make incumbents whole, we believe that these differences should be taken into account when providing comparable facilities. We therefore propose to require that new AWS entrants provide comparable facilities to incumbents that are relocated, and we seek comment on this proposal.⁵⁶

⁵⁰ See *AWS Sixth R&O*, 19 FCC Rcd at 20753, ¶ 71 (requiring AWS licensees in the 1995-2000 MHz and 2020-2025 MHz bands to relocate incumbent BAS operations in all affected BAS markets, including those markets where the AWS licensee provides partial, minimal, or no service). See also *800 MHz R&O*, 19 FCC Rcd at 15097, ¶ 256 (requiring Nextel to follow its agreement to relocate BAS licensees across multiple TV markets to avoid inter-market coordination and interference problems).

⁵¹ See *AWS Third NPRM*, 18 FCC Rcd at 2256, ¶ 71.

⁵² See *Emerging Technologies Third R&O*, 8 FCC Rcd 6589 at 6591 & 6603, ¶¶ 5 & 36.

⁵³ See *Microwave Cost Sharing First Report and Order and Further Notice of Proposed Rule Making*, 11 FCC Rcd 8825 at ¶¶ 27-34 (2000) (“*Microwave Cost Sharing First R&O and FNPRM*”). See also 47 C.F.R. §§ 101.73, 101.75, 101.91.

⁵⁴ Consistent with this purpose, the Commission’s relocation procedures provide that during involuntary relocation, new entrants would only be required to provide incumbents with enough throughput to satisfy their system use at the time of relocation, not to match the overall capacity of the system. See 47 C.F.R. § 101.75.

⁵⁵ For example, in ET Docket No. 95-18, the Commission adopted a policy in which new MSS entrants would relocate incumbent BAS systems operating in the 1990-2110 MHz band to the 2025-2110 MHz band – a reduction of 35 megahertz of spectrum. The Commission determined that BAS could achieve comparable facilities in the reduced spectrum because the relocation would entail an upgrade of equipment from analog to digital. See *MSS Second R&O*, 15 FCC Rcd 12315; *MSS Third R&O*, 18 FCC Rcd 23638.

⁵⁶ Comments should be limited to the issue of the provision of comparable facilities by new entrants. See also *supra* note 42.

17. We further note that under our relocation policies only stations with primary status are entitled to relocation. Because secondary operations, by definition, cannot cause harmful interference to primary operations nor claim protection from harmful interference from primary operations at frequencies already assigned or assigned at a later date,⁵⁷ new entrants are not required to relocate secondary operations. As stated above, BRS stations licensed after 1992 to use the 2160-2162 MHz band are on a secondary basis. Thus, in some cases, a portion of BRS channel 2 has secondary status, and this portion would not be entitled to relocation under existing *Emerging Technologies* policies. Stations licensed prior to 1992 for BRS channel 2 (2156-2162 MHz) operate on a primary basis over the entire channel and thus, would be entitled to relocation. We propose to apply the current relocation policies regarding stations with primary and secondary status to the BRS and seek comment on this proposal.

18. We also seek comment on how to apply the comparable facilities requirement to unique situations faced by BRS licensees. For example, we recognize that the incumbent BRS licensee may change the type of services it offers as it transitions to the new BRS band plan (*e.g.*, from 1-way to 2-way service or from fixed to mobile service), and we seek comment on how the comparable facilities policy would be satisfied in such a situation. We also seek comment on how the relocation obligation of comparable facilities should be applied to post-1992 licensees operating on a combination of BRS channels 1 and 2/2A (*e.g.*, integrated for downstream two-way broadband operations), considering these channels will likely transition to new channels in the restructured band at different times.⁵⁸ For example, as noted above, we seek comment on what the respective relocation obligations should be for AWS licensees in the five megahertz block of BRS channel 1 (2150-2155 MHz) who will be licensed as part of the upcoming AWS auction of the 2110-2155 MHz band and AWS licensees in the remaining one megahertz block (2155-2156 MHz) who will be licensed at a later date. In addition, we seek comment on whether replacement of customer premises equipment (CPE) in use at the time of relocation (*e.g.*, customer equipment that is used and will continue to be used in the provision of two-way broadband operations) should be part of the comparable facilities requirement.

19. Because we have already identified relocation spectrum in the 2495-2690 MHz band (2.5 GHz band) for BRS licensees currently in the 2150-2160/62 MHz band (2.1 GHz band), we also seek comment on a proposal whereby the Commission would reassign 2.1 GHz BRS licensees, whose facilities have not been constructed or are not in use per Section 101.75 of the Commission's rules, to their corresponding frequency assignments in the 2.5 GHz band as part of the overall BRS transition.⁵⁹ Specifically, we propose to modify the licenses of these 2.1 GHz BRS licensees to assign them 2.5 GHz spectrum in the same geographic areas covered by their licenses upon the effective date of the *Report and Order* in this proceeding. Under this proposal, no subscribers would be harmed by immediately reassigning these licensees to the 2.5 GHz band, consistent with our policy. Further, these BRS licensees could become proponents in the transition of the 2.5 GHz band and avoid delay in initiating new service (they would be limited in initiating or expanding service in the 2.1 GHz band under other proposals put forth in this *Fifth Notice*), and new AWS entrants in the 2.1 GHz band could focus their efforts on relocating the remaining BRS operations and their subscribers, facilitating their ability to clear the band

⁵⁷ See 47 C.F.R. § 2.105(c).

⁵⁸ As noted above, new entrants for a portion of the spectrum now occupied by BRS channel 1 (2150-2156 MHz) will be licensed in the upcoming AWS auction of the 2110-2155 MHz band. The remaining spectrum now occupied by BRS channels 2 and 2A (2156-2162 MHz) and the upper one megahertz of BRS channel 1 (2155-2156 MHz) will be licensed at a later date. See *supra* para. 6.

⁵⁹ Currently, the 2150-2162 MHz band is used to provide subscribers in 30 to 50 markets (urban and rural) across the country with wireless broadband service and, in some cases, multichannel video programming service. See *Ex Parte* filing on behalf of Wireless Communications Association International, Inc. (Aug. 5, 2005).

quickly and provide new service. We propose to undertake these license modifications pursuant to our authority under Section 316 of the Communications Act.⁶⁰ Specifically, Section 316(a)(1), provides that “[a]ny station license . . . may be modified by the Commission . . . if in the judgment of the Commission such action will promote the public interest, convenience and necessity.”⁶¹ As the D.C. Circuit recently explained in *California Metro Mobile Communications v. FCC*, “Section 316 grants the Commission broad power to modify licenses; the Commission need only find that the proposed modification serves the public interest, convenience and necessity.”⁶² The D.C. Circuit has held that such modifications do not have to be consensual⁶³ and that license holders may be moved on a service-wide basis, without license-by-license consideration.⁶⁴ The D.C. Circuit also has upheld license modifications that involve relocating existing licensees to new spectrum, outside of the auction process. Specifically, the court found that the Commission may approve spectrum swaps between existing licensees, without offering the swapped spectrum to alternative users.⁶⁵ In addition, under our proposal, these reassigned BRS licensees would not be entitled to “comparable facilities” under the relocation policy since no facilities have been constructed or are in use. Accordingly, we seek comment on this proposal. We ask that commenters consider the impact of this proposal on the 2.5 GHz transition set forth in the *BRS R&O and FNPRM*, as well as the impact on the availability of the 2.1 GHz band for new AWS entrants.

20. *Leasing.* Some BRS licensees of channels 1 and 2 currently lease their spectrum capacity to other commercial operators,⁶⁶ and the Commission has determined that future leasing of BRS and EBS spectrum will be allowed under the Secondary Markets policy.⁶⁷ Because leasing is prevalent in the BRS

⁶⁰ 47 U.S.C. § 316.

⁶¹ 47 U.S.C. § 316 (a)(1).

⁶² *California Metro Mobile Communications v. FCC*, 365 F.3d 38, 45 (D.C. Cir.2004) (“*CMMC*”). Among other things, the court found that section 316 is not unambiguous and therefore deferred to the Commission’s interpretation that “section 316 contains no limitation on the time frame within which it may act to modify a license and that its action under the section is not subject to the limitations on revocation, modification or reconsideration imposed by [s]ection 405.” 365 F.3d at 45 (*citations omitted*). The court also found that the Commission’s modification served the public interest, even though the modification was based on potential rather than actual interference, and it caused a minor disruption in *CMMC*’s operations. *Id.* at 46.

⁶³ *Peoples Broadcasting Co. v. United States*, 209 F.2d 286, 288 (D.C. Cir. 1953). In *People’s Broadcasting*, the court upheld the Commission’s authority to modify a television station license without an application by the licensee for such a modification, noting that “if modification of licenses were entirely dependent upon the wishes of existing licensees, a large part of the regulatory power of the Commission would be nullified.”

⁶⁴ *Community Television, Inc. v. FCC*, 216 F.3d 1133, 1140 (D.C. Cir. 2000). In *Community Television*, the court upheld the FCC’s rules establishing procedures and timetable under which television broadcasting would migrate from analog to digital technology.

⁶⁵ See *Rainbow Broadcasting v. FCC*, 949 F.2d 405, 410 (D.C. Cir. 1991), in which the court held the Commission had the authority to allow noncommercial and commercial television licensees to exchange channels without exposing licensees to competing applications, despite third-party interest in acquiring swapped license.

⁶⁶ See, e.g., *Ex Parte* filing of Private Networks, Inc. (Nov. 6, 2003) (noting that some grandfathered BRS licensees have long-term leases with commercial operators for use of their spectrum).

⁶⁷ See *BRS R&O*, 19 FCC Rcd at 14232-34 ¶¶ 177-81. Under the Secondary Markets policy, licensees may engage in either “spectrum manager leasing” whereby they retain *de facto* control of the spectrum and *de jure* control of the license or “*de facto* transfer leasing” whereby they transfer *de facto* control of the spectrum to a lessee. See Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of (continued....)

bands, the “comparable facilities” policy needs to address these arrangements. We recognize that leasing arrangements vary—some BRS licensees may continue to lease their spectrum to third parties when they relocate to the 2.5 GHz band, but others BRS licensees may discontinue leasing arrangements prior to relocation. In all cases, the BRS licensee retains *de jure* control of the license and is the party entitled to negotiate for “comparable facilities” in the relocation band. We propose to allow incumbent BRS licensees to rely on the throughput, reliability and operating costs of facilities operated by a lessee in negotiating “comparable facilities.” In cases where the BRS licensees continue to lease their spectrum to third parties when they relocate to the 2.5 GHz band, we propose that the licensee may include the lessee in negotiations but that lessees would not have a separate right of recovery – *i.e.*, the new entrant would not have to reimburse both the licensee and lessee for “comparable facilities.”⁶⁸ Further, in cases where the BRS licensee discontinues leasing arrangements prior to relocation, we propose that the lessee is not entitled to recover lost investment from the new entrant.⁶⁹ We believe that this approach is consistent with the purpose of the “comparable facilities” policy to provide new facilities in the relocation band so that the public continues to receive service. We seek comment on these leasing proposals.

21. *Licensee Eligibility.* Consistent with our findings in earlier proceedings, we now propose to apply the relocation policies discussed in this *Fifth Notice* to BRS incumbent primary licensees who seek comparable facilities at the time of relocation.⁷⁰ Any incumbent licensee, whose license is to be renewed before relocation, would have the right to relocation only if its license is renewed. We further propose that an assignment or transfer of control would not disqualify a BRS incumbent in the 2150-2160 MHz band from relocation eligibility so long as the facility is not rendered, as a result, more expensive to relocate. In addition, we propose that if a grandfathered BRS license (*i.e.*, authorized facilities operating with a 35-mile-radius PSA) is cancelled or forfeited, and the right to operate in that area has not automatically reverted to the BRS licensee that holds the corresponding BTA license, no new licenses would be issued for BTA service in the 2150-2160/62 MHz band.⁷¹ We seek comment on these eligibility proposals.

22. *Future Licensing in the 2150-2160 MHz Band.* In the *Emerging Technologies* proceeding, the Commission recognized two divergent objectives when considering the types of modifications and expansions existing licensees could make without affecting their status with respect to emerging technology licensees – on one hand, existing licensees must be allowed a certain amount of flexibility to operate without devaluing the usefulness of their facilities; on the other hand, the new entrants must be provided with a stable environment in which to plan and implement new services.⁷² The (Continued from previous page) _____

Secondary Markets, WT Docket No. 00-230, *Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd 20604 (2003) (“*Secondary Markets Order and Notice*”), *Erratum* 18 FCC Rcd 24817 (2003).

⁶⁸ A private agreement between the licensee and lessee should address how new facilities or payment for “comparable facilities” will be shared between the parties.

⁶⁹ This issue should be addressed in a private agreement between the licensee and lessee.

⁷⁰ See, e.g., *MSS Second MO&O*, 15 FCC Rcd at 12361-62, ¶ 134; *MSS Third MO&O*, 18 FCC Rcd at 23675-76, ¶¶ 79-80; *18 GHz Relocation Proceeding*, 15 FCC Rcd at 13466, ¶ 75.

⁷¹ See *BRS R&O* at 14189-90, ¶ 54. Reversion upon cancellation or forfeiture of an existing license to the licensee that holds the corresponding BTA license is consistent with the approach the Commission has taken in other wireless services. See, e.g., Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz bands, ET Docket No. 95-183, *Report and Order and Second Notice of Proposed Rulemaking*, 12 FCC Rcd 18600, 18637-78 ¶ 79 (1997).

⁷² See *Emerging Technologies First R&O and Third NPRM*, 7 FCC Rcd 6886 at ¶¶ 30-31.

Commission decided that the best way to balance these divergent objectives was to establish procedures whereby existing licensees who chose to modify or expand their facilities after a particular date set by the Commission, would do so on a secondary basis to emerging technology licensees.⁷³ Consistent with this current relocation policy and in order to provide some certainty to new AWS licensees on the scope of their relocation obligation, we propose that major modifications to authorized facilities, as discussed in the next paragraph, made by BRS licensees after the effective date of a *Report and Order* in this proceeding will not be eligible for relocation. We further propose that major modifications and extensions to existing BRS systems will be authorized on a secondary basis to emerging technology systems in the 2150-2160 MHz band after the effective date of the *Report and Order* in this proceeding.⁷⁴ Moreover, all major modifications will render the modified BRS licensee secondary to emerging technology operations, unless the incumbent affirmatively justifies primary status and establishes that the modification would not add to the relocation costs of the emerging technology licensees.⁷⁵ In addition, we propose that BRS facilities newly authorized in the 2150-2160 MHz band after the effective date of a *Report and Order* in this proceeding would not be eligible for relocation.⁷⁶ We seek comment on these proposals.

23. For purposes of relocation, we propose to adopt criteria that would be the basis for determining what qualifies as a major modification for BRS licensees. Adopting major modification criteria for the purposes of relocation is necessary because BRS licensees are now licensed on a geographic area basis, and thus are allowed to place transmitters anywhere within their defined service area without prior authorization so long as the licensee's operations comply with the applicable service rules, do not affect radio-frequency zones, or require environmental review or international coordination.⁷⁷ Specifically, we propose to adopt criteria that, for example, would classify the additions of new transmit sites or base stations and changes to existing facilities that would increase the size or coverage of the service area or interference potential as types of modifications that are major, and thus not eligible for relocation. Traditionally, these limits have been expressed by identifying the distance by which existing transmit sites can be relocated, limiting increases in emissions, and various other means. Accordingly, we seek comment on what the criteria should be for major modifications and, in particular, the criteria in the former major modification rule for BRS licensees, codified at 47 C.F.R. § 21.23; the former rule for EBS licensees codified at 47 C.F.R. § 74.911(a)(2); or the current rule for wireless telecommunications services in § 1.929(d).

2. Negotiation Periods/Relocation Schedule

24. We generally propose to require that negotiations for relocation of BRS operations be conducted in accordance with our *Emerging Technologies* policies, except that we propose to forego a voluntary negotiation period and instead require only a mandatory negotiation period that must expire

⁷³ See, e.g., 47 C.F.R. §§ 101.81 and 101.83.

⁷⁴ As noted above, after January 16, 1992, licensees in the 2160-2162 MHz band were already authorized on a secondary basis.

⁷⁵ Similar procedures are set forth in Section 101.81 of the Commission's rules for other adjacent *Emerging Technologies* bands. See 47 C.F.R. § 101.81. See also, e.g., 47 C.F.R. § 101.83 (procedures for major modifications of station licensees in the 18.3-19.3 GHz band).

⁷⁶ It is unlikely that new BRS facilities will be authorized in this band since the Commission assigned this spectrum via a competitive bidding process in 1996. See *supra* note 23.

⁷⁷ See *BRS R&O*, 19 FCC Rcd at 14189-90, ¶ 54.

before an emerging technology licensee could proceed to request involuntary relocation.⁷⁸ The BRS transition plan for the new band at 2495-2690 MHz has five stages: (1) the initiation of the transition process – when a proponent files an initiation plan for a geographic area with the Commission; (2) the transition planning period – where parties can file counterproposals and any disputes would go to arbitration; (3) the reimbursement of costs; (4) the termination of incumbent operations; and (5) the filing of post-transition notification of completion with the Commission. The approximate time needed for the re-banding process includes 3-3 ½ years for the initiation and planning stages and 1 ½ years for the actual relocation, for a total of approximately five years.⁷⁹ Thus, we recognize that the new band where the BRS incumbents are to be relocated is undergoing its own transition process that may not be completed until at least 2008. In light of these considerations, we propose to forego a voluntary negotiation period and institute “rolling” mandatory negotiation periods (*i.e.*, separate, individually triggered negotiation periods for each BRS licensee) of three years followed by the involuntary relocation of BRS incumbents. We propose that the mandatory negotiation period would be triggered for each BRS licensee when an AWS licensee informs the BRS licensee in writing of its desire to negotiate. Relocation of BRS operations by AWS licensees is more likely to take place in a relatively piecemeal fashion and over an extended period of time. Consequently, it is possible that a uniform mandatory negotiation period applicable to all BRS licensees would expire by the time that many BRS licensees were approached for relocation by an AWS entrant. We seek comment on this proposal.

25. Under *Emerging Technologies* policies, the mandatory negotiation period is intended as a period of negotiation between the parties on relocation terms resulting in a contractual relocation agreement.⁸⁰ The mandatory negotiation period ensures that an incumbent licensee will not be faced with a sudden or unexpected demand for involuntary relocation if an emerging technology provider initiates its relocation request, and provides adequate time to prepare for relocation. During mandatory negotiations, the parties are afforded flexibility in the process except that an incumbent licensee may not refuse to negotiate and all parties are required to negotiate in good faith.⁸¹ If no agreement is reached during negotiations, an AWS licensee may proceed to involuntary relocation of the incumbent. In such a case, the new AWS licensee must guarantee payment of all relocation expenses, and must construct, test, and deliver to the incumbent comparable replacement facilities consistent with *Emerging Technologies* procedures.⁸² We note that under *Emerging Technologies* principles, an AWS licensee would not be required to pay incumbents for internal resources devoted to the relocation process or for fees that cannot be legitimately tied to the provision of comparable facilities, because such expenses are difficult to determine and verify.⁸³ We propose to apply these negotiation/relocation principles to BRS licensees, and we seek comment on doing so. We also seek comment on whether to apply a “right of return” policy to AWS/BRS relocation negotiations similar to rule 47 C.F.R. § 101.75(d) (*i.e.*, if after a 12 month trial period, the new facilities prove not to be comparable to the old facilities, the BRS licensee could return to the old frequency band or otherwise be relocated or reimbursed). We ask parties to take into account the

⁷⁸ See 47 C.F.R. § 101.71 (voluntary negotiations) and § 101.73 (mandatory negotiations); *see also Emerging Technologies Third R&O*, 8 FCC Rcd at 6595, ¶ 15; *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd 8825.

⁷⁹ See *BRS R&O and FNPRM*, 19 FCC Rcd at 14197-208, ¶¶ 72-103.

⁸⁰ See *Emerging Technologies Third R&O*, 8 FCC Rcd at 6595, ¶ 15.

⁸¹ 47 C.F.R. § 101.73.

⁸² See 47 C.F.R. § 101.75 for details on costs and the definition of comparable facilities.

⁸³ 47 C.F.R. § 101.75.

time periods for the transition occurring in the restructured 2495-2690 MHz band when providing comments on this issue.

26. *Sunset Date.* We propose to apply the sunset rule of 47 C.F.R. § 101.79 to BRS relocation negotiations. This rule provides that new licensees are not required to pay relocation expenses after ten years following the start of the negotiation period for relocation. Consistent with our proposal to establish rolling mandatory negotiation periods, we propose that the ten year sunset date commence from the date the first AWS license is issued in the 2150-2160 MHz band. However, because we anticipate that portions of the spectrum in the 2150-2160 MHz band will be made available for AWS auction at different times, the first AWS license could be issued in one portion of the band earlier than the first AWS license is issued in another portion of the band.⁸⁴ We therefore seek comment on whether we should establish different sunset dates that are based on when the first AWS license is issued for each portion of the spectrum. In this case, the commencement dates and subsequent sunset dates are likely to be different for BRS channels 1 and 2/2A. Alternately, should we establish a single sunset date for the entire band? If so, we seek comment as to whether that sunset date should be ten years from the date the first AWS license is issued in whatever portion of the 2150-2160 MHz band is the last to be licensed. Further, we seek comment on when the ten year sunset date should commence if we do not adopt our proposal for rolling mandatory negotiation periods. Finally, commenters should consider that the sunset date proposal we ultimately adopt would apply apart from the restructuring of the 2495-2690 MHz band.

27. *Good Faith Requirement.* Finally, we expect the parties involved in the replacement or retuning of BRS equipment to negotiate in good faith, that is, each party would be required to provide information to the other that is reasonably necessary to facilitate the relocation process. We therefore propose to apply the good faith guidelines of 47 C.F.R. § 101.73 to BRS negotiations, and we seek comment on this proposal.

3. Interference Issues/Technical Standards

28. The Commission currently provides for the protection of fixed microwave services operating in the 1.9 GHz and 2.1 GHz bands through the provisions of Section 24.237 of our rules.⁸⁵ Under Section 24.237, PCS licensees operating in the 1850-1990 MHz band and AWS licensees operating in the 2110-2155 MHz band must, prior to commencing operations, perform certain engineering analyses to ensure that their proposed operations do not cause interference to incumbent fixed microwave services. Part of that analyses calls for the use of TIA Telecommunications Systems Bulletin (TSB) 10-F, or its successor standard,⁸⁶ to determine when proposed PCS or AWS operations might cause interference to existing fixed microwave stations.⁸⁷

⁸⁴ See *supra* para. 6 (describing how the Commission has set forth service rules and anticipated auction timing for the 2150-2155 MHz band, whereas development of the 2155-2160 MHz band is on a different timeline).

⁸⁵ See 47 C.F.R. § 24.237. See also Amendment of the Commission's Rules to Establish New Personal Communications Services, *Second Report and Order*, 8 FCC Rcd 7700, 7762 ¶ 150 (1993); *Memorandum Opinion and Order*, 9 FCC Rcd 4957, 5029 ¶ 186 (1994).

⁸⁶ PCS and AWS licensees may use TIA TSB 10-F for this purpose or "an alternative method" when agreed to by all parties. See 47 C.F.R. § 24.237(a).

⁸⁷ The Commission also adopted TIA TSB 10-F as the criteria for determining potential MSS-ancillary terrestrial component (ATC) to FS interference and Nextel to Broadcast Auxiliary Service (BAS) interference. See *MSS Third R&O*, 18 FCC Rcd at 23672, ¶ 70; *800 MHz R&O*, 19 FCC Rcd at 15100, ¶ 263.

29. We seek herein to develop rules that will enable AWS licensees to determine when their proposed operations would cause interference to incumbent BRS systems operating in the 2150-2160 MHz band, such that the relocation of those systems would be necessary before AWS operations could begin. We therefore seek comment on whether a rule comparable to Section 24.237 should be developed for this purpose. If so, we seek comment as to what procedures and mechanisms should be contained in such a rule (e.g., a “distance” table, such as Table 2 in Section 24.237, which identifies the distance from an AWS station within which a BRS station must be protected; the use of TIA TSB 10-F, or some comparable document, to determine when interference is expected to occur to BRS stations, *etc.*). Commenters favoring this approach should provide information that would lead to the development of a distance table applicable to BRS operations; and commenters should also indicate whether and how TIA TSB 10-F could be used to determine the potential for interference to BRS systems. Commenters not favoring the use of a Section 24.237-type rule should indicate what procedures we should adopt to enable AWS licensees to determine when their operations will cause interference to incumbent BRS systems.

B. Relocation of FS in the 2160-2175 MHz Band

30. In the *Emerging Technologies* proceeding, the Commission established procedures for the relocation of incumbent operations by new technology licensees in several frequency bands, including the paired bands at 2110-2150 MHz and 2160-2200 MHz.⁸⁸ Later, in the *Microwave Cost Sharing* proceeding, the Commission further addressed incumbent relocations by new technology licensees.⁸⁹ Together, these proceedings provided for, among other matters, relocation procedures that included both voluntary and mandatory negotiations, as well as relocation sunset periods, as delineated in 47 C.F.R. Part 101.⁹⁰

31. In 2000, in the *MSS Second R&O* in ET Docket No. 95-18, the Commission adopted ‘modified’ *Emerging Technologies* relocation procedures for FS incumbents in the 2165-2200 MHz band that would be relocated by new MSS licensees in that band.⁹¹ Under these ‘modified’ procedures, the Commission eliminated the voluntary negotiation period for relocation of FS incumbents by MSS in the 2165-2200 MHz band⁹² and provided instead a single mandatory negotiation period applying to all FS incumbents. This single mandatory negotiation period would be triggered when the first MSS licensee informs, in writing, the first FS incumbent of its desire to negotiate.⁹³ Furthermore, consistent with its

⁸⁸ See *supra* note 3; *Emerging Technologies First R&O and Third NPRM*, 7 FCC Rcd 6886 at ¶¶ 21-24. These procedures continue to apply to these bands except as modified in part in later decisions and as we propose in this *Notice*.

⁸⁹ See *supra* note 3.

⁹⁰ See generally, 47 C.F.R. §§ 101.69-101.79.

⁹¹ See *MSS Second R&O*, 15 FCC Rcd 12315.

⁹² *Id.* at 12331, ¶ 46 and 12343, ¶ 86.

⁹³ See 47 C.F.R. 101.73(d). As then adopted, this section provided, in part, that “[m]andatory negotiations will commence when the Mobile-Satellite Service (MSS) licensee informs the fixed microwave licensee in writing of its desire to negotiate . . .” In explaining the operation of this rule, the Commission stated that “[b]ecause FS microwave is not an integrated, dynamically coordinated service like BAS, we will not establish a particular start time for negotiations. Rather, we will adhere to our *Emerging Technologies* policy, which states that the negotiation period begins when the *first* licensee in the new service (here, MSS) informs the *first* licensee in the incumbent service (FS microwave), in writing, of its desire to negotiate.” [Emphasis added.] As a result, there would be a single negotiation period that applied simultaneously to all FS incumbents. See *MSS Second R&O* at 12343, ¶ 86.

findings in the earlier *Microwave Cost Sharing* proceeding, the Commission established that the FS relocation rules would sunset ten years after the negotiations begin for the first FS licensee.⁹⁴

32. In the *AWS Second R&O*, the Commission addressed the relocation procedures that would apply to the relocation of incumbent FS licensees by new AWS entrants in the paired 2110-2150 MHz band.⁹⁵ The Commission concluded that “the modified [MSS] relocation procedures [for the 2165-2200 MHz band] ... represent[ed] the best course.”⁹⁶ The Commission reasoned, “[a] unified approach to our rules and procedures serves the public interest, and can promote the rapid development of AWS, which many commenters support.”⁹⁷

33. As discussed more fully elsewhere herein, in the *AWS Third R&O*, the Commission reallocated the 1990-2000/2020-2025 MHz and 2165-2180 MHz bands for Fixed and Mobile services to support AWS.⁹⁸ Subsequently in the *AWS Sixth R&O*, the Commission concluded that, given its earlier decision in the *AWS Second R&O* to apply the ‘modified’ relocation procedures to AWS relocation of FS in the 2110-2150 MHz band, it would be appropriate to apply the same procedures to the relocation of FS by AWS licensees in the 2175-2180 MHz paired band.⁹⁹

34. In proposing relocation procedures for incumbent FS operations in the 2160-2175 MHz band, we continue to believe that it is desirable to harmonize the FS relocation procedures among the various AWS designated bands to the greatest extent feasible. As the Commission observed in the *AWS Sixth R&O*, relocation procedures that are consistent can be expected to foster a more efficient rollout of AWS and minimize confusion among the parties, and thereby serve the public interest.¹⁰⁰

35. Under the existing ‘modified’ *Emerging Technologies* relocation procedures described above, there is a single mandatory negotiation period that commences when the first new technology entrant informs the first FS licensee, in writing, of its desire to negotiate. A ten-year sunset period is triggered when the mandatory negotiation period begins. We seek comment on whether we should apply these same procedures to FS relocation by AWS in the 2160-2175 MHz band. As noted above, this would be consistent with the procedures adopted in the *AWS Second R&O* and *AWS Sixth R&O* for the paired bands 2110-2150 MHz and 2175-2180 MHz, respectively.

36. We also propose to clarify that under the single mandatory negotiation periods approach the ten-year sunset would supersede, and thereby terminate, any remaining mandatory negotiation period that had not yet run its course. We propose that this ten-year sunset period for the 2160-2175 MHz band should commence with the date the first AWS license is issued in that band. We seek comment on this

⁹⁴ See 47 C.F.R. 101.79(a). See *MSS Second R&O*, 15 FCC Rcd 12315 at ¶¶ 79-80, citing *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd 8825 at ¶ 66.

⁹⁵ *AWS Second R&O*, 17 FCC Rcd at 23214-15, ¶¶ 42-46. The language of Section 101.73(d) was also amended to broaden its scope to include FS relocation by AWS.

⁹⁶ *AWS Second R&O*, 17 FCC Rcd at 23215, ¶ 46.

⁹⁷ *Id.*

⁹⁸ See generally, *AWS Third R&O and Third NPRM*, 18 FCC Rcd 2223.

⁹⁹ *AWS Sixth R&O*, 19 FCC Rcd at 20754, ¶ 76.

¹⁰⁰ *Id.* The *AWS Sixth R&O* also adopted relocation and reimbursement procedures for the 1910-1915 MHz and 1995-2000/2020-2025 MHz bands.

proposal, particularly whether this trigger event represents the most appropriate date for starting the ten-year sunset period. Because we have not yet determined how we will make this spectrum available for assignment, it is possible that different portions of the band may be licensed at different times. We therefore seek comment as to whether we should establish different sunset periods for FS incumbents in different frequency blocks within the band, based on the date the first AWS license is issued for each subset of the band.¹⁰¹ We recognize that, in this case, the commencement date and subsequent sunset date may not be uniform across the whole band. We also seek comment on whether we should instead set a uniform sunset date for the entire band and, if so, what trigger date we would use to determine that sunset date.¹⁰²

37. We also seek comment on an alternative approach. Relocation of FS operations by AWS licensees is more likely to take place in a relatively piecemeal fashion and over an extended period of time. Consequently, it is possible that a single mandatory negotiation period afforded under the existing relocation procedures would expire before the time that many FS licensees were approached for relocation by an AWS entrant. Therefore, we also seek comment on whether each FS incumbent in the 2160-2175 MHz band should be afforded a separate, individually triggered, negotiation period – as contrasted with the across-the-board uniform period for all incumbents under the existing relocation rules.¹⁰³ Under this alternative proposal, a mandatory negotiation period would be triggered by an event specific to each FS licensee, which we propose would be when an AWS licensee informs the FS licensee in writing of its desire to negotiate. This would result in a series of independent, or “rolling,” negotiation periods, each having its own time frame. One potential benefit of the rolling negotiation period approach is that it could afford a greater opportunity for FS incumbents and AWS licensees to engage in relocation negotiations and could foster a more equitable and expeditious transition to AWS in the band. On the other hand, this approach could result in more complex negotiation timetables. We seek comment on this alternative proposal.

38. *Other Bands.* If we were to adopt the alternative rolling negotiation period approach described above for the 2160-2175 MHz band, we seek comment on whether the same approach should be adopted for corresponding paired segments of the 2110-2150 MHz band. In a similar fashion, if we were to adopt the rolling negotiation approach for these two bands, we seek comment on whether the relocation procedures adopted for the 2175-2180 MHz band in the *AWS Sixth R&O* should also be changed to afford rolling FS negotiation periods, resulting in a unified rolling negotiation period approach across these bands. We also seek comment on whether the modified sunset rules discussed above should apply in these other bands as well. Finally, we seek comment on whether the relocation/sunset procedures described here would harmonize well with the procedures for other *Emerging Technologies* bands that have been addressed elsewhere in this and other proceedings.

39. *Incumbent Part 22 Services.* We also seek comment on whether and how to harmonize the *Emerging Technologies* relocation rules for Part 22 point-to-point microwave links and Part 101 fixed services. When the *Emerging Technologies* relocation rules were first adopted, fixed microwave services in the spectrum were regulated under Parts 21, 22, and 94, dealing with Common Carrier fixed point-to-point, fixed services supporting Paging and Radiotelephone, and Private Operational point-to-point,

¹⁰¹ We emphasize that even if there were to be multiple sunset dates within the 2160-2175 MHz band, all FS incumbents within a sub-block of that band (e.g. 2170-2175 MHz) would be subject to the same sunset date.

¹⁰² For example, in the 2150-2160 MHz block, discussed *supra*, we proposed that a unified sunset date could be ten years from the date that the first AWS license is issued in the last portion of the band to be licensed.

¹⁰³ We do *not* propose to change the existing relocation rules that apply to FS relocations by MSS licensees in the 2180-2200 MHz band. See para. 50, *infra*.

respectively. To address relocation of all of these fixed services, the Commission established separate but identical relocation rules in each Part.¹⁰⁴ In 1996, the Commission merged the rules regulating Common Carrier and Private Operational services in Part 101 but left fixed services supporting Paging and Radiotelephone, along with the rules for relocating these links, in Part 22.¹⁰⁵

40. Although initially identical, the *Emerging Technologies* relocation rules in Part 22 and in Part 101 subsequently diverged. When the Commission determined that FS incumbents in the 2.1 GHz band would be subject to modified relocation procedures, these modifications were reflected in the Part 101 relocation rules but inadvertently not included in the Part 22 rules, although Part 22 point-to-point services also operated in the 2.1 GHz spectrum. Thus, at that point, AWS entrants in the 2.1 GHz band would be required to follow the original *Emerging Technologies* rules to relocate Part 22 links, but would use the modified rules to relocate Part 101 links.

41. The rules applicable to Part 22 and Part 101 links further diverged recently, when the Commission determined that it would not renew the Part 22 point-to-point licenses in the 2110-2130 and 2160-2180 MHz bands, but instead allow all current Part 22 fixed service licenses in these bands to expire at the end of their current term.¹⁰⁶ Commission records indicate that there are 53 active Part 22 fixed licenses in these two bands, and that all will have expired by January 3, 2010. Thus, all Part 22 fixed services will cease operations in the 2.1 GHz band by 2010. In contrast, Part 101 FS licensees in *Emerging Technologies* spectrum are not currently prohibited from renewing their licenses.

42. We do not propose to permit renewal of Part 22 fixed service licenses in the 2.1 GHz band. We do seek comment, however, on whether the relocation rules that apply to AWS relocation of Part 101 fixed services should otherwise apply to AWS relocation of Part 22 services as well.

C. Cost Sharing

43. Our *Emerging Technologies* relocation policies require new licensees who benefit from the clearing of the spectrum of incumbent operations by an earlier entrant to reimburse that entrant for reasonable costs incurred in clearing the spectrum.¹⁰⁷ The Commission has found that adopting cost sharing rules in these circumstances serves the public interest because it (1) distributes relocation costs more equitably among the beneficiaries of the relocation; (2) encourages the simultaneous relocation of multi-link communications systems; and (3) accelerates the relocation process, promoting more rapid deployment of new services.¹⁰⁸ In this section, we discuss cost sharing among new licensees when they

¹⁰⁴ See *Emerging Technologies First R&O and Third NPRM*, 7 FCC Rcd 6886.

¹⁰⁵ See *Reorganization and Revision of Parts 1, 2, 21, and 94 of the Rules to Establish a New Part 101 Governing Terrestrial Microwave Fixed Radio Services*, WT Docket No. 94-148, *Report and Order*, 11 FCC Rcd 13449 (1996).

¹⁰⁶ See *Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services*, WT Docket No. 03-103, *Biennial Regulatory Review--Amendment of Parts 1, 22, and 90 of the Commission's Rules, Amendment of Parts 1 And 22 of the Commission's Rules To Adopt Competitive Bidding Rules For Commercial And General Aviation Air-Ground Radiotelephone Service*, WT Docket No. 05-42, *Report and Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 4403 at ¶ 159 (2005).

¹⁰⁷ See *supra* note 3.

¹⁰⁸ See *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd at 8861, ¶ 71. The Commission also noted that, absent such cost sharing, a new entrant might decline to relocate an incumbent even where the benefits of relocation exceeded the costs, if the benefits were distributed among many new entrants while the costs were (continued....)

relocate incumbent FS operations in the 2110-2150 and 2160-2200 MHz bands and when they relocate BRS operations in the 2150-2160/62 MHz band.

44. *Relocation of Incumbent FS Licensees.* The Part 101 relocation rules address, *inter alia*, the cost sharing obligation imposed on new licensees when they relocate FS incumbents in the 2110-2150 MHz and 2160-2200 MHz bands, which currently are used by FS licensees mostly as paired links in the lower and upper bands. Section 101.82 provides that when a new licensee in either of these bands relocates an incumbent paired FS link with one path in one band and the paired path in the other band, the new licensee is entitled to reimbursement of fifty percent of its relocation costs from any subsequently entering new licensee which would have been required to relocate the same FS link, subject to a monetary “cap.”¹⁰⁹ We also note that this rule applies to both new AWS licensees in the 2110-2150 MHz and 2160-2180 MHz bands as well as to MSS licensees in the 2180-2200 MHz band, which are discussed separately below.

45. In the *AWS-2 Service Rules NPRM*, the Commission recognized that a single FS path in these bands could cross multiple AWS license areas, and thus multiple AWS licensees could benefit by the relocation of a single FS link.¹¹⁰ The Commission thus sought comment on whether it should adopt formal procedures for apportioning relocation costs among multiple AWS licensees in the 2110-2150 MHz and 2175-2180 MHz bands, and in particular, whether it should apply the cost sharing rules in Part 24 that were used by new PCS licensees when they relocated incumbent FS links in the 1850-1990 MHz band. In this *Fifth Notice*, we seek comment on whether we should adopt formal procedures for apportioning relocation costs among multiple AWS licensees in the 2160-2175 MHz band and in particular, whether we should apply the cost sharing rules in Part 24. We also seek comment on whether AWS licensees in the 2160-2175 MHz band should be subject to the same cost sharing regime that we adopt for relocation of FS incumbents in the 2110-2150 MHz and 2175-2180 MHz bands.¹¹¹

46. Under the Part 24 cost sharing plan, new licensees that incur costs relocating an FS link are eligible to receive reimbursement from subsequent new entrants that also benefited from that relocation.¹¹² Reimbursement claims are submitted to one of the private non-profit clearinghouses (Continued from previous page) _____ borne only by the relocator. See *Microwave Cost Sharing Notice of Proposed Rulemaking*, 11 FCC Rcd at 1931, ¶ 16.

¹⁰⁹ See 47 C.F.R. § 101.82. The rule recognizes that although a new licensee may not receive a direct benefit by relocating a link in one of the bands (*e.g.*, it is licensed to operate in one band but not both), it may relocate a paired link in that band in order to satisfy its obligation to provide comparable facilities to the incumbent FS licensee. Thus, the new licensee is entitled to be reimbursed by another new licensee for relocating a link that otherwise it did not need to relocate to address interference.

¹¹⁰ See Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands; Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 04-356, WT Docket No. 02-353, *Notice of Proposed Rulemaking*, 19 FCC Rcd 19263, 19282-84 ¶¶ 46-49 (2004) (*AWS-2 Service Rules NPRM*).

¹¹¹ Because the cost sharing issues raised in this *Fifth Notice* are similar to those raised in the *AWS-2 Service Rules NPRM*, comments on cost sharing filed in response to the *Fifth Notice* may reference comments on cost sharing filed in response to the *AWS-2 Service Rules NPRM*.

¹¹² We note that the obligations of PCS entrants under the cost sharing plan, along with their obligations to relocate FS incumbents from the 1850-1990 MHz band, terminated as of April 4, 2005. See 47 C.F.R. § 24.253; Public Notice, “Broadband PCS Entities and Fixed Microwave Services Licensees Reminded Of April 4, 2005 Sunset of Relocation Cost Compensation and Microwave Cost Sharing Rules,” DA 05-612 (Wireless Tel. Bur. rel. March 8, 2005). Our overview of the plan here thus describes how the plan operated prior to the termination date.

designated by the Wireless Telecommunications Bureau to administer the plan.¹¹³ All new entrants are required to file a prior coordination notice with these clearinghouses before beginning operations.¹¹⁴ Upon receiving such a notice, a clearinghouse with a reimbursement claim on file identifies whether the new entrant has benefited from the relevant relocation using a Proximity Threshold Test.¹¹⁵ This test limits the beneficiaries to those entrants turning on a base station that both operates in the same spectrum that the incumbent link did prior to relocation and is within a specified geographic distance of the link.¹¹⁶ Having identified a new entrant as a beneficiary, the clearinghouse then determines the amount of the beneficiary's repayment obligation using a rule-specified cost sharing formula.¹¹⁷ This amount is subject to a cap of \$250,000 per relocated link, plus \$150,000 if a new or modified tower is required.¹¹⁸ Once the beneficiary is notified of the amount, it is then responsible for paying reimbursement within 30 days, with an equal share of the total going to each entrant that has previously contributed to the relocation.¹¹⁹ FS incumbents that self-relocate are also permitted to obtain reimbursement from benefiting AWS entrants under the plan, subject to the same cap described above.¹²⁰ Any disputes over cost sharing obligations under the rules are addressed in the first instance by a clearinghouse, and if still unresolved, by alternatives such as binding arbitration.¹²¹ All of these payment obligations are imposed as a default, and new licensees are permitted to enter into private cost sharing arrangements with each other that supercede the cost sharing plan as it applies to reimbursement between those licensees.¹²²

47. We believe that adopting the Part 24 cost sharing plan for new AWS licensees that relocate FS incumbents would have many benefits. First, the Part 24 plan was devised to accommodate

¹¹³ See *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd at 8878, Appendix A, ¶ 3; 47 C.F.R. § 24.243.

¹¹⁴ See 47 C.F.R. § 24.249(a).

¹¹⁵ See 47 C.F.R. § 24.247.

¹¹⁶ *Id.*

¹¹⁷ See 47 C.F.R. §§ 24.243, 24.249. The cost sharing formula calculates a benefiting entrant's reimbursement obligation based on the total "actual" costs of relocation, the number of prior entrants that would have interfered with the link, and the number of months that have passed since the relocator first obtained reimbursement rights. 47 C.F.R. § 24.243. The number of months is factored in to depreciate the reimbursement obligation of new entrants over time, ensuring that early entrants, who receive a greater benefit from the relocation, also pay a larger share of the relocation costs. The *pro rata* cost sharing formula does not apply to a new entrant that relocates a link entirely outside its spectrum band or geographic license area. In that circumstance, the relocator is entitled to 100 % reimbursement of its costs from the next beneficiary without depreciation, subject to the reimbursement cap. See *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd at 8884-54, Appendix A, ¶¶ 16-17.

¹¹⁸ See 47 C.F.R. § 24.243(b). We note that this cap applies only to reimbursement paid to an initial relocator by a subsequent new licensee beneficiary; it does not operate as limit to an initial relocator's responsibility for the costs of relocation, which is not subject to any cap.

¹¹⁹ See 47 C.F.R. § 24.243; *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd at 8880, Appendix A, ¶ 6.

¹²⁰ See 47 C.F.R. § 24.243.

¹²¹ 47 C.F.R. § 24.251.

¹²² For the full details of the PCS cost sharing plan, see the *Microwave Cost Sharing* proceeding cited at note 3, *supra*.

new cellular type systems licensed by geographic areas and incumbent FS point-to-point operations, which are essentially the same circumstances at issue here, and the Part 24 plan has a proven record of success. In 2000, the Commission reviewed the operation of the Part 24 cost sharing rules and concluded that “[t]hey generally have served to promote an efficient and equitable relocation process”¹²³ In addition, since the plan went into operation in 1996, the Commission has resolved numerous questions regarding the details of the plan’s operation and application. We therefore expect that there will be less need for clarification if we adopt this regime for AWS. For these reasons, we anticipate that adopting these rules will expedite the relocation of FS incumbents and the introduction of new services. We therefore propose to adopt a cost sharing plan for relocation of FS incumbents in the 2160-2175 MHz band based on the Part 24 plan and seek comment on this proposal.¹²⁴

48. While the Part 24 rules could be applied to the relocation of FS incumbents in the 2160-2175 MHz band without substantial changes, we seek comment on whether some modifications are nevertheless appropriate. For example, PCIA has suggested in response to the *AWS-2 Service Rules NPRM* that, in establishing a cost sharing plan for AWS relocation of FS, we should modify the Part 24 plan by (1) establishing a rule requiring licensing data to be filed by all entities; (2) mandating that parties are required to act in good faith in connection with their responsibilities under the cost sharing plan; (3) providing that reasonable interest charges can be applied to cost sharing obligations; (4) creating an explicit mechanism for expedited appeal to the Commission from a disputed clearinghouse determination; and (5) giving weight to the determinations of the clearinghouse in such an appeal.¹²⁵ We seek comment on these suggested changes to the Part 24 plan.

49. The Part 24 plan delegates authority to the Wireless Telecommunications Bureau to assign the administration of the cost sharing rules to one or more private non-profit clearinghouses.¹²⁶ Management of the Part 24 cost sharing rules by third-party clearinghouses has been highly successful, and two entities have already expressed interest in accepting this responsibility for AWS relocation of FS in the 2110-2150 MHz and 2175-2180 MHz bands.¹²⁷ We seek comment on the rules that should govern such a clearinghouse and the procedures and quality criteria we should use to select a clearinghouse administrator.

50. As noted above, MSS is allocated to the 2180-2200 MHz band. FS links in this band are paired with FS links in the 2130-2150 MHz band which is designated for AWS. Cost sharing between MSS and AWS licensees in these paired bands is governed by section 101.82, which provides that when a new licensee in either of these bands relocates an incumbent paired FS link with one path in one band and the paired path in the other band, the new licensee is entitled to reimbursement of fifty percent of its relocation costs (*i.e.*, the total cost of relocating both paths) from any subsequently entering new licensee which would have been required to relocate the same FS link, subject to a monetary “cap.” The Commission adopted relocation rules for MSS that recognize the unique characteristics of a satellite

¹²³ *Microwave Cost Sharing Memorandum Opinion and Order on Reconsideration*, 15 FCC Rcd at 14003, ¶ 8.

¹²⁴ We note that a cost sharing procedure based on the Part 24 plan would identify the AWS licensees that have a reimbursement obligation using a proximity threshold (*see supra* para. 46) rather than the cost sharing rule in Section 101.82 for the 2110-2150 MHz and 2160-2200 MHz bands. As discussed below, new MSS licensees would continue to follow Section 101.82.

¹²⁵ PCIA-The Wireless Infrastructure Association (PCIA) Comments to *AWS-2 Service Rules NPRM* at 5-6.

¹²⁶ 47 C.F.R. § 24.241.

¹²⁷ PCIA Comments to *AWS-2 Service Rules NPRM* at 6-8; CTIA Reply to *AWS-2 Service Rules NPRM* at 12-13.

service. For example, unlike a new terrestrial entrant such as AWS that can clear the band on a link-by-link basis, MSS must clear all incumbent FS operations in the 2180-2200 MHz band within the satellite service area if interference will occur. Thus, the relocation obligations and cost sharing among MSS new entrants in the 2180-2200 MHz is relatively straightforward and can function without a clearinghouse or formal cost sharing procedures.¹²⁸ Section 101.82 establishes a sharing obligation between MSS and AWS that is reasonable and relatively easy to implement, and because it does not depreciate cost sharing obligations, it provides MSS licensees with additional assurance of cost recovery. In addition to this consideration, we also do not wish to change the relocation and cost sharing rules applicable to MSS, because MSS licensees are currently in the midst of the implementation and relocation process. Subsequently, the *AWS-2 Service Rules NPRM* has sought comment on how the AWS sharing obligation (*i.e.*, fifty percent for relocating the link) should be apportioned among multiple AWS licensees. In this *Fifth Notice*, we seek comment on whether MSS entrants entitled to reimbursement under Rule 101.82 should submit their reimbursement claims to an AWS clearinghouse, as discussed above, including any procedures we may adopt for filing such claims.¹²⁹ We believe that this approach would relieve MSS licensees of the burden of identifying the AWS licensees who would be obligated to pay relocation costs. We seek comment on this proposal.

51. *Relocation of Incumbent BRS Licensees.* In this *Fifth Notice*, we propose to require AWS entrants to relocate BRS operations in the 2150-2160/62 MHz band on a link-by-link basis, based on interference potential.¹³⁰ We also note certain instances where it may be necessary for the AWS licensee to relocate more BRS facilities than an interference analysis conducted on a link-by-link basis might indicate as technically necessary, in order to provide relocating incumbents with comparable facilities—*e.g.*, where an AWS licensee may be required to relocate BRS operations outside its own service area or where BRS incumbents operate on combinations of BRS channels 1 and 2/2A.¹³¹ Thus, a subsequent AWS licensee who operates co-channel in an adjacent geographic area or who operates on a different frequency than the relocater would benefit from the relocation of certain BRS operations. The relocation of a single BRS link could also have more than one AWS beneficiary if the BRS link uses spectrum that overlaps more than one AWS license block. Consequently, we seek comment on whether we should establish cost sharing obligations for AWS licensees who benefit from an earlier AWS licensee's relocation of BRS incumbents in the 2150-2160/62 MHz band. For example, we seek comment on whether cost sharing obligations should be imposed on new licensees that receive interference but do not cause it, as is done with the PCS rules, or only on those licensees that cause interference, as is the case for both the current *Emerging Technologies* and MSS rules in Part 101.¹³²

¹²⁸ See *MSS Second R&O*, 15 FCC Rcd at 12345-47, ¶¶ 95-102 (any subsequently entering licensee that cannot demonstrate that it would not have interfered with the microwave link is required to participate in reimbursing the relocater and depreciation does not apply).

¹²⁹ The Part 24 plan formula that adjusts an AWS licensee's apportionment based on, for example, depreciation over time (*see supra* note 117), would not affect the amount of reimbursement due to the MSS licensee or to the AWS licensee who requests reimbursement under section 101.82. The fifty percent attributable to the AWS entrant would be treated as the entire actual cost of the link relocation for purposes of applying the cost sharing formula.

¹³⁰ See *supra* paras. 14-15.

¹³¹ See *supra* paras. 16-19.

¹³² See 47 C.F.R. § 101.75(a). See also *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd 8825, Appendix A, ¶ 3.

52. We also seek comment on what, if any, specific cost sharing obligations are necessary or appropriate, including how costs should be apportioned among AWS licensees. Although we noted above that the Part 24 plan could be applied to FS relocation without substantial changes, we believe that this is not the case for BRS operations which are significantly different than point-to-point FS operations. BRS operations are primarily point-to-multipoint, based either on a contour around a fixed transmitter with protected receive sites within the contour or on a wide geographic area with multiple base and receive sites located anywhere within the licensed area. We thus seek comment on what criteria could be used to identify whether a subsequent AWS licensee has an obligation to share the cost of relocating a BRS incumbent and how the reimbursement obligation should be apportioned among AWS licensees.¹³³ Commenters should consider, for example, whether we should require each AWS licensee to bear this financial responsibility in proportion to the amount of spectrum in the 2150-2160/62 MHz band for which it is licensed, or in proportion to the amount of geographic area cleared within its licensed market, or some other metric, such as MHz/pops.¹³⁴ We also seek comment on whether we should apply a “cap” or some other limit on the amount a relocater is entitled to receive as reimbursement in order to protect later entrants who did not participate in negotiations; we also seek comment on what the amount of the “cap” should be.¹³⁵ Moreover, we seek comment on whether formal cost sharing procedures, such as those in the Part 24 plan, are necessary or appropriate to implement any cost sharing obligations we may ultimately adopt, and if so, what procedures we should adopt.¹³⁶ Finally, we seek comment on whether we should designate a clearinghouse party to administer any cost sharing rules we may adopt, the rules that should govern a clearinghouse and the procedure and quality criteria we should use to select a clearinghouse administrator.

V. ORDER

53. In order to assist the Commission in determining the scope of the new AWS entrants’ relocation obligation, we will require BRS licensees in the 2150-2160/62 MHz band to provide the following information to the Commission within 60 days and 120 days of the effective date of this

¹³³ For example, under the Part 24 plan, the Proximity Threshold Test determines whether a new licensee triggers a reimbursement obligation. See 47 C.F.R. § 24.247. In addition, under the Part 24 plan, reimbursable costs are apportioned among new licensees based on the cost sharing formula delineated in Section 24.243 and discussed in note 117, *supra*. See 47 C.F.R. § 24.243.

¹³⁴ The measure “MHz/pops” represents the amount of spectrum multiplied by the population of the covered area, and is expressed on a one-megahertz basis. Using MHz/pops would allocate costs among licensees in a way that recognizes both the amount of spectrum that is affected as well as the number of people within the geographical service area at issue.

¹³⁵ The caps in our current rules are based on the amount that would be sufficient to cover the average cost of relocating an FS link. For cost sharing in the 2110-2150 MHz and 2160-2200 MHz bands, the total costs of which 50% is to be reimbursed will not exceed \$250,000 per paired fixed microwave link relocated, nor \$150,000 if a new or modified tower is required. See 47 C.F.R. § 101.82. For Broadband PCS relocators entitled to *pro rata* reimbursement, the actual costs may not exceed \$250,000 per link, with an additional \$150,000 permitted if a new or modified tower is required. See 47 C.F.R. § 24.243. Overall, the Commission’s policy is that relocators are only entitled to reimbursement of “actual” costs, as opposed to so-called “premium” costs, defined as costs above those required to obtain comparable facilities. These premium costs may be incurred to induce an incumbent to agree voluntarily to relocation. See *Microwave Cost Sharing First R&O and Second NPRM*, 11 FCC Rcd at 8884-54, Appendix A, ¶¶ 18, 20.

¹³⁶ See, e.g., 47 C.F.R. §§ 24.239-24.253 (cost sharing procedures for PCS licensees responsible for the relocation of FS incumbents from the 1850-1990 MHz band).

Order.¹³⁷ Currently, neither the Commission nor the public has reliable information on the construction status and/or operational parameters of each BRS system in the 2150-2160/62 MHz band that would be subject to relocation. We believe that reliable, public data on each incumbent system that would be subject to relocation is essential well in advance of the planned auction of the 2150-2155 MHz band next year.¹³⁸ We note that the information we require would ultimately be necessary in the context of relocation negotiations. Because the Commission now licenses the BRS service on the basis of geographic licensing areas, we will require BRS licensees to submit information on the locations and operating characteristics of BRS systems (*e.g.*, the location of base or fixed stations by coordinates, tower heights, power levels, etc.) in the 2150-2160/62 MHz band, on other system characteristics of BRS incumbents (*e.g.*, subscriber numbers and types of equipment used), and on categories of services provided (*e.g.*, one-way or two-way service, point-to-point or point-to-multipoint operations, data or analog video service).¹³⁹ We also will require BRS licensees to provide this information even if the spectrum is leased to third parties. Further, because we propose relocation on a link-by-link basis, we will require that BRS licensees, as part of the information on system design in the band, provide the number of links (including the connection between a base station and subscriber premises equipment) within the system for both point-to-point and point-to-multipoint systems. To the extent that a system uses both BRS channels 1 and 2 as part of the same service (*e.g.*, as a link to a two-way data service), we will require that BRS licensees make special note of this when providing their system information. We note that this list is not inclusive. This information will be collected through the Commission's Universal Licensing System (ULS) and made available to the public. To further this process, we delegate authority to the Office of Engineering and Technology and the Wireless Telecommunications Bureau to issue Public Notices setting forth the specific data required of BRS licensees, when it is to be filed and the procedures for filing this information. Finally, we make this *Order* effective upon publication in the Federal Register.¹⁴⁰

VI. PROCEDURAL MATTERS

54. *Final Regulatory Flexibility Analysis for Eighth Report and Order and Initial Regulatory Flexibility Analysis for the Fifth Notice of Proposed Rule Making.* As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. § 603, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the possible significant economic impact on small entities of the proposals suggested in this document. The FRFA is set forth in Appendix B. As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis

¹³⁷ Filing dates will correspond to information collection requirements for the Commission's Universal Licensing System (ULS).

¹³⁸ See 47 U.S.C. § 154(i) (the Commission may make regulations, not inconsistent with the Act, as necessary in the execution of its functions).

¹³⁹ The information submitted need not be signed under oath; however, willful false statements made therein are punishable by fine and imprisonment, and by appropriate administrative sanctions, including revocation of a station's license. See 47 C.F.R. § 1.917(c).

¹⁴⁰ We find that there is good cause to make the requirement for BRS licensees to file information effective upon publication of the *Order* in the Federal Register. The Commission has provided BRS licensees with ample time to file the required information and the ability to use the ULS to submit the information easily. As noted above, reliable data on each incumbent system that would be subject to relocation is essential well in advance of the planned auction of the 2150-2155 MHz band next year. See Section 553(d)(3) of the Administrative Procedure Act, 5 U.S.C. § 553(d)(3).

(IRFA) of the possible significant economic impact on small entities of the proposals suggested in this document. The IRFA is set forth in Appendix C.

55. *Ex Parte Rules – Permit-But-Disclose Proceeding.* This is a permit-but-disclose notice and comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission’s rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206(a).

56. *Final Paperwork Reduction Analysis.* This *Eighth Report and Order* does not contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, it does not contain any new or modified “information collection burden for small business concerns with fewer than 25 employees,” pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4).

57. *Initial Paperwork Reduction Analysis.* The *Fifth Notice of Proposed Rule Making and Order* contain 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 the 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 2002,¹⁴¹ we seek specific comment on how we might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”

58. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judith Boley Herman, Federal Communications Commission, 445 12th Street, S.W., Room 1-C804, Washington, D.C. 20554, or via the Internet to <Judith-B.Herman@fcc.gov>, and to Kristy LaLonde, Policy Analyst, Office of Information and Regulatory Affairs (OIRA), Office of Management and Budget (OMB), Docket Library, Room 10234, New Executive Office Building (NEOB), 725 17th Street, N.W., Washington, D.C. 20503, or via the Internet at <LaLonde@omb.eop.gov>.

59. *Congressional Review Act.* The Commission will send a copy of this *Eighth Report and Order* and *Order* 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).

60. *Comments.* Pursuant to Sections 1.415 and 1.419 of the Commission’s rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before **[30 days from date of publication in the Federal Register]**, and reply comments on or before **[45 days from date of publication in the Federal Register]**. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS) or by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

¹⁴¹ Public Law 107-198, *see* 44 U.S.C. 3506(c)(4).

61. Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters 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 for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply. 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, commenters must submit two additional copies for each additional docket or rulemaking number.

62. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. 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). The Commission's contractor, Natek, Inc., 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 mail, Express mail, and Priority Mail should be addressed to 445 12th Street, SW., Washington, DC 20554.

63. *Further Information.* For further information, contact Priya Shrinivasan, Office of Engineering and Technology, at (202) 418-7005, or via the Internet at Priya.Shrinivasan@fcc.gov.

VII. ORDERING CLAUSES

64. Accordingly, IT IS ORDERED that pursuant to Sections 1, 4(i), 7(a), 301, 303(f), 303(g), 303(r), 307, 316, 332 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151, 154(i), 157(a), 301, 303(f), 303(g), 303(r), 307, 316, and 332, this Eighth Report and Order IS ADOPTED and that Part 2 of the Commission's Rules IS AMENDED, as specified in Appendix A, [**effective 30 days after publication in the Federal Register**].

65. IT IS FURTHER ORDERED that pursuant to Sections 1, 4(i), 7(a), 301, 303(f), 303(g), 303(r), 307, 316, and 332 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151, 154(i), 157(a), 301, 303(f), 303(g), 303(r), 307, 316, and 332, this Fifth Notice of Proposed Rule Making IS ADOPTED.

66. IT IS FURTHER ORDERED that pursuant to Section 4(i) of the Communications Act, as amended, 47 U.S.C. 154(i), this Order IS ADOPTED, [**effective immediately upon publication in the Federal Register**]. This Order contains information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13, that are not effective until approved by the Office of Management and Budget (OMB).

67. IT IS FURTHER ORDERED that pursuant to Section 5(c) of the Communications Act, as amended, 47 U.S.C. § 155(c), the Office of Engineering and Technology and the Wireless Telecommunications Bureau ARE GRANTED DELEGATED AUTHORITY to implement the requirement set forth in this Order.

68. IT IS FURTHER ORDERED that NOTICE IS HEREBY GIVEN of the proposed regulatory changes described in this Fifth Notice of Proposed Rule Making, and that comment is sought on these proposals.

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A**FINAL RULES**

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Part 2 as follows:

**PART 2 – FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL
RULES AND REGULATIONS**

1. The authority citation for Part 2 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

2. Section 2.106, the Table of Frequency Allocations, is amended by revising page 34.

§ 2.106 Table of Frequency Allocations.

The revisions read as follows:

* * * * *

1930-1970 FIXED MOBILE 5.388A 5.388B 5.388	1930-1970 FIXED MOBILE 5.388A 5.388B Mobile-satellite (Earth-to-space) 5.388	1930-1970 FIXED MOBILE 5.388A 5.388B 5.388	1850-2025	1850-2000 FIXED MOBILE NG177	RF Devices (15) Personal Communications (24) Fixed Microwave (101)
1970-1980 FIXED MOBILE 5.388A 5.388B 5.388				2000-2020 MOBILE-SATELLITE (Earth-to-space) US380	Satellite Communications (25)
1980-2010 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.388 5.389A 5.389B 5.389F				NG156	
2010-2025 FIXED MOBILE 5.388A 5.388B 5.388	2010-2025 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.388 5.389C 5.389E 5.390	2010-2025 FIXED MOBILE 5.388A 5.388B 5.388		2020-2025 FIXED MOBILE NG177	
2025-2110 SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) FIXED MOBILE 5.391 SPACE RESEARCH (Earth-to-space) (space-to-space) 5.392			2025-2110 SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) SPACE RESEARCH (Earth-to-space) (space-to-space) 5.391 5.392 US90 US222 US346 US347 US393	2025-2110 FIXED NG118 MOBILE 5.391 5.392 US90 US222 US346 US347 US393	TV Auxiliary Broadcasting (74F) Cable TV Relay (78) Local TV Transmission (101J)
2110-2120 FIXED MOBILE 5.388A 5.388B SPACE RESEARCH (deep space) (Earth-to-space) 5.388			2110-2120	2110-2120 FIXED MOBILE US252	Public Mobile (22) Wireless Communications (27) Fixed Microwave (101)
2120-2160 FIXED MOBILE 5.388A 5.388B 5.388	2120-2160 FIXED MOBILE 5.388A 5.388B Mobile-satellite (space-to-Earth) 5.388	2120-2170 FIXED MOBILE 5.388A 5.388B 5.388	2120-2200	2110-2180 FIXED MOBILE NG153 NG178	
2160-2170 FIXED MOBILE 5.388A 5.388B 5.388 5.392A	2160-2170 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.388 5.389C 5.389E 5.390			2180-2200 MOBILE-SATELLITE (space-to-Earth) US380	Satellite Communications (25)
2170-2200 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A 5.388 5.389A 5.389F 5.392A				NG168	

* * * * *

APPENDIX B

FINAL REGULATORY FLEXIBILITY ANALYSIS

(For Eighth Report and Order)

As required by the Regulatory Flexibility Act (RFA)¹ an Initial Regulatory Flexibility Analysis was incorporated in the *Third Notice of Proposed Rule Making (Third Notice)* in ET Docket 00-258.² The Commission sought written public comment on the proposals in the *Third Notice*, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Eighth Report and Order

The *Eighth Report and Order (Eighth R&O)* reallocates the 2155-2160 MHz band for Fixed and Mobile services and designates the 2155-2175 MHz band for the provision of advanced wireless services (AWS). The *Eighth R&O* is the latest in a series of decisions in ET Docket 00-258 allocating spectrum that can be used for the provision of new and innovative wireless communications services that we have collectively referred to as “AWS.” The provision of this spectrum serves the public interest by promoting the rapid deployment of efficient radio communications facilities and supports the goals of Section 7 of the Communications Act,⁴ which sets forth a policy of encouraging the provision of new technologies and services to the public.

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

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

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

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of entities that will be affected by the rules.⁵ The RFA defines “small entity” as having the same meaning as the term “small business,” “small organization,” and “small governmental jurisdiction.”⁶ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act, unless the Commission has developed one or more definitions that are appropriate to

¹ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

² 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 (2003).

³ 5 U.S.C. § 604.

⁴ 47 U.S.C. § 157.

⁵ 5 U.S.C. §§ 603(b)(3), 604(a)(3).

⁶ 5 U.S.C. § 601(6).

its activities.⁷ Under the Small Business Act, a “small business concern” is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the Small Business Administration (SBA).⁸

Multipoint Distribution Service, Multichannel Multipoint Distribution Service. Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as “wireless cable,” transmit video programming to subscribers using the microwave frequencies of Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).⁹ In connection with the 1996 MDS auction, the Commission defined “small business” as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years. The SBA has approved of this standard.¹⁰ The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs).¹¹ Of the 67 auction winners, 61 claimed status as a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are not more than \$40 million and are thus considered small entities.¹²

In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution,¹³ which includes all such companies generating \$12.5 million or less in annual receipts.¹⁴

⁷ 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), 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, established one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition in the Federal Register.”

⁸ 15 U.S.C. § 632.

⁹ Amendment of Parts 21 and 74 of the Commission’s Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Report and Order*, 10 FCC Rcd 9589, 9593, ¶ 7 (1995) (“*MDS Auction R&O*”). The MDS and ITFS was renamed the Broadband Radio Service (BRS) and Educational Broadband Service (EBS), respectively. See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 MHz Band, WT Docket No. 03-66, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004).

¹⁰ See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary Jackson, Assistant Administrator for Size Standards, Small Business Administration (dated Mar. 20, 2003) (noting approval of \$40 million size standard for MDS auction).

¹¹ Basic Trading Areas (BTAs) were designed by Rand McNally and are the geographic areas by which MDS was auctioned and authorized. See *MDS Auction R&O*, 10 FCC Rcd at 9608, ¶ 34.

¹² 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA’s small business size standard for “other telecommunications” (annual receipts of \$12.5 million or less). See 13 C.F.R. § 121.201, NAICS code 517910.

¹³ 13 C.F.R. § 121.201, NAICS code 517510.

¹⁴ *Id.*

According to Census Bureau data for 1997, there were a total of 1,311 firms in this category that had operated for the entire year.¹⁵ Of this total, 1,180 firms had annual receipts of under \$10 million, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.¹⁶ Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the proposed rules and policies. Because the Commission's action only affects MDS operations in the 2155-2160/62 MHz band, the actual number of MDS providers who will be affected by the proposed reallocation will only represent a small fraction of these small businesses.

Fixed Microwave Services. Microwave services include common carrier,¹⁷ private-operational fixed,¹⁸ and broadcast auxiliary radio services.¹⁹ At present, there are approximately 36,708 common carrier fixed licensees and 59,291 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of the FRFA, we will use the SBA's definition applicable to Cellular and other Wireless Telecommunications companies – *i.e.*, an entity with no more than 1,500 persons.²⁰ According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.²¹ Of this total, 965 firms had employment of 999 or fewer employees, and an additional twelve firms had employment of 1,000 employees or more.²² Thus, under this size standard, majority of firms can be considered small. We note that the number of firms does not necessarily track the number of licensees. We estimate that all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition.

D. Description of Projected Reporting, Record Keeping, and Other Compliance Requirements

The *Eighth R&O* reallocates the 2155-2160 MHz band and designates the 2155-2175 MHz band to support the introduction of new AWS applications. The item does not propose service rules. The

¹⁵ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4 (issued October 2000).

¹⁶ *Id.*

¹⁷ 47 C.F.R. Part 101 *et seq.* (formerly, part 21 of the Commission's Rules) for common carrier fixed microwave services (except MDS).

¹⁸ Persons eligible under Parts 80 and 90 of the Commission's rules can use Private-Operational Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

¹⁹ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. See 47 C.F.R. Part 74 *et seq.* Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

²⁰ 13 C.F.R. § 121.201, NAICS code 517212.

²¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997," Table 5 (issued Oct. 2000).

²² *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."

ultimate use of the band will be determined by future proceedings that adopt specific service rules and, more generally, by market forces operating within the framework of such rules. Accordingly, the item contains no new reporting, recordkeeping, or other compliance requirements.

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

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.²³

In the *Eighth R&O*, we decided to provide additional spectrum to support the introduction of AWS because doing so will promote the rapid deployment of efficient radio communications. Another option would have been to not reallocate or designate the 2155-2160 MHz band. We rejected this alternative because doing so would have limited our ability to provide additional spectrum and done little to minimize the potential economic impact on small entities. Specifically, because incumbent users in the 2155-2160 MHz band are subject to a transition plan adopted in a separate proceeding and would ultimately be required to cease use of spectrum in this band, a decision to not reallocate the spectrum would only have a minimal, short-term effect on incumbent users yet make it much more likely that valuable spectrum resources would lie fallow. Additionally, the provision of additional spectrum that can be used to support AWS can directly benefit small business entities by providing new opportunities for the provision of innovative new fixed and mobile wireless services by such entities.

F. Report to Congress

The Commission will send a copy of the *Eighth R&O*, including this FRFA, in a report to be sent to Congress pursuant to the SBREFA.²⁴ In addition, the Commission will send a copy of the *Eighth R&O*, including the FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Eighth R&O* and the FRFA (or summaries thereof) will also be published in the Federal Register.²⁵

²³ 5 U.S.C. § 603(c).

²⁴ See 5 U.S.C. § 801(a)(1)(A).

²⁵ See 5 U.S.C. § 604(b).

APPENDIX C

INITIAL REGULATORY FLEXIBILITY ANALYSIS

(For Fifth Notice of Proposed Rule Making)

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 *Fifth Notice of Proposed Rule Making (Fifth Notice)*. 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 on the *Fifth Notice* provided in paragraph 60 of the item. The Commission will send a copy of this *Fifth Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the *Fifth Notice* and IRFA (or summaries thereof) will be published in the Federal Register.³

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

The *Fifth Notice* proposes relocation procedures to govern the relocation of: (1) Broadband Radio Service (BRS)⁴ licensees in the 2150-2160/62 MHz band; and (2) Fixed Microwave Service (FS) licensees in the 2160-2175 MHz band. The proposed relocation procedures generally follow the Commission's relocation policies delineated in the *Emerging Technologies* proceeding, and as modified by subsequent decisions.⁵ These relocation policies are designed to allow early entry for new technology providers by allowing providers of new services to negotiate financial arrangements for reaccommodation of incumbent licensees, and have been tailored to set forth specific relocation schemes appropriate for a variety of different new entrants, including Personal Communications Service (PCS) licensees, Mobile Satellite Service (MSS) licensees, 18 GHz Fixed Satellite Service (FSS) licensees, and Nextel. While these new entrants occupy different frequency bands, each entrant has had to relocate incumbent operations. The relocation procedures we propose in the *Fifth Notice* are designed to ensure an orderly

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

² See 5 U.S.C. § 603(a).

³ *Id.*

⁴ The Multipoint Distribution Service (MDS) was renamed the Broadband Radio Service (BRS). See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 MHz Band, WT Docket No. 03-66, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004).

⁵ 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 *Teledesic, LLC v. FCC*, 275 F.3d 75 (D.C. Cir. 2001) (affirming modified relocation scheme for new satellite entrants to the 17.7 – 19.7 GHz band). 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) (collectively, *Microwave Cost Sharing* proceeding).

and expeditious transition of, with minimal disruption to, incumbent BRS and FS operations from the 2150-2160/62 MHz and 2160-2175 MHz bands, respectively, in order to allow early entry for new AWS licensees into these bands.

The *Fifth Notice* seeks comment on what specific relocation procedures are best suited for the incumbent BRS operators in the 2150-2160/62 MHz band. For example, we propose a mandatory negotiation period that must expire before an emerging technology licensee could proceed to request involuntary relocation and, due to the nature of BRS, ask whether we should establish separate, individually triggered negotiation periods for each BRS licensee. We also seek to develop rules that will enable AWS licensees to determine when their proposed operations would cause interference to incumbent BRS systems operating in the 2150-2160 MHz band, such that the relocation of those systems would be necessary before AWS operations could begin. We identified a number of options for setting forth these technical requirements, including implementation of a “distance” table that identifies the distance from an AWS station within which a BRS station must be protected, and the use of the TIA TSB 10-F standard to determine when interference is expected to occur to BRS stations. The *Fifth Notice* similarly seeks comment on specific relocation procedures for incumbent FS operations in the 2160-2175 MHz band, including options for modifying sunset periods to accommodate new AWS entrants in the band. The *Fifth Notice* recognizes that we have traditionally provided for cost sharing among multiple new entrants that benefit from the relocation of incumbent licensees, and seeks comment on what cost sharing responsibilities should be implemented between the first AWS entrant and other subsequent AWS entrants in the 2150-2160/62 MHz and the 2160-2175 MHz bands. We note that in the *Emerging Technologies* and *Microwave Cost Sharing* proceedings, the Commission established procedures for relocating incumbent operations by new technology licensees in the 2160-2200 MHz band whereby the new licensees that relocate a paired microwave link with one path in the 2110-2150 MHz portion of the band and the other paired path in the 2160-2200 MHz portion of the band are entitled to reimbursement for a portion of their relocation expenses. Because these procedures encompass the 2160-2175 MHz band discussed in the *Fifth Notice*, we seek comment on the appropriate application of cost sharing requirements. One option is to establish new cost sharing procedures for the band that are based on our existing Part 24 cost sharing rules that were used for PCS relocation, while at the same time retaining and integrating the existing cost sharing requirement in Part 101.

After evaluating comments filed in response to the *Fifth Notice*, the Commission will examine further the impact of all rule changes on small entities and set forth its findings in the Final Regulatory Flexibility Analysis.

B. Legal Basis

The proposed action is authorized under Sections 1, 4(i), 7(a), 301, 303(f), 303(g), 303(r), 307, 316, and 332 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151, 154(i), 157(a), 301, 303(f), 303(g), 303(r), 307, 316, and 332.

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

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.⁶ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small

⁶ 5 U.S.C. § 603(b)(3).

organization," and "small governmental jurisdiction."⁷ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁸ 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.⁹

Broadband Radio Service. The Broadband Radio Service (BRS) consists of Multichannel Multipoint Distribution Service (MMDS) systems, which were originally licensed to transmit video programming to subscribers using the microwave frequencies of Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).¹⁰ In connection with the 1996 MDS auction, the Commission defined "small business" as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years. The SBA has approved of this standard.¹¹ The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs).¹² Of the 67 auction winners, 61 claimed status as a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are not more than \$40 million and are thus considered small entities.¹³

In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution,¹⁴ which includes all such companies generating \$12.5 million or less in annual receipts.¹⁵ According to Census Bureau data for 1997, there were a total of 1,311 firms in this category that had

⁷ 5 U.S.C. § 601(6).

⁸ 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).

⁹ Small Business Act, 15 U.S.C. § 632 (1996).

¹⁰ Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Report and Order*, 10 FCC Rcd 9589, 9593, ¶ 7 (1995) ("MDS Auction R&O").

¹¹ See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary Jackson, Assistant Administrator for Size Standards, Small Business Administration (dated Mar. 20, 2003) (noting approval of \$40 million size standard for MDS auction).

¹² Basic Trading Areas (BTAs) were designed by Rand McNally and are the geographic areas by which MDS was auctioned and authorized. See *MDS Auction R&O*, 10 FCC Rcd at 9608, ¶ 34.

¹³ 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard for "other telecommunications" (annual receipts of \$12.5 million or less). See 13 C.F.R. § 121.201, NAICS code 517910.

¹⁴ 13 C.F.R. § 121.201, NAICS code 517510.

¹⁵ *Id.*

operated for the entire year.¹⁶ Of this total, 1,180 firms had annual receipts of under \$10 million, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.¹⁷ Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the proposed rules and policies. Because the Commission's proposals only affect BRS operations in the 2155-2160/62 MHz band, the actual number of BRS providers who will be affected by the proposed relocation procedures will only represent a small fraction of these small businesses.

Fixed Microwave Services. Microwave services include common carrier,¹⁸ private-operational fixed,¹⁹ and broadcast auxiliary radio services.²⁰ At present, there are approximately 36,708 common carrier fixed licensees and 59,291 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of the FRFA, we will use the SBA's definition applicable to Cellular and other Wireless Telecommunications companies – *i.e.*, an entity with no more than 1,500 persons.²¹ According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.²² Of this total, 965 firms had employment of 999 or fewer employees, and an additional twelve firms had employment of 1,000 employees or more.²³ Thus, under this size standard, majority of firms can be considered small. We note that the number of firms does not necessarily track the number of licensees. We estimate that all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition.

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

The *Fifth Notice* seeks comment on proposals for relocation procedures applicable to BRS licensees in the 2150-2160/62 MHz band and FS licensees in the 2160-2175 MHz band, but does not

¹⁶ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4 (issued October 2000).

¹⁷ *Id.*

¹⁸ 47 C.F.R. Part 101 *et seq.* (formerly, part 21 of the Commission's Rules) for common carrier fixed microwave services (except MDS).

¹⁹ Persons eligible under Parts 80 and 90 of the Commission's rules can use Private-Operational Fixed Microwave services. See 47 C.F.R. parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

²⁰ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. See 47 C.F.R. Part 74 *et seq.* Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

²¹ 13 C.F.R. § 121.201, NAICS code 517212.

²² U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997," Table 5 (issued Oct. 2000).

²³ *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."

propose service rules. Thus, the item contains no new reporting, recordkeeping, or other compliance requirements.

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

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.²⁴

The proposals contained in the *Fifth Notice* are designed to provide spectrum to support the introduction of new advanced mobile and fixed terrestrial wireless services. This action is critical to the continuation of technological advancement, furthers the goals of the Telecommunications Act of 1996, and serves the public interest. We are likewise committed to ensuring that the disruption to incumbent operations and the economic impact of this proceeding on incumbent licensees is minimal. As discussed in Section A, *supra*, we have proposed to establish rules based on our existing *Emerging Technologies* relocation procedures to govern the entry of new licensees into the 2150-2160/62 MHz and 2160-2175 MHz bands. An alternative option would be to offer no relocation process, and instead require incumbent licensees to cease use of the band by a date certain and prohibit new licensees from entering the band until that date. We believe that an *Emerging Technologies*-based relocation procedure is preferable, as it draws on established and well known principles (such as time-based negotiation periods and the requirement of negotiating in good faith), benefits small BRS and FS licensees because the proposals would require new AWS licensees to pay for the costs to relocate their incumbent operations to comparable facilities, and – for small AWS licensees – offers a process by which new services can be brought to the market expeditiously. Moreover, we believe that the provision of additional spectrum that can be used to support AWS will directly benefit small business entities by providing new opportunities for the provision of innovative new fixed and mobile wireless services.

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

None.

²⁴ See 5 U.S.C. § 603(c).

**JOINT STATEMENT OF
COMMISSIONERS MICHAEL J. COPPS AND
JONATHAN S. ADELSTEIN**

Re: 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

This item initiates an important discussion on the relocation procedures that ultimately will apply to Broadband Radio Service (BRS) licensees in the 2150-2160/62 MHz band. This discussion is particularly significant because the adopted procedures will have a direct impact on a subgroup of future Advanced Wireless Services (AWS) licensees that will be responsible for relocation of the BRS portion of the AWS spectrum block. Consequently, timely resolution of the relocation issues raised in the NPRM portion of this item is critical to the Commission's current plans to conduct an auction of AWS spectrum next summer.

Over seven (7) weeks ago, we and our colleagues committed to launching a proceeding to examine the narrow issue of limiting the ability of designated entities (DEs) who have a relationship with the largest wireless carriers from having access to bidding credits in the AWS and other future auctions. We remain very interested in a timely resolution of this issue and firmly believe that it can be completed well in advance of next year's auction. The Commission now has several open proceedings affecting the upcoming AWS auction that need to be resolved before a successful AWS auction can be held. We need to move quickly on the DE question just as we are doing with the proceeding at hand.