Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 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

COMMENTS ON FIFTH NOTICE OF PROPOSED RULEMAKING

THE WIRELESS COMMUNICATIONS ASSOCIATION INTERNATIONAL, INC.

Andrew Kreig
President

1333 H Street, NW
Suite 700 West
Washington, DC 20005
202-452-7823

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EXECUTIVE SUMMARY

Since the Commission first proposed five years ago to relocate Broadband Radio Service ("BRS") channels 1 and 2 from 2150-2162 MHz to clear that spectrum for the Advanced Wireless Service ("AWS"), the Wireless Communications Association International, Inc. ("WCA") has engaged in repeated good faith efforts to eliminate the regulatory uncertainty that has hung over the spectrum and assure that relocation to alternative spectrum is managed in a manner that is fair to BRS channels 1 and 2 licensees, their spectrum lessees, and consumers. Thus, WCA is pleased that the Commission's *Fifth Notice of Proposed Rulemaking* ("*Fifth NPRM*") in this proceeding once again proposes to adopt rules and policies to govern BRS relocation. Unfortunately, although WCA agrees with the Commission's basic policy objectives, adoption of some of the specific implementation rules proposed in the *Fifth NPRM* would prove fundamentally unfair to those who have invested substantial time, effort and money to develop viable businesses utilizing the 2150-2162 MHz band, and to the public that has come to rely on their service offerings.

WCA believes that there are approximately 30-50 markets where BRS channels 1 and 2 are being used today, providing tens of thousands of subscribers in urban and rural areas with wireless broadband service and, in a handful of cases, multichannel video programming service. Although the number of operating systems implicated by the relocation of BRS channels 1 and 2 is relatively small, the stakes for the licensees, spectrum lessees and consumers is anything but. To the contrary, those who are using BRS channels 1 and 2 today have invested millions of dollars in developing robust service offerings that are expanding daily. For example, W.A.T.C.H. TV Company uses BRS channels 1 and 2 to provide high-speed Internet access service to over 5,000 subscribers in and around Lima, OH. Sioux Valley Wireless provides broadband services to over 2,250 residential and commercial subscribers in and around Sioux Falls, SD using the 2150-2162 MHz band. Evertek, Inc. has approximately 1,000 subscribers in rural Iowa using BRS channel 2. CommSpeed offers service using the 2150-2162 MHz band to approximately 2,000 subscribers in rural areas of Northern Arizona. Sprint Nextel Corp. provides wireless broadband service over 2150-2162 MHz to nearly 20,000 subscribers in 14 markets across the country. These companies, along with others that are similarly situated, have invested substantial resources into developing their businesses, many of which provide services that are not available from competitive sources. That investment must be protected as the Commission moves to refarm the 2150-2162 MHz band for AWS.

Certainly, then, WCA applauds the Commission's declarations that AWS licensees "must guarantee payment of all [BRS] relocation expenses" and that the Commission "need[s] to minimize the disruption to incumbent BRS [operations]." These basic policy objectives provide an appropriate foundation upon which to build a regulatory regime for relocating the 30-50 operating systems using BRS channels 1 and 2. The problem, however, is that the specific proposals advanced by the *Fifth NPRM* do not consistently hew to these broader policy objectives. Hence, while the *Fifth NPRM* represents a good starting point, adjustments to some of the specific proposals advanced by that document are necessary to assure that the Commission's policy objectives are met.

In the decade since the Commission's initial decision in the *Emerging Technologies* docket governing the relocation of point-to-point microwave licensees by Personal

Communications Service ("PCS") auction winners, the Commission has consistently refined its rules governing spectrum refarming both to address circumstances not present in the PCS/microwave relocation scenario and to assure fundamental fairness to those being relocated. Yet, when it comes to proposing specific rules and policies to govern the refarming of the 2150-2162 MHz band, the *Fifth NPRM* largely retreats to the initial PCS/microwave approach, ignoring those subsequent refinements. This fealty to the original PCS/microwave regime is surprising, given the substantial evidence in this proceeding that strict application of that relocation model here would be a recipe for disaster. As the Commission crafts its rules and policies to govern the relocation of BRS channels 1 and 2, it cannot forget that BRS, unlike point-to-point microwave, is a geographically-licensed service that is used to distribute services directly to consumers on a wide-area basis. The critical differences between the two situations call for a very different approach here, particularly when one considers that BRS channel 1 and 2 service providers will be relocated for the benefit of AWS licensees *who will be providing similar services and competing for the same customers as those using BRS to provide broadband services.* Hence, affording AWS licensees the level of control over relocation of BRS channel 1 and 2 operations that PCS licensees had over microwave relocation would inevitably create a host of "fox in the henhouse" problems.

WCA therefore believes that the Commission can and should do here what it has done when refarming other spectrum bands over the past decade: use the core principles first adopted for the PCS/microwave relocation, as well as the modifications applied in subsequent refarming proceedings, to inform the development of a refarming framework that addresses the unique needs of BRS service providers without compromising the Commission's desire to clear the 2150-2162 MHz band efficiently. WCA's proposal offers a framework that is relatively easy to apply and, if adopted, will achieve the balance of interests the Commission presumably is looking for here. Under WCA's proposal:

- Any AWS auction winner may, following an unsuccessful three year mandatory negotiation period, require at its expense the involuntary relocation of any BRS channel 1 or 2 operating system to comparable facilities. However, no AWS auction winner may deploy any facilities that pose a threat of interference to BRS operations (as determined under a technical standard discussed in these comments) unless either: (i) the licensee and lessee of BRS channel 1 and 2 operations consent during a three year mandatory negotiation period, or (ii) the AWS auction winner funds the involuntary relocation of the BRS channel 1 and 2 system to comparable facilities following an unsuccessful negotiation. In all cases, the F Block AWS auction winner should be required to fund the relocation of every BRS channel 1 and 2 operating system within its Regional Economic Area Grouping to comparable facilities no later than ten years following the grant of its AWS license, if relocation has not otherwise occurred.

- To protect and preserve the proprietary relationship between the BRS system operator and its subscribers, the Commission should employ an approach similar to that adopted for 800 MHz rebanding in WT Docket No. 02-55 and make the BRS licensee/lessee responsible for taking all steps necessary to complete deployment of comparable facilities (including any required customer equipment changeouts) on BRS channels 1 and 2 operating either in their designated replacement spectrum in the 2496-2690 MHz band or such other spectrum as the BRS interests designate. Procedures similar to those employed in the 800 MHz rebanding can be used to avoid the incursion of excess costs,

although WCA believes that the limited number of BRS relocations obviates any need for a transition administrator. To assure that BRS control over the relocation process does not cause undue delay, the Commission should require that the process be completed no later than 24 months following the conclusion of any unsuccessful mandatory negotiation period.

- BRS channel 1 and 2 licensees/lessees should have the same right to self-relocation afforded point-to-point microwave licensees under the initial PCS/microwave relocation rules, although the cost reimbursement rules should provide for funding by the F Block AWS auction winner along the lines adopted for the 800 MHz rebanding.

- The AWS auction winners should be required to fund the refarming of Broadcast Auxiliary Service ("BAS") channel A10 from the 2496-2500 MHz band consistent with the proposal pending before the Commission in IB Docket No. 02-364. To avoid delays in the refarming of the 2150-2162 MHz band, the Commission should mandate that the removal of BAS channel A10 operations from the 2496-2500 MHz band be completed within two years of the later of the effective date of the Commission's reconsideration order in IB Docket No. 02-364, or the effective date of the Commission's resolution of the *Fifth NPRM*, and in no event should any BRS licensee be required to migrate from the 2150-2162 MHz band until that process is completed.

- Each F Block AWS auction winner should be required to reimburse the entity that serves as the transition Proponent under Section 27.1230 of the Rules for the *pro rata* transition costs associated with BRS channels 1 and 2, consistent with Section 27.1233(c) of the Commission's Rules.

- No restriction should be imposed on the ability of those currently utilizing BRS channels 1 and 2 at 2150-2162 MHz to deploy new base stations, modify existing facilities or add new subscribers, nor should AWS auction winners be absolved of responsibility for the costs of later relocation of those facilities. Moreover, no restriction should be imposed on the ability of a BRS channel 1 or 2 licensee to assign, transfer or lease its channel, and its transferee/assignee/lessee should be entitled to the same rights as any other BRS channel 1 or 2 licensee/lessee. To the extent an AWS auction winner desires to minimize its relocation expenses, it can relocate BRS channels 1 and 2 systems sooner rather than later. However, until they are relocated, existing businesses that utilize BRS channels 1 and 2 must be permitted to continue expanding as necessary to meet public demand for service.

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COMMENTS ON FIFTH NOTICE OF PROPOSED RULEMAKING

The Wireless Communications Association International, Inc. ("WCA") hereby submits its comments in response to the Commission's *Fifth Notice of Proposed Rulemaking* ("*Fifth NPRM*") in the above-captioned proceeding.[1]

I. INTRODUCTION.

As the trade association of the wireless broadband industry and the primary advocate for Broadband Radio Service ("BRS") licensees and system operators using the 2150-2162 MHz band, WCA has been deeply involved in the Commission's efforts over the past five years to devise appropriate rules for refarming the 2150-2162 MHz band to make that spectrum available for Advanced Wireless Services ("AWS"). Although WCA has not objected to the refarming of the 2150-2162 MHz band, it has repeatedly sought to end the regulatory uncertainty hanging over BRS channels 1 and 2 and to assure that the relocation of BRS channels 1 and 2 from 2150-2162 MHz to alternative spectrum is managed in a manner that is fair to licensees, their spectrum

[1] *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*, Eighth Report and Order, Fifth Notice of Proposed Rulemaking and Order, 20 FCC Rcd 15855, 15861-62, 15879 (2005) ["*Fifth NPRM*" or "*Order*"].

lessees, and consumers.[2] Those objectives remain unchanged – it is essential that in response to the *Fifth NPRM* the Commission adopt rules that provide licensees and lessees of BRS channels 1 and 2 with certainty regarding their futures and assure that they and their customers are treated fairly during the refarming process.

These are not trivial concerns. As the *Fifth NPRM* notes, there are approximately 30-50 markets where BRS channels 1 and/or 2 are being used today.[3] These systems are providing tens of thousands of subscribers in urban and rural areas with wireless broadband service or, in a handful of cases, multichannel video programming service, and the number grows each day.[4]

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[2] *See, e.g.*, Comments of Wireless Communications Ass'n Int'l, ET Docket No. 00-258, at 48-53 (filed Feb. 22, 2001) ["WCA 00-258 NPRM Comments"]; Comments of Wireless Communications Ass'n Int'l, ET Docket No. 00-258, at 10-14 (filed Oct. 22, 2001); Attachment to "A Compromise Solution for Relocating MDS From 2150-2162 MHz," attached as an appendix to Letter from Andrew Kreig, President, Wireless Communications Ass'n Int'l, *et al.*, to Michael K. Powell, Chairman, Federal Communications Commission, ET Docket No. 00-258 (filed Jul. 11, 2002); Comments of Wireless Communications Ass'n Int'l on Third Notice of Proposed Rulemaking, ET Docket No. 00-258, at 28-44 (filed Apr. 14, 2003); Letter from Andrew Kreig, President, Wireless Communications Ass'n Int'l, *et al.*, to Michael K. Powell, Chairman, Federal Communications Commission, ET Docket No. 00-258, at Appendix A (filed Apr. 7, 2004) ["MDS Industry 2.1 GHz Proposal"]; Letter from Paul J. Sinderbrand, Counsel, Wireless Communications Ass'n Int'l, to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 00-258 *et al*. (filed Aug. 5, 2005).

[3] *See Fifth NPRM*, 20 FCC Rcd at 15865 n.59 ("[T]he 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.") (citation omitted). To WCA's knowledge, in every case where both channels are being used in a given market, they are being used in conjunction with one another and thus must be relocated in tandem. *See* Letter from Paul J. Sinderbrand, Counsel, Wireless Communications Ass'n Int'l, to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 00-258 *et al*. (filed July 26, 2005) ["WCA July 26, 2005 Letter"]. *See also Fifth NPRM*, 20 FCC Rcd at 15865. Indeed, as discussed *infra* at Section II.D, AWS facilities that pose a threat of interference to a BRS channel 1 operation will invariably pose a threat of interference to a collocated BRS channel 2 operation. And, even were that not the case, the AWS community will find that it would actually cost far more to relocate one of the two BRS channels at 2150-2162 MHz to "comparable facilities" and retain the other at 2150-2162 MHz then it will cost to migrate both to comparable facilities at the same time.

[4] The *Fifth NPRM* incorrectly suggests that that BRS spectrum can only be used in four scenarios: "1) downstream analog video; 2) downstream digital video; 3) downstream digital data; and 4) downstream/upstream digital data." *Id.* at 15862-63. In fact, as WCA and others had previously advised the Commission, the predominant use of the band today is for *upstream* digital data – the 2150-2162 MHz band is used for the transmission of data from subscriber premises to base stations, while spectrum elsewhere (generally in the 2500-2690 MHz band) is used for the downstream transmissions from base

Although the number of operating systems implicated by the refarming of the 2150-2162 MHz band is relatively small, the stakes for the licensees, spectrum lessees and consumers is anything but. To the contrary, the system operators who are using BRS channels 1 and 2 today have invested millions of dollars in developing robust service offerings.[5] For example, W.A.T.C.H. TV Company uses BRS channels 1 and 2 to provide high-speed Internet access service to over 5,000 subscribers in and around Lima, OH. Sioux Valley Wireless provides broadband services to over 2,250 residential and commercial subscribers in and around Sioux Falls, SD using 2150-2162 MHz. Evertek, Inc. has approximately 1,000 subscribers in rural Iowa served using BRS channel 2. CommSpeed offers service using the 2150-2162 MHz band to approximately 2,000 subscribers in rural areas of Northern Arizona. Sprint Nextel Corp. provides wireless broadband service over 2150-2162 MHz to nearly 20,000 subscribers in 14 markets across the country. These companies, along with others that are similarly situated, have invested substantial resources to create and sustain their businesses, and that investment must be protected as the Commission moves to refarm the 2150-2162 MHz band for AWS.

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stations to subscribers. *See, e.g.*, WCA July 26, 2005 Letter at 2; Comments of Wireless Communications Ass'n Int'l, WT Docket No. 02-353, at 4-6 (filed Feb. 7, 2003); Letter from Thomas Knippen, Vice President and General Manager, W.A.T.C.H. TV Company, WT Docket No. 03-66 *et al.* (filed June 1, 2004); Letter from Joel Brick, Technical Director, Sioux Valley Wireless, WT Docket No. 03-66 *et al.* (filed May 30, 2004). Indeed, unlike the relocation spectrum at 2496-2502 MHz and 2618-2624 MHz specified for BRS channels 1 and 2, respectively, in the initial *Report and Order* in WT Docket No. 03-66, BRS channels 1 and 2 at 2150-2162 MHz were ideally suited for upstream communications in a Frequency Division Duplex system because they are contiguous, are lower in the spectrum (and thus have greater range at lower power) and are separated from the downstream channels such that interference is not a concern. Indeed, the Commission's decision to designate non-contiguous replacement spectrum for BRS channels 1 and 2 and to place one channel in the Lower Band Segment ("LBS") and one in the Upper Band Segment ("UBS") will pose challenges that could complicate the migration from 2150-2162 MHz.

[5] As the Commission develops its rules and policies to govern the relocation of BRS systems from the 2150-2162 MHz band, it is essential for it to keep in mind that the millions of dollars invested in these systems has come from system operators who, in some cases, lease BRS channel 1 and/or 2 from the licensee. As discussed *infra* at II.G, WCA is troubled that while the *Fifth NPRM* acknowledges that

Given the Commission's long-standing recognition that the propagation characteristics of BRS spectrum render it uniquely suited for the provision of wireless broadband services in rural areas that cannot be served by digital subscriber line ("DSL") or cable modem service,[6] it should come as no surprise that in many instances BRS channels 1 and 2 are often used for just that purpose – to provide the customer-to-base station link for wireless broadband offerings to rural consumers who do not have access to alternative broadband service providers.[7] Thus, this proceeding implicates not just the economic interests of licensees and lessees, but also the Commission's oft-stated policy objective of assuring all Americans access to broadband service. Should the Commission fail to provide BRS systems with a seamless transition from the 2150-2162 MHz band to replacement spectrum, more than a few rural subscribers are likely to lose their access to broadband.

"leasing is prevalent" at 2150-2162 MHz, it has not proposed rules and policies that protect lessees' investment and the continued viability of the services that they offer to the public.

[6] BRS systems use fixed antennas usually mounted 20 to 50 feet above ground at the subscriber's location and base stations installed very high above average terrain, allowing BRS channels 1 and 2 to serve those within a 35 mile radius of the base station. This extraordinary service range is achieved through the use of technologies that require a direct line of sight between the subscriber antenna and the base station antenna. To achieve the critical mass of subscribers necessary to justify the high cost of base stations, a broadband system operator will seek to mount its 2150-2162 MHz band base station receive antennas as high above average terrain as possible, generally utilizing mountaintops, tall towers or skyscrapers. Similarly, the operator utilizes outdoor 2150-2162 MHz transmission antennas mounted above the ground clutter to maximize the signal level that is received by the base station. In this fashion, the system operator can maximize the number of subscriber locations that "see" the base station without suffering obstructions from topography, foliage, building blockage or other obstructions.

[7] *See, e.g., Spectrum Study of the 2500-2690 MHz Band: The Potential for Accommodating Third Generation Mobile Systems*, ET Docket No. 00-232, *Interim Report*, at 22 (Nov. 15, 2000) ("in rural or otherwise underserved markets in the country, [BRS] may be the sole provider of broadband service."); *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Second Memorandum Opinion and Order, 18 FCC Rcd 16848, 16851 (2003) (noting that BRS systems in development "present a significant opportunity to provide alternatives for the provision of broadband services to consumers in urban, suburban and rural areas and to improve opportunities for distance learning and telemedicine services").

As will be discussed below, WCA whole-heartedly agrees with the two fundamental policy objectives cited in the *Fifth NPRM* – (i) AWS auction winners must fund the relocation of BRS operations from the 2150-2162 MHz band, and (ii) relocation must be accomplished with a minimum of disruption to BRS systems and their subscribers.[8] These basic goals provide an appropriate foundation upon which to build a regulatory regime for migrating the 30-50 operating systems using BRS channels 1 and 2 to comparable facilities. Unfortunately, however, the specific proposals advanced by the *Fifth NPRM* do not consistently hew to these broader policy objectives. To the contrary, adoption of some of the specific rules and policies proposed in the *Fifth NPRM* could force many BRS systems to entirely fund their own multi-million dollar relocations, a capital expenditure that no doubt would drive some out of business. And, even those that are relocated to replacement spectrum at the expense of AWS auction winners would face a significant risk of disruption and loss of subscribers if certain of the proposals advanced in the *Fifth NPRM* are adopted. That is hardly an appropriate result for licensees and system operators whose only "crime" has been to deploy facilities and deliver innovative services to the public in accordance with the Commission's own directives, using spectrum allocated by the Commission specifically for that purpose.

The Commission can, and must, do better. In these comments, WCA sets forth a comprehensive approach to the relocation of operating systems that utilize BRS channels 1 and/or 2. Admittedly, the approach proposed by WCA here departs in certain respects from that adopted by the Commission more than a decade ago to address the migration of point-to-point microwave links from spectrum reallocated for Personal Communications Service ("PCS"). However, over the intervening years the Commission has consistently refined its rules governing

[8] *See Fifth NPRM*, 20 FCC Rcd at 15862, 15869-70.

spectrum refarming both to address circumstances not present in the PCS/microwave relocation scenario and to assure fundamental fairness to those being relocated. WCA's approach utilizes the rules and policies adopted for the PCS/microwave relocation, as well as the modifications adopted in subsequent refarming proceedings, to inform the development of a relocation framework that addresses the unique needs of BRS service providers without compromising the Commission's need to clear the 2150-2162 MHz band efficiently. In so doing, WCA hopes to restore an appropriate balance to the debate – while the *Fifth NPRM* focuses on affording AWS auction winners maximum flexibility and minimizing their cost, it fails to balance that consideration against the substantial costs and regulatory uncertainty that would be imposed on BRS interests. The key elements of WCA's approach to BRS relocation can be summarized as follows:

- Any AWS licensee can request the involuntary relocation of any operating BRS channel 1 and/or 2 system by commencing a three year mandatory negotiation with the BRS licensee and any lessee. If the mandatory negotiation period concludes without agreement, the BRS licensee and any lessee must involuntarily relocate to comparable facilities that they select and deploy at the initial expense of the AWS licensee that requested the involuntary relocation.

- No AWS licensee may deploy any facilities that pose a threat of interference to BRS operations (as determined under a technical standard discussed in these comments) unless either: (i) an agreement with the affected BRS licensee and any lessee is reached during a three year mandatory negotiation, or (ii) the AWS licensee has funded the involuntary relocation of the affected BRS system to comparable facilities that the BRS licensee and any lessee select and deploy following an unsuccessful mandatory negotiation.

- BRS systems operating in the 2150-2162 MHz band may self-relocate at any time following the effective date of the Commission's decision resolving the *Fifth NPRM*, and will be funded by the F Block AWS auction winner for the Regional Economic Area Grouping ("REAG") in which the BRS system is located.

- Each BRS channel 1 and 2 licensee and lessee must involuntarily relocate to comparable facilities they select and deploy no later than ten years following the grant of the F Block AWS license for the REAG in which the BRS operation is located. Responsibility for funding such relocation shall initially rest with the F Block AWS licensee for the relevant REAG.

These proposals, as well as a variety of related issues, are discussed in detail below.

II. DISCUSSION.

A. *The Rules And Policies Governing The Relocation Of BRS Channels 1 And 2 Systems Should Be Informed By The Commission's Experience In Refarming Spectrum Over The Past Decade, But Must Be Adjusted As Necessary To Accommodate The Particular Circumstances Present Here.*

Throughout this proceeding, BRS licensees and service providers have asked only for what the Commission has already said victims of involuntary relocation are entitled to, *i.e.*, to be left "no worse off than they would be if relocation were not required."[9] Significantly, not even those who have supported the relocation of BRS channels 1 and 2 have suggested that BRS service providers should receive anything less.[10] WCA therefore applauds the acknowledgements in the *Fifth NPRM* that in refarming the 2150-2162 MHz band, the Commission "need[s] to minimize the disruption to incumbent BRS . . . operations during the transition"[11] and that AWS auction winners "must guarantee payment of all [BRS] relocation expenses" absent a negotiated agreement to the contrary.[12]

What troubles WCA, however, is that the specific proposals advanced in the *Fifth NPRM* do not consistently advance these overarching principles. Specific instances are discussed in

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[9] *Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation*, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8825, 8843 (1996) ["*Microwave Cost-Sharing Order*"]. *See also 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*, Third Report and Order, Third Notice of Proposed Rulemaking and Second Memorandum Opinion and Order, 18 FCC Rcd 2223, 2251 (2003).

[10] *See* Comments of Motorola, Inc., ET Docket No. 00-258, at 13 (filed Oct. 22, 2001); Comments of Nortel Networks Inc., ET Docket No. 00-258, at 5-6 (filed Oct. 19, 2001); Reply Comments of Cingular Wireless LLC, ET Docket No. 00-258, at 4 (filed Nov. 8, 2001).

[11] *Fifth NPRM*, 20 FCC Rcd at 15862.

[12] *Id.* at 15869.

detail below. Generally speaking, however, the problem is that while the Commission acknowledges that "BRS operations . . . are *significantly different* than point-to-point FS operations"[13] and that "BRS relocation procedures must take into account the unique circumstances faced by the various incumbent [BRS] operations,"[14] often the specific rules and policies proposed in the *Fifth NPRM* are carbon copies of those adopted in the mid-1990s to govern the clearing of point-to-point microwave links from spectrum reallocated for PCS. This despite the fact that when the Commission first adopted relocation rules in the *Emerging Technologies* proceeding, it specifically excluded BRS from its relocation plan because of the difference in the nature of the services.[15]

This proposed fealty to the PCS/microwave relocation scheme, notwithstanding the recognized differences between the services, is surprising given the *Fifth NPRM*'s acknowledgement that over the past decade the Commission has refined and modified the PCS/microwave relocation model in proceedings involving "Mobile Satellite Service (MSS) licensees, 18 GHz Fixed Satellite Service (FSS) licensees, and Nextel, in frequency bands currently occupied by incumbent operations."[16] As this acknowledgment suggests, rather than force-feed refarming of the 2150-2162 MHz band into the mid-1990s PCS/microwave regime, the appropriate approach is illustrated by the Commission's discussion in connection with the relocation of incumbent fixed microwave licensees in the 18 GHz band by the Fixed Satellite Service:

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[13] *Id.* at 15879 (emphasis added).

[14] *Id.* at 15862-63.

[15] *See Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies*, First Report and Order and Third Notice of Proposed Rulemaking, 7 FCC Rcd 6886, 6888-89 (1992) (citations omitted) ["*Emerging Technologies First R&O*"].

[16] *Fifth NPRM*, 20 FCC Rcd at 15861-62.

> While new rules we are adopting are based upon the concepts adopted in the Emerging Technologies proceeding and contained in Section 101.75 for the PCS service transition, there are some differences between the situations at 2 GHz and 18 GHz that warrant some changes in the relocation rules for 18 GHz. We note that the rules adopted in [the] Emerging Technologies proceeding were developed at the time solely based on the specifics of the sharing issues at 2 GHz. *While we strive for consistency in our rules, we need not adhere to the specifics of the existing 2 GHz relocation policy at 18 GHz if it is inappropriate*.[17]

Thus, particularly where those being relocated to new spectrum were providing point-to-multipoint services or using their spectrum to deliver communications offerings directly to end-users, the Commission has readily departed from its initial PCS/microwave relocation regime.[18]

All of the above reaffirms that, as in any rulemaking proceeding, the Commission must "examine the relevant data and articulate a satisfactory explanation for its position," including a "rational connection between the facts found and the choice made."[19] As will be discussed

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[17] *Redesignation of the 17.7-19.7 GHz Frequency Bands, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 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*, Report and Order, 15 FCC Rcd 13430, 13468 (2000) (emphasis added). *See also Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile Satellite Service*, Second Report and Order and Second Memorandum Opinion and Order, 15 FCC Rcd 12315, 12329-30 (2000) ("[T]he integrated nature of BAS, along with the nationwide, and indeed global, scope of MSS, makes a licensee-by-licensee relocation of BAS impossible. For these reasons, we must consider additional factors in crafting a relocation scheme for BAS."); *Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band*, First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making, 11 FCC Rcd 1463, 1508 (1995) (concluding that "a narrowly-tailored mandatory relocation mechanism" was essential for implementation of a wide-area licensing scheme for the 800 MHz SMR service) ["*800 MHz SMR First R&O*"]; *Microwave Cost-Sharing Order*, 11 FCC Rcd at 8870 (stating that the "microwave relocation rules already apply to all emerging technology services," but that "as new services develop, we may review our relocation rules and make modifications to those rules where appropriate.") (citation omitted).

[18] *See, e.g.*, *800 MHz SMR First R&O*, 11 FCC Rcd at 1508; *Improving Public Safety Communications In The 800 MHz Band*, Report and Order, Fifth Report and Order and Fourth Memorandum Opinion and Order, and Order, 19 FCC Rcd 14969 (2004) ["*800 MHz Rebanding R&O*"]; *Improving Public Safety Communications In The 800 MHz Band*, Supplemental Order and Order on Reconsideration, 19 FCC Rcd 25120 (2004) ["*800 MHz Rebanding Reconsideration Order*"].

[19] *Motor Vehicle Mfrs. Assn. v. State Farm Mut. Insurance Co.*, 463 U.S. 29, 43 (1983) (citation omitted); *see also Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962); *Achernar Broadcasting Co. v. FCC*, 62 F.3d 1441, 1447 (D.C. Cir. 1995), *citing Cities of Carlisle and Neola v. FERC*, 741 F.2d

below, the "relevant data" in this case establishes that a conventional application of the PCS/microwave approach will not work here. Instead, the Commission can and should adopt a relocation framework for BRS that incorporates the basic concepts of *Emerging Technologies* (including the substantial revisions and refinements developed over the past decade in connection with a host of other spectrum refarmings), but applies them in a manner appropriate for the BRS of today.[20]

B. *The BRS Relocation Rules And Policies Must Be Crafted To Protect The Relationship Between The BRS System Operator And Its Subscribers.*

Throughout these comments, WCA will highlight a host of differences between the point-to-point microwave facilities relocated by PCS and the BRS systems at issue in this proceeding. However, as the Commission considers the fundamental differences between point-to-point microwave and BRS, none are more important than these two. First, unlike point-to-point microwave, *BRS is used to provide a wide-area service directly to retail subscribers.* That critical difference adds a level of complexity to the refarming of the 2150-2162 MHz band that certainly was not present as the Commission crafted rules to govern the PCS/microwave relocation, and it has rarely been at issue in the refarmings since.[21] Indeed, second, those

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429, 433 (D.C. Cir. 1984) (agency not entitled to deference when it has "stopped shy of carefully considering the disputed facts").

[20] *Cf. Bechtel v. FCC*, 10 F.3d 875, 878 (D.C. Cir. 1993) ("[w]hen a party attacks a policy on grounds that the agency already has dispatched in prior proceedings, the agency can simply refer to those proceedings if their reasoning remains applicable and adequately refutes the challenge. *But the agency must always stand ready 'to hear new argument' and 'to reexamine the basic propositions' undergirding the policy.*") (citations omitted)(emphasis added).

[21] WCA has previously alerted the Commission that the retail nature of BRS service means, among other things, that BRS relocation will require changeouts of customer premises equipment, and thus BRS service providers must, for example, notify their customers that their equipment must be changed out; schedule and coordinate "truck rolls" for changeouts at each customer's premises; incur labor and other expenses associated with the changeout process; and follow-up with their customers to verify that their new equipment is working properly and that they were otherwise satisfied with the changeout process. *See* note 2 *supra* and the WCA filings cited therein.

complexities are compounded here when one considers that BRS channels 1 and 2 are primarily used to provide wireless broadband services directly to retail subscribers, and that many new AWS licensees will either already be offering competitive DSL, cable modem or wireless broadband services or will be acquiring their AWS spectrum with the intent of offering a competing wireless broadband service.[22] If the Commission truly intends "to minimize the disruption to incumbent BRS . . . operations during the transition," then it must depart significantly from the approach used in PCS/microwave relocation in a manner that reflects the competitive battle between BRS and AWS for broadband subscribers. Otherwise, relocation of BRS service providers by AWS licensees has the potential to be disrupted by a host of "fox in the henhouse" problems.

The problems arising from the competitive posture of BRS and AWS interests are perhaps best illustrated when one considers the threshold issue of who will be responsible for actually deploying comparable facilities at the tens of thousands of subscriber locations served by BRS channel 1 and 2 systems. Whether BRS channels 1 and 2 are used for wireless broadband service or for distribution of video, the transmission and reception equipment located at the subscriber premises is specifically designed to operate in the 2150-2162 MHz band and cannot be retuned to operate elsewhere.[23] This means that as operations on BRS channels 1 and 2 are migrated elsewhere from the 2150-2162 MHz band, it will be essential for new equipment

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[22] *See, e.g., Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, Report and Order, 18 FCC Rcd 25162, 25164 (2003) ("[o]ur actions today bring us closer to our goals of achieving the universal availability of broadband access and increasing competition in the provision of such broadband services both in terms of the types of services offered and in the technologies utilized to provide those services.").

[23] As discussed *infra*, the Commission must provide for the relocation of BRS channels 1 and 2 to their designated replacement spectrum in the 2496-2690 MHz band unless the BRS licensee and any lessee agree otherwise. For present purposes, suffice it to say that the existing transmission and reception equipment deployed at subscriber locations for use with the 2150-2162 MHz band is not sufficiently frequency agile that it can be reused in connection with relocation to any other available spectrum.

to be installed at every subscriber's home or business.[24] And, because the equipment being used by most BRS channel 1 and 2 operations today requires professional installation, that necessarily means that in most instances the refarming process will require an installer to visit each subscriber location at least once, and perhaps multiple times.[25]

Under the mid-1990s PCS/microwave relocation model, the auction winner/new entrant is, in the absence of agreement to the contrary, responsible for selecting and deploying the "comparable facilities" on a "turn-key" basis – it installs the comparable facilities on its own, tests those facilities and, when installation is completed, turns the facilities over to the incumbent being relocated.[26] The *Fifth NPRM* proposes to utilize the same approach here.[27] Use of that

[24] The *Fifth NPRM* solicits 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." *Fifth NPRM*, 20 FCC Rcd at 15865. To the extent that some miscellaneous equipment installed at a subscriber's premises can be reused in the provision of comparable facilities at that location, such as antenna mounting hardware, cabling, etc., it should be reused. However, the more expensive equipment currently installed at a subscriber's premises (including the transceiver in a broadband system and the downconverter in a video system) will not be reusable, and thus the AWS licensee must fund its replacement. As the Commission implicitly recognizes in Paragraph 53 of the *Order* in this proceeding, there should be no doubt that comparable facilities must include both base station equipment and subscriber equipment. *See Order*, 20 FCC Rcd at 15879-80 (requiring BRS channel 1 and 2 licensees to provide information regarding "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."). Given that the equipment installed at the subscriber premises is essential for the communications services offered by BRS licensees and lessees, it would be absurd to suggest that AWS licensees should be excused from funding all necessary replacement of that equipment.

[25] As discussed *infra* at Section II.B.1, unless the Commission permits BRS service providers to select and deploy their own "comparable facilities" at the expense of the appropriate AWS licensees, it will be essential that the Commission require that current 2150-2162 MHz-based facilities be maintained in place and that BRS service providers have a "right of return" to those facilities for 12 months. Upon expiration of that 12 month period, the AWS licensee would then be required to remove the current facilities, presenting another logistical burden for the BRS operator, another imposition on the consumer, and another opportunity for the AWS licensee to engage in mischief designed to encourage the subscriber to leave BRS for the AWS licensee's competitive offering.

[26] *See, e.g., Microwave Cost-Sharing Order*, 11 FCC Rcd at 8830.

model would necessarily require BRS licensees and system operators not only to disclose to their competitors proprietary information regarding the identity and location of their subscribers, but also to provide those competitors with physical access to their subscribers' homes and businesses for purposes of installing replacement facilities.

Requiring such disclosure and access by BRS system operators cannot be squared with the Commission's commitment "to minimize the disruption to incumbent BRS. . .operations during the transition."[28] To the contrary, the potential for the AWS licensee to engage in anti-competitive mischief from a forced disclosure of proprietary BRS information and access to BRS subscribers is staggering. Never before has the Commission even seriously considered requiring incumbents that are being involuntarily relocated to disclose proprietary information or provide access to their subscribers. Rather, *the Commission has consistently assured during spectrum refarmings that incumbents' proprietary information is protected.*

For example, when in 1997 the Commission allowed new Economic Area licensees to relocate incumbent Specialized Mobile Radio ("SMR") operations in the 800 MHz band to comparable facilities, it refused to require that incumbents provide proprietary information, reasoning that:

> [O]ur relocation rules are not intended to require the mandatory disclosure of incumbents' proprietary information or customer lists. . . . [I]ncumbents need not disclose competitively sensitive information.[29]

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[27] *See Fifth NPRM*, 20 FCC Rcd at 15869-70 (proposing that AWS new entrants "construct, test, and deliver to the incumbent comparable replacement facilities" consistent with the procedures that applied to point-to-point microwave links).

[28] *Id.* at 15862.

[29] *Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band*, Memorandum Opinion and Order and Order on Reconsideration, 12 FCC Rcd 9972, 9990 (1997).

Similarly, when the Commission crafted its 2004 rules and policies for rebanding at 800 MHz, it specifically recognized the competitive relationship between Nextel Communications, Inc. ("Nextel") and the other incumbent commercial service providers that would be relocated at Nextel's expense, and adopted an approach under which Nextel's personnel would not have direct access to the customer information or the physical facilities of the incumbents.[30] Instead, the Commission afforded the incumbents control over their own relocation at Nextel's expense, and found that under the resulting rules and policies, "[w]e do not foresee any party having access to competitively-sensitive information such as the identity and other details of an incumbent's customers."[31] None of this should be surprising, as the Commission has consistently protected proprietary information, and particularly proprietary subscriber information, from disclosure.[32]

1. As In The 800 MHz Band Proceeding, The Incumbents Should Be Responsible For Selecting And Deploying Comparable Facilities.

Although WCA discusses *infra* a variety of other public interest benefits associated with preventing AWS licensees from selecting and deploying facilities at the premises of BRS subscribers, it is clear that the PCS/microwave model cannot be applied here without inappropriately requiring BRS disclosure of information of the greatest competitive sensitivity.

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[30] *See 800 MHz Rebanding Reconsideration Order*, 19 FCC Rcd at 25153.

[31] *800 MHz Rebanding R&O*, 19 FCC Rcd at 15078.

[32] For example, in FCC Form 477 (Local Telephone Competition and Broadband Reporting), BRS operators are not required to disclose the specific locations of their customers or even the number of subscribers they have in each zip code – they are only required to list their total number of broadband connections and the zip codes in which they have at least one connection. *Local Telephone Competition and Broadband Reporting*, Report and Order, 19 FCC Rcd 22340, 22349-50, 22353-54 (2004). Similarly, in its annual collection of system information from cable operators on FCC Form 325, the Commission has afforded confidentiality to, *inter alia*, (1) number of cable modem subscribers; (2) the length of cable operator's fiber optic plant; and (3) the number of fiber optic nodes and number of subscribers per node. *See Cox Communications, Inc. – Request for Confidentiality for Information Submitted on Forms 325 for the Year 2003*, Order, 19 FCC Rcd 12160 (Media Bur. 2004).

Fortunately, there is another approach – one the Commission embraced the last time it was faced with a situation where a spectrum refarming project required one competitor to fund the migration of another to alternative spectrum.

To preserve the commercially sensitive relationship between the BRS system operator and its subscribers, the Commission should use an approach based on that developed just last year in WT Docket No. 02-55 to protect relocating 800 MHz incumbent commercial service providers. Specifically, WCA proposes that when an involuntary relocation of BRS channel 1 and 2 operations occurs, the BRS system operator should have the sole responsibility for selecting and deploying "comparable facilities" and taking all other steps necessary to complete relocation of the operations to replacement spectrum, subject to payment of its legitimate expenses by the relevant AWS auction winner pursuant to the procedures discussed *infra* at Section II.B.2.[33]

This approach should be utilized whenever an AWS licensee, the BRS licensee and any BRS spectrum lessee are unable to reach an agreement on the relocation of BRS channels 1 and 2 during the three-year mandatory negotiation period (whether the AWS licensee commences those negotiations voluntarily because it fears interference from BRS or because it must commence negotiations because it is proposing to deploy facilities that threaten interference to BRS).[34] In addition, it should be utilized when no mandatory negotiation period has been

[33] As discussed herein, the relevant AWS auction winner will either be: (1) the AWS auction winner that requests relocation; (2) the AWS auction winner required to fund relocation because it is deploying facilities that pose an interference threat to BRS channels 1 and 2; or (3) the licensee of the F Block AWS license if the relocation has not occurred pursuant to (1) or (2) and instead is completed either pursuant to the self-relocation system discussed in Section II.D *infra*, or to comply with the requirement that relocation be completed within ten years of the issuance of the F Block AWS license for the REAG in which the BRS geographic service area ("GSA") centroid is located, as discussed *infra* in Section II.C.

[34] WCA agrees with the Commission's proposal to skip any voluntary negotiation period and proceed directly to a three-year mandatory negotiation period. *See Fifth NPRM*, 20 FCC Rcd at 15868-69. The Commission should make clear that the three-year mandatory negotiation period for any AWS licensee

commenced by an AWS licensee, and the BRS licensee/lessee unilaterally relocates to comply with the proposed ten-year relocation deadline discussed *infra* in Section II.C.

Adoption of this approach will advance the public interest in a variety of ways. First and foremost, it is the most efficient manner for assuring that BRS service providers at all times maintain their proprietary customer information during the relocation process.[35] However, it offers other benefits as well, as it eliminates a host of opportunities for the AWS auction winner to game the system to its competitive advantage. For example, allowing the incumbent to select and deploy its own comparable facilities will mitigate the need to maintain the incumbent's existing facilities at 2150-2162 MHz for a year after the switch-over and to assure the incumbent a right of return to the 2150-2162 MHz band during that period. The *Fifth NPRM* recognizes that in the PCS/microwave model, the Commission routinely applies a "right of return" policy under which the incumbent's existing facilities must be maintained for a 12 month trial period and the incumbent retains the right to return to its former spectrum if the new facilities prove not

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can begin no earlier than the date on which it is granted a license to operate, per the AWS licensing procedures in Part 27 of the Commission's Rules. This will avoid forcing BRS operators into premature negotiations with auction winners who have no authority to commence operations. Also, the *Fifth NPRM* states that each 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." *Id.* As discussed *infra*, the Commission should make it absolutely clear that an AWS licensee *must* trigger the mandatory negotiation period upon determining, per the formulae recommended in Section II.D *infra,* that it must relocate a BRS operation to avoid potential interference. Finally, while WCA supports the Commission's proposal to permit BRS service providers who lease BRS channels 1 and/or 2 to be included in any relocation negotiations with AWS licensees (*Id.* at 15866-67), the Commission should go further and *require* that BRS service providers/channel lessees be included in the process. Since BRS service providers have the greatest economic stake in BRS relocation and will be most directly affected by how, when and under what conditions relocation will be accomplished, their involvement in relocation negotiations should not be deemed optional.

[35] While WCA does not object to an overriding requirement that mandatory relocation negotiations be conducted in "good faith" (*see id*. at 15870), under no circumstances should any such requirement obligate a BRS service provider to disclose customer information (including but not limited to customer identities and addresses) or other proprietary business data to an AWS licensee at any time, nor should it require a BRS service provider to afford an AWS licensee any access to its customer locations or system facilities.

to be comparable to the old ones.[36] The rationale for providing this right of return is simple – "[t]he purpose of the twelve-month trial period is to ensure that microwave incumbents have a full opportunity to operate their new systems under real-world operating conditions and to obtain redress from the PCS licensee if the new system does not perform comparably to the old system or pursuant to agreed-upon terms."[37]

The Commission's concern that an incumbent might not receive truly comparable facilities as part of a relocation is magnified here, given the competitive posture of AWS and BRS. While a "right of return" policy alone cannot prevent the AWS licensee from engaging in competitive misconduct, it does somewhat mitigate the AWS licensee's incentive to do so by providing the BRS victim a ready avenue of relief. One can only imagine the mischief that could occur if the AWS licensee is permitted by the Commission to select and install replacement facilities at subscriber locations, but is not required to maintain the existing BRS facilities and afford BRS a right of return. Most obviously, in such an environment the AWS competitor would have the perverse incentive to construct substandard replacement facilities for the BRS system. It would know full well that if problems arise after the cut-over to those new facilities, in the absence of a right of return the BRS operator would have no immediate cure. In turn, it would know that while the BRS system operator fights before the Commission for relief from the

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[36] *See Fifth NPRM*, 20 FCC Rcd at 15869, *citing* 47 C.F.R. § 101.75(d).

[37] *Microwave Cost-Sharing Order*, 11 FCC Rcd at 8849. The rationale for a 12-month test period is particular applicable to BRS channel 1 and 2 usage. The Commission has explained that affording a full year of testing assures that the "seasonal variations in precipitation and foliage density" as well as the "seasonal variations in atmospheric ionization" that can effect the propagation of radio waves are fully considered. *See Redesignation of the 17.7-19.7 GHz Frequency Bands, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 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*, Second Order on Reconsideration, 17 FCC Rcd 24248, 24265 n.108 (2002). Because BRS channels 1 and 2 are deployed using line of sight technology that is particularly sensitive to foliage (*see supra* note 6), testing of replacement facilities selected and installed by an AWS competitor through all four seasons would be particularly important.

inadequate replacement facilities, BRS subscribers frustrated with their poor post-migration service will flock to alternative service providers, including the AWS licensee. Thus, unless the Commission affords the BRS licensee control over its own relocation path, a right of return is essential to assuring that BRS interests receive comparable facilities.[38]

Moreover, by providing BRS interests with the ability to select and deploy their own comparable facilities, the Commission can assure that one competitor (the AWS licensee) cannot foist upon the BRS operations technology that might marginally meet the "comparable facilities" definition, but are functionally incompatible from a practical perspective with the other equipment being used by the BRS system on other channels.[39] This is a critical point – any evaluation of whether facilities are "comparable" must include an evaluation of their compatibility with the facilities utilized in connection with other channels that are part of the same system. Allowing the incumbents to select and deploy their own facilities, so long as they are "comparable," will eliminate the need for the Commission to referee disputes over whether the AWS licensee, which has a clear incentive to deliver inadequate facilities to the BRS licensee and system operator, has complied with the comparable facilities requirement. Rather, the BRS

[38] And, if the Commission can safely eliminate the "right of return" by providing BRS with the ability to select and deploy its own facilities, it will materially reduce the costs associated with the refarming of 2150-2162 MHz by eliminating the need for a visit to the subscriber's location to remove the original, obsolete equipment. That additional visit will be a costly one, since not only will the applicable AWS licensee have to fund the direct cost of the truck roll, but it will also have to fund the BRS operator's efforts to schedule appointments, monitor the equipment removal and provide for follow-up contact with each subscriber to assure that the work was performed in a satisfactory manner.

[39] Because WCA is proposing that the incumbents select and deploy their own "comparable facilities," WCA need not here address in detail the suggestion that an AWS licensee should be permitted to utilize wired technology to substitute for a BRS wireless link. Suffice it to say for present purposes that where DSL or cable modem service is available, the wireless subscriber has presumably made an informed decision to subscribe to the wireless service, and not the wired alternative. Before the Commission adopts any rule permitting the AWS licensee to substitute wired for wireless technologies, the Commission should consider how it will explain to the affected BRS subscriber that he or she is being forced by Washington to migrate to a wired technology that the subscriber had previously rejected.

community will make their own decisions regarding comparability, and the "comparable facilities" will only be used as a limit on recovery.[40]

[40] For purposes of WCA's proposal, "comparable facilities" must be defined in a manner that is appropriate in light of the nature of BRS. While the *Fifth NPRM* cites to the "throughput," "reliability," and "operating costs" elements of "comparable facilities" adopted in the PCS/microwave proceeding, it ignores that in subsequent refarmings the Commission has expanded the definition to reflect those situations where incumbents are providing service to end users. *See Fifth NPRM*, 20 FCC Rcd at 15864. While WCA agrees that these factors are pertinent, the Commission must not make the mistake of assuming that comparable facilities for point-to-point microwave stations are the same as those for BRS channel 1 and 2 operations. For example, just last month the Commission in a similar situation reiterated that:

> Comparable facilities are those that will provide the same level of service as the incumbent's existing facilities, with transition to the new facilities as transparent as possible to the end user. Specifically, (1) equivalent channel capacity; (2) equivalent signally capability, baud rate and access time; (3) coextensive geographic coverage; and (4) operating costs.

See Improving Public Safety Communications in the 800 MHz Band, Memorandum Option and Order, WT Docket No. 02-55, FCC 05-174, ¶ 37 (rel. Oct. 5, 2005), *citing 800 MHz Rebanding R&O*, 19 FCC Rcd at 15076-77. A similar point of reference is the Commission's relocation framework for SMR licensees in the upper 200 channels of the 800 MHz band, where the Commission held that the comparable facilities doctrine "requires that the change [in the relocated service provider's facilities] be transparent to the end user to the fullest extent possible" and that the four specific factors relevant to the analysis were system, capacity, quality of service, and operating costs. *See Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band; Implementation of Sections 3(n) and 322 of the Communications Act -- Regulatory Treatment of Mobile Services; Implementation of Section 309(j) of the Communications Act -- Competitive Bidding*, Second Report and Order, 12 FCC Rcd 19079, 19112-13 (1997) ["*800 MHz SMR Second R&O*"]. The Commission also used this analytical framework in defining comparable facilities for licensees relocated by virtue of Nextel's rebanding of the 800 MHz spectrum. *See 800 MHz Rebanding R&O*, 19 FCC Rcd at 15077..

Moreover, the Commission has made clear that comparable facilities must not suffer greater interference than those that are being replaced. *800 MHz SMR Second R&O*, 12 FCC Rcd at 19113 ("Comparable facilities must provide the same quality of service as the facilities being replaced. We define quality of service to mean that the end user enjoys the same level of interference protection on the new system as on the old system.") (citation omitted); *Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies*, Third Report and Order and Memorandum Opinion and Order, 8 FCC Rcd 6589, 6604 (1993) (in determining comparability, the Commission will "consider, inter alia, system reliability, capability, speed, bandwidth, throughput, overall efficiency, bands authorized for such services, and interference protection.") ["*Emerging Technologies Third R&O*"]. This is a critical issue for BRS relocation to the 2.5 GHz band, as the potential for interference, particularly among non-synchronized systems operating in proximity to one another, is a matter of record in WT Docket No. 03-66.

WCA's proposal also serves to protect the subscriber's interest in not having to permit an uninvited "guest" with which it has no relationship into his or her home. The sad reality is that BRS subscribers are going to be substantially inconvenienced by the Commission's decision to refarm the 2150-2162 MHz band, because it necessarily means that each subscriber will have to schedule a visit for installation of replacement equipment and remain at home for that process. While the Commission made the decision, and the AWS community will benefit, it is the BRS system operator who will bear the brunt of the consumer's understandable unhappiness that it is being inconvenienced for a site visit that merely preserves its existing service. BRS system operators generally use professionals to install equipment at the homes and businesses of subscribers. These professionals are highly-trained not only in the technical aspects of their job, but also in customer relations since they are the "public face" of the company to subscribers. BRS system operators are confident that if *their* professionals are making the site visits to replace existing equipment as part of the 2150-2162 MHz refarming, customer dissatisfaction (and the resulting loss of subscribers) can be minimized by leveraging the existing good relationship BRS system operators have with their customers. Obviously, if the AWS competitor is making the site visit, it has a very different incentive and a less customer-friendly dynamic will develop.

In sum, an approach modeled on the 800 MHz rebanding clearly provides an appropriate balance between the desire of AWS licensees to clear the 2150-2162 MHz band promptly and the need for BRS licensees and system operators to maintain both the confidentiality of proprietary information and the integrity of their network. Moreover, while WCA believes that BRS service providers have ample incentive to relocate themselves in a cost-efficient and timely manner, the Commission can address any concerns from the AWS community regarding the cost

and timing of refarming under WCA's proposal by adopting two requirements similar to those adopted to govern the 800 MHz rebanding.

2. Procedures Can Be Implemented To Assure Fair Compensation To The Relocating BRS Operation, While Avoiding Excess Costs.

To control the migration costs that will be incurred by BRS licensees and lessees, and ultimately paid by AWS auction winners,[41] the system adopted last year to govern the 800 MHz refarming process should be the Commission's guidepost here. Consistent with the approach taken there, the Commission should state with crystalline clarity here that: (i) the incumbents' reimbursable costs of relocation are limited to those expenses of the BRS licensee and any spectrum lessee that are necessary to deploy and migrate to "comparable facilities" in accordance with the criteria discussed in Section II.B.2; [42] and (ii) that BRS licensees, BRS lessees and AWS licensees must negotiate and thereafter conduct any necessary involuntary relocation in good faith. In the 800 MHz rebanding proceeding, the Commission recognized that "[t]he overriding requirement of [the Commission's] framework is the good faith requirement."[43]

With that clear, any lingering concerns about incumbent "gold-plating" can be addressed by establishing a process under which BRS incumbents' anticipated refarming costs are subject

[41] Throughout these comments, WCA discusses imposing the costs of clearing BRS channels 1 and 2 upon the AWS licensee that voluntarily initiates mandatory negotiations (presumably because it fears interference from BRS), the AWS licensee that is required to initiate mandatory negotiations because it contemplates deploying facilities that could interfere with BRS, or the F Block AWS licensee. The *Fifth NPRM* solicits comment on whether the costs of relocating a given BRS license should be shared among the AWS licensees that ultimately benefit. *See Fifth NPRM*, 20 FCC Rcd at 15879-80. There is no doubt that multiple AWS licensees will benefit from most BRS relocations and thus cost-sharing may be appropriate. WCA is ambivalent as to how the Commission ultimately provides for AWS licensees to share the costs of refarming BRS from the 2150-2162 MHz band, so long as the process does not alter the Commission's policy determination that all costs of refarming the 2150-2162 MHz band should be borne by the AWS interests and does not slow the receipt by BRS licensees and lessees of their relocation funding.

[42] *800 MHz Rebanding R&O*, 19 FCC Rcd at 15074.

[43] *Id.* at 15077.

to review before relocation has commenced, and then confirmed during a "true-up" process at the conclusion of the refarming. In the 800 MHz rebanding, incumbents were required to estimate their refarming costs and present that estimate to Nextel, either directly or through the Transition Administrator.[44] Upon Nextel's final approval of the estimate (which cannot be unreasonably withheld), the funding requested in the estimate is provided to the incumbent.[45] Upon receipt of the requested funds, the incumbent reconfigures its facilities as necessary to complete relocation, after which the incumbent submits a final accounting of its actual relocation expenses and a determination is made as to whether the incumbent is entitled to additional reimbursement from Nextel (to the extent that the incumbent underestimated its actual costs) or must reimburse Nextel (to the extent that the incumbent's estimate exceeded its actual costs).

WCA believes that a similar approach can and should be used here. However, due to the relatively limited number of BRS facilities that will need to be relocated (remember, there are only 30-50 markets where BRS channels 1 and 2 are currently utilized) and the fact that most are likely to be relocated pursuant to private agreements negotiated among AWS licensees, BRS licensees and BRS spectrum lessees, WCA does not believe it will be necessary for the Commission to impose upon the AWS interests the significant costs and delays associated with any designation of a third-party transition administrator to oversee the process.[46]

Specifically, WCA proposes that the following approach apply either upon unsuccessful conclusion of a mandatory negotiation, or upon the determination by the BRS licensee/lessee that

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[44] *See 800 MHz Rebanding Reconsideration Order*, 19 FCC Rcd at 25129; *800 MHz Rebanding R&O*, 19 FCC Rcd at 15073-74.

[45] *Id*.

[46] If the Commission believes otherwise, then it must assure that whatever third-party administrator it selects is truly neutral and not controlled by or unduly beholden to either BRS or AWS interests.

it desires to either self-relocate or commence an involuntary relocation designed to vacate the spectrum by the ten-year deadline discussed in Section II.C:

- The BRS licensee and any BRS spectrum lessee will provide a written, detailed estimate of their costs of migrating to comparable facilities directly to the appropriate AWS licensee.

- Upon its receipt of the notice/estimate, the AWS licensee will have 30 days within which to either: (1) approve the estimate and send the BRS licensee/lessee the funds requested in the estimate; or (2) ask the BRS licensee/lessee for further clarification of or revisions to those portions of the estimate with which it does not agree. In the latter case, the BRS licensee/lessee will be required to respond with the requested information within ten business days, and the responsible AWS licensee will have ten business days thereafter within which to approve the estimate (including any modifications thereto) and send the funds requested, or take the matter to the Commission for resolution. In any such Commission proceeding, the AWS licensee will bear the burden of proving that the BRS licensee/lessee's proposed facilities are not comparable or that the estimate exceeds the reasonable cost of deploying those comparable facilities.[47]

- Once the requested funds are received, the BRS licensee and any lessee will then commence deployment of the comparable facilities necessary to complete the spectrum refarming.

- Upon completion of that deployment, the BRS licensee and any lessee will promptly notify the responsible AWS licensee that they have completed the relocation process and have commenced operations on the new spectrum. In addition, the BRS licensee and any lessee must, within 90 days of such notice, provide the AWS licensee with a final accounting of their expenses and monetary reimbursement to the extent the advance payment made by the AWS licensee exceeded the actual cost.

- Upon its receipt of the final accounting, the AWS licensee will have 30 days within which to either: (1) approve the final accounting and send the BRS licensee/lessee

[47] *See 800 MHz Reband R&O*, 19 FCC Rcd at 15076 ("If disputed issues remain thirty days after the end of the mandatory negotiation period, the Transition Administrator shall forward the record to the Chief of the Public Safety and Critical Infrastructure Division . . . . The Chief of the Public Safety and Critical Infrastructure Division is hereby delegated the authority to rule on disputed issues, *de novo.*"); *id.* at 15077 ("While parties must first bring disputes over the utmost good faith requirement to the Transition Administrator, disputing parties may subsequently bring breaches of the good faith requirement to the Commission . . . ."); *cf. Petition for Declaratory Ruling Concerning The Requirement For Good Faith Negotiations Among Economic Area Licensees And Incumbent Licensees In the Upper 200 Channels Of the 800 MHz Band*, Memorandum Opinion and Order,16 FCC Rcd 4882, 4884 (2001) ("We also decline to rule that a general relocation plan, based on public information regarding the number of channels and location, constitutes a good faith offer of relocation by an EA licensee. Whether such a generalized relocation plan constitutes a good faith offer of relocation must be examined on a case-by-case basis.").

> any funds to the extent the actual costs incurred exceed the amount previously paid; or (2) ask the BRS licensee/lessee for further clarification of or revisions to those portions of the final accounting with which it does not agree. In the latter case, the BRS licensee/lessee will be required to respond with the requested information within ten business days, and the responsible AWS licensee will have ten business days thereafter within which to approve the final accounting (including any modifications thereto) and send any funds requested, or present the matter to the Commission for resolution.

Since each BRS service provider will have its own needs and requirements during the relocation process, it is imperative that the Commission give BRS service providers the flexibility to identify and request reimbursement for whatever equipment and system modifications are reasonably necessary to assure provision of comparable facilities without disruption of existing service to subscribers.[48] As in the case of the 800 MHz rebanding, the Commission should define the recoverable costs more broadly than it did in connection with the PCS/microwave relocation to assure that, as promised, relocated BRS licensees and lessees incur no costs associated with their relocation, and that the sole responsibility for paying those costs rests with the responsible AWS licensee.[49]

That policy objective, for example, drove the Commission to deviate from the PCS/microwave model and not cap a relocated 800 MHz incumbent's reimbursable transaction costs to two percent of its "hard" relocation costs. Rather than blindly follow its PCS/microwave approach, the Commission left itself the flexibility to accommodate those situations where the two percent cap would deny the relocated incumbent full reimbursement of its relocation costs.[50] It should do the same here.

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[48] *See 800 MHz Rebanding Reconsideration Order*, 19 FCC Rcd at 25152 ("[T]he Transition Administrator may authorize the disbursement of funds for any reasonable and prudent expense directly related to the retuning of a specific 800 MHz system.").

[49] *See id.* at 15129; *800 MHz Rebanding R&O*, 19 FCC Rcd at 15064.

[50] *See 800 MHz Rebanding Reconsideration Order*, 19 FCC Rcd at 25151.

Likewise, in crafting its cost-recovery policies for the 800 MHz band, the Commission abandoned its PCS/microwave ban on the recovery of internal costs and permits incumbents to recover their documented internal costs attributable to relocation during the rebanding of the 800 MHz spectrum. Indeed, the web site for the 800 MHz Transition Administrator leaves no doubt about this: "If [an incumbent's] internal personnel perform reconfiguration or associated planning activities, [the incumbent] will be reimbursed for the actual time incurred by [its] employees at their hourly rate based on actual cost."[51] Hence, consistent with this more recent approach, the Commission should permit a BRS incumbent to fully recover its internal costs associated with relocation of operations on BRS channels 1 and 2. However, Paragraph 25 of the *Fifth NPRM* implies that the Commission might not permit recovery of internal costs, on the thin

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[51] *See* 800 MHz Transition Administrator, Online Reference Guide version 1.1, Funding Guidelines, Internal Labor and Outside Vendors *at* http://www.800ta.org/org/funding/labor.asp ["800 MHz TA Labor and Vendor Funding Guide"]. More specifically:

- Incumbent internal labor incurred to support 800 MHz reconfiguration is reimbursable at established market based rates, whether the time is incurred during normal business hours or overtime hours, subject to the following criteria:
- The rates (both regular and overtime rates) are based on established market based bill rates that the licensee currently charges for similar work.
- The costs are incremental to the licensee, i.e., the costs would not have been incurred "but for" the FCC mandate to reconfigure 800 MHz systems.
- Any overtime could not be accomplished during normal business hours.
- The costs are the minimum necessary to obtain facilities comparable to those presently in use.

See 800 MHz Transition Administrator, Incumbent Labor Rate Reimbursement Policy *at* http://www.800ta.org/content/PDF/policy/IncumbentLaborRatePolicy.pdf. Further, "[w]hen no market rate can be substantiated, incumbent internal labor incurred to support 800 MHz reconfiguration is reimbursable at base hourly rates plus reasonable overhead, whether the time is incurred during normal business hours or overtime hours. . . ." *Id.*; *see also* 800 MHz TA Labor and Vendor Funding Guide ("[t]o determine the hourly rate of a salaried employee, divide the employee's salary by 2,080 hours. . . . You will need to keep time sheets (or equivalent supporting documentation) indicating the activities performed and actual hours worked for each of your employees for which you will seek reimbursement.").

reed that "such expenses are difficult to determine and verify."[52] Yet, the Commission obviously concluded otherwise in connection with the 800 MHz rebanding proceeding, and there is no reason for it to do otherwise here. Indeed, failure to afford BRS service providers the right to recover their internal relocation costs would be no minor matter: the record before the Commission throughout this proceeding establishes that migrating subscribers from the 2150-2162 MHz band will be a labor-intensive process. As WCA noted five years ago in response to the very first *Notice of Proposed Rulemaking* in this proceeding:

> Operators will incur extraordinary expenses to notify . . . subscribers that their customer premises equipment must be replaced, to schedule appointments for such replacement, and to then supervise and successfully complete . . . truck rolls and equipment change-outs. In addition to the costs associated with acquiring new customer premises equipment to replace existing equipment (which obviously must be reimbursed), operators will incur huge expenses in connection with the diversion of their own personnel from the task of marketing and installing new subscribers to the task of relocation.[53]

Hence, the internal costs of accomplishing relocation without compromising day-to-day operations may prove substantial. To ensure full reimbursement of BRS relocation costs, it is absolutely essential that BRS service providers be permitted to recover those internal costs associated with diverting existing personnel and other internal resources from their existing functions to the task of relocation, and, where applicable, the costs of hiring new personnel and

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[52] *Fifth NPRM*, 20 FCC Rcd at 15869.

[53] WCA 00-258 NPRM Comments at 50; *see also* Comments of SpeedNet, L.L.C., ET Docket No. 00-258, at 5 (filed Nov. 22, 2005) ("[t]he time and costs associated with such a transition involves at a bare minimum informing the customer that a change is required, having the customer contact SpeedNet to schedule an appointment, the inconvenience to the customer at having to be home for the appointment, transportation and labor costs in sending a technician to change the equipment and the cost of the equipment itself. In-band or single band transceivers are available, yet often exceed $400 each for just the equipment. In addition, SpeedNet must arrange for personnel to arrange such appointments and must take up hundreds of hours of employee hours arranging, coordinating and executing such changes, all time taken away from marketing and expanding its services to future customers.").

acquiring other additional resources for that purpose, provided that all such costs are directly attributable to relocation and are sufficiently itemized and documented as such.

3. The Commission Can Avoid Delays In Refarming By Establishing A Deadline For BRS Relocation.

To avoid any concern that BRS interests given control over their own migrations will not complete the process of deploying comparable facilities in due time, the Commission should establish a hard deadline by which a given BRS operation must deploy its comparable facilities and vacate the 2150-2162 MHz band.

Obviously, the time it will take to relocate any given BRS usage of channels 1 and 2 will depend upon, among other things, the nature of that usage, the extent of that usage (particularly the number of subscribers that must receive new equipment), the availability of the equipment necessary to construct comparable facilities, the availability of personnel to complete the migration, weather conditions, etc. In the 800 MHz rebanding proceeding, the Commission mandated that refarming must be completed within 36 months of the Commission's release of the Public Notice announcing the start date of band reconfigurations in the first NPSPAC region.[54]

Here, however, WCA believes that in most cases migration can be completed sooner. Therefore, WCA proposes that a BRS licensee be required to cease operations in the 2150-2162 MHz band no later than 24 months following receipt from the appropriate AWS licensee of funds equal to the estimated cost of relocation, as discussed *supra* in Section II.B.2.[55] However,

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[54] *See 800 MHz Rebanding R&O*, 19 FCC Rcd at 15076.

[55] To promote the earliest possible relocation of BRS from 2150-2162 MHz to the 2496-2690 MHz band, BRS service providers should be afforded immediate authority to operate in their replacement spectrum in the 2496-2690 MHz band, as well as in the 2150-2162 MHz band. Such dual authority is necessary to ensure a seamless relocation, as it will permit BRS systems to operate concurrently in both their existing spectrum and in their relocation spectrum until all subscribers can be provisioned with the equipment necessary to operate in the latter. Requiring BRS licensees to seek special authorization as part of the

it certainly may be that in a handful of cases, particularly where small companies have substantial subscriber bases, additional time will be required, and the Commission should be prepared to extend the deadline where good cause is shown.[56]

C. *The Proposed "Sunset" Of Relocation Obligations Is Inconsistent With The Commission's Stated Objective Of Assuring That AWS Funds The Refarming Of The 2150-2162 MHz Band And That The BRS Industry Not Be Disrupted.*

The *Fifth NPRM* requests comment on whether the Commission should impose a ten-year sunset on the AWS auction winners' obligation to fund BRS relocation, similar to that employed in the PCS/microwave regime.[57] Under this proposal, if a BRS channel 1 or 2 operation is not relocated within ten years,[58] the BRS license would become secondary, the BRS licensee and any spectrum lessee would be required to protect subsequent AWS deployments against interference, the BRS licensee and any spectrum lessee would be required to suffer interference from subsequent AWS deployments, and the BRS licensee and any spectrum lessee would be required

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refarming process will only delay the relocation of BRS and the introduction of AWS. *See, e.g., 800 MHz SMR First R&O,* 11 FCC Rcd at 1510 ("[A]ny relocation of an incumbent must be conducted in such a fashion that there is a 'seamless' transition from the incumbent's 'old' frequency to its 'relocated' frequency (that is, there is no significant disruption in the incumbent's operations.").

[56]As discussed *infra* at Section II.I, the AWS auction winners should be required to fund the repacking of Broadcast Auxiliary Service ("BAS") operations in the 2450-2500 MHz band to the 2450-2486 MHz band no later than two years from the later of the effective date of the reconsideration decision in IB Docket No. 02-364 or the effective date of the decision resolving the *Fifth NPRM.* Absent the repacking of BAS use of the band, BRS use of the 2496-2500 MHz band will be problematic because of the nationwide, itinerant use of BAS channel A10. Under WCA's approach, BAS likely will vacate the 2496-2500 MHz band prior to any involuntary BRS relocations. However, if the Commission does not adopt WCA's proposal, in no event should it require any involuntary relocations until the 2496-2500 MHz is free of itinerant, nationwide use by BAS.

[57] *See Fifth NPRM,* 20 FCC Rcd at 15870.

[58] The *Fifth NPRM* solicits comment as to whether this ten year period should commence upon a single date or upon the issuance of the first AWS license for each AWS band segment. *See id.* From WCA's perspective, the issue is of no moment – there should be no sunset date and instead, as discussed above, the Commission should require all BRS channel 1 and 2 operations to be relocated no later than ten years following issuance of the F Block AWS auction for the geographic area at issue.

to fund their own relocation to alternative facilities. What the *Fifth NPRM* does not address, however, is how this draconian approach possibly can be squared with the Commission's position that AWS auction winners must fund the refarming of the 2150-2162 MHz band and that they must accomplish the refarming without disruption to BRS operations. The answer is simple – a "sunset" would be inherently at odds with the Commission's stated goals in this proceeding and thus should be rejected.

The risk of a fundamentally unfair result for BRS licensees here is patent. As the Commission is well aware, in many areas of the country AWS auction winners face substantial band-clearing efforts separate and apart from the need to relocate BRS operations from 2150-2162 MHz. Indeed, it was for this reason that the Commission afforded AWS auction winners *fifteen* year license terms and the same period of time to demonstrate that they are providing "substantial service" as required under the AWS licensing rules.[59] And, of course, since AWS is a Part 27 service, an AWS licensee need only provide service to 20% of the population of its service area to demonstrate substantial service and secure renewal.[60] Thus, it is a virtual certainty that in many areas of the country (and particularly rural areas where BRS-based service providers like W.A.T.C.H. TV Company, Sioux Valley Wireless, Evertek, Inc. and CommSpeed thrive), AWS facilities will not be deployed within the ten-year sunset period the *Fifth NPRM* suggests.

Thus, notwithstanding the *Fifth NPRM's* pronouncement that AWS auction winners "must guarantee payment of all [BRS] relocation expenses"[61] the practical effect of the

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[59] *See* 47 C.F.R. § 27.13(g).

[60] *See, e.g. Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service*, Report and Order, 12 FCC Rcd 10785, 10844 (1997).

[61] *Fifth NPRM*, 20 FCC Rcd at 15869.

Commission's proposal will almost certainly be that in some areas of the country, particularly the more rural areas where use of BRS channels 1 and 2 is most pervasive, BRS licensees and system operators will be left to their own devices. The Commission's promise of a cost-free, seamless transition to replacement spectrum will prove hollow. Instead, the harsh reality for these small, but highly successful, operators is that ten years will come and go, they will be relegated to secondary status and, when AWS finally arrives, the BRS system will have to clear the band and either fund its own relocation to alternative spectrum or cease operating.

The fundamental unfairness of this approach is exacerbated by the competitive relationship between BRS and AWS. Adoption of the *Fifth NPRM*'s sunset proposal will create a perverse incentive for AWS licensees to schedule their deployments to avoid proximity to the 30-50 BRS systems that use 2150-2162 MHz until after ten years have passed, thereby shifting the costs of relocation entirely onto the BRS service providers with which they will compete.[62] *There simply is no public interest justification for exposing BRS service providers and their customers to that sort of risk.*

The *Fifth NPRM* is mute as to what interest a sunset purports to serve. However, to the extent the Commission's objective here is to expedite relocations, there is a better way – the establishment of a hard deadline by which BRS systems must vacate the 2150-2162 MHz band.[63]

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[62] The Commission did not have these concerns in the PCS/point-to-point microwave context. Since PCS licensees had just a five-year buildout period and had no competitive incentive to keep point-to-point microwave incumbents in limbo, the Commission could fairly assume that PCS licensees had more than ample incentive to complete the relocation process before the ten-year sunset date. *See Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensees,* Notice of Proposed Rulemaking, 11 FCC Rcd 10187, 10197 (1996) (noting that "many broadband PCS licensees may meet their five-year construction obligations early").

[63] The alternative, of course, would be to impose no sunset, and no hard deadline, but to retain the funding obligation in place for so long as it takes for the band to be refarmed through market forces. Quite frankly, although WCA recognizes that this approach is contrary to the Commission's thinking on the topic, WCA believes that this would be the best approach. To the extent that any AWS licensee desires to relocate a BRS operation, it would always have that right under WCA's proposal. To the extent any BRS

WCA therefore submits that a more fair and effective solution to require every BRS licensee and lessee operating in the 2150-2162 MHz band relocate, at the expense of the F Block AWS auction winner, to comparable facilities no later than ten years following the grant of the F Block AWS license for the REAG in which the BRS station has its GSA centroid.[64] Any concerns regarding potential BRS "gold-plating" of facilities during this involuntary relocation process can be addressed by adoption of the procedures discussed *supra* in Section II.B.2. Given the unique competitive posture of AWS and BRS, a hard deadline for completion of AWS-funded relocations (as opposed to ending all AWS funding obligations on that date) is the most effective defense BRS service providers can have against dilatory AWS licensee conduct during the relocation process.

There is ample precedent for this approach. For example, in connection with Nextel's receipt of a nationwide license for the G Block PCS license in conjunction with the 800 MHz rebanding, it was recognized that Nextel's operations posed a risk of interference to BAS

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operation desires to relocate to comparable facilities, it could always do that and recover its costs. Neither AWS nor BRS would be harmed by delaying relocation beyond ten years. Indeed, in the absence of any deadline the only reason a given BRS facility would not relocate because there is no market demand for relocation by either AWS or BRS, and in such a situation one is hard pressed to identify any public interest harm in delaying relocation.

[64] The GSA centroid for BRS facilities that were initially site-based is a matter of record maintained within the Universal Licensing System. For purposes of BRS GSAs established by Basic Trading Area ("BTA") boundaries, the GSA centroid should be defined as the point that has a latitude that is the midpoint between the easternmost and westernernmost latitudes of the BTA and a longitude that is the midpoint between the northernmost and southernmost longitudes of the BTA. As discussed above, any of the AWS auction winners in geographic proximity to a given BRS operation at 2150-2162 MHz may cause interference to or suffer from that BRS operation. Thus, it is only fair that any AWS auction winner have the ability to relocate BRS operations that will cause it interference, and that any AWS auction winner have the obligation to relocate BRS operations to which it will cause interference. However, if BRS facilities are not relocated prior to the ten-year deadline, the obligation to fund relocation should fall upon the F Block AWS auction winner for the REAG in which the relevant BRS GSA centroid resides, since it is this AWS licensee that generally gains the greatest benefit by the relocation of BRS. Again, WCA is ambivalent as to whether the Commission adopts rules allowing the F Block AWS auction winner to recover a portion of its funding from other AWS licensees, so long as the process does not slow the receipt by BRS licensees of their relocation funding, or reduce the amount thereof. *See supra* note 41.

operations in the band. Under the traditional PCS/microwave approach, Nextel merely would have been required to relocate BAS when Nextel proposed to deploy facilities that would cause interference, and that obligation would sunset after ten years. However, the Commission chose not to apply its traditional approach. Instead, Nextel was required, within 30 months of the effective date of the *Report and Order* in WT Docket No. 02-55, to provide for refarming of *all* BAS operations from the 1990-2025 MHz band, even if such operations would not suffer interference from facilities being deployed by Nextel.[65] WCA's proposal for BRS relocation is consistent with this approach – AWS auction winners must fund the relocation of all BRS operations in the band by a date certain, regardless of whether their deployments by that date would interfere with BRS.[66]

D. *BRS Facilities Within Line Of Sight Of Proposed AWS Base Station Deployments Must Be Relocated Unless The BRS Licensee And Any Spectrum Lessee Agree Otherwise.*

As the Commission recognizes in the *Fifth NPRM*, an AWS licensee must relocate a BRS channel 1 or 2 system before that AWS licensee deploys facilities that pose a threat of harmful interference to the BRS operation.[67] Thus, the *Fifth NPRM* solicits comment on what technical standards should be applied to determine when a contemplated AWS facility poses such a threat.[68]

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[65] *See 800 MHz Reband R&O*, 19 FCC Rcd at 15102.

[66] Of course, the Commission's approach for refarming the 800 MHz band also serves as precedent for WCA's approach since there, too, Nextel is required to fund the relocation of operations to their new channels without regard to whether Nextel's own 800 MHz operations would cause interference. *See id* at 15064.

[67] *See Fifth NPRM*, 20 FCC Rcd at 15871.

[68] *Id.*

As a preliminary matter, the Commission has it wrong in proposing that AWS licensees generally be permitted to relocate BRS on a "link-by-link basis" such as was done in connection with the PCS/microwave relocation.[69] While the *Fifth NPRM* acknowledges that "[i]n *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 . . . 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,"[70] WCA is unaware of *any* circumstance under which a link-by-link approach would be appropriate.

The basic flaw in the *Fifth NPRM* is its failure, once again, to propose an approach that accommodates the recognized differences between BRS and point-to-point microwave. As discussed *supra*, BRS channels 1 and 2 primarily are being utilized today either for upstream transmissions from *multiple* broadband subscribers to a base station or for downstream video transmissions from a headend to *multiple* receive locations. Thus, as the Commission itself recognizes:

> BRS operations . . . 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.[71]

In other words, point-to-point microwave licensees receive only the right to deliver a relatively narrow class of non-consumer services from Point A to Point B over spectrum for which they pay nothing (and whose licenses are rarely transferred in the secondary market except

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[69] *See id.* at 15863.

[70] *Id.* (emphasis added).

in conjunction with the businesses they support).[72] By contrast, holders of BRS spectrum rights (many of which were bought and paid for at auction or through the secondary market) may deliver a variety of services directly to an unlimited number of customers over point-to-multipoint systems within their Commission-designated service areas. Indeed, the Commission has left no doubt that the right to provide wide-area, consumer-based services to multiple points is the *sine qua non* of BRS.[73]

Given the manner in which BRS channels 1 and 2 are being utilized at present, a link-by-link approach would seriously undermine the viability of BRS services offerings on those channels. Each subscriber link (whether upstream in the case of a broadband service or downstream in the case of a video service) is part and parcel of a single system – it shares equipment, service and marketing resources with all of the subscribers. Under a link-by-link approach, however, the symbiotic relationship among a system's subscribers would be destroyed – some would remain on the 2150-2162 MHz band system, while others would be migrated to one or more other systems. The result would be to impose substantial additional operating costs

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[71] *Id*. at 15879.

[72] *See Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies*, Notice of Proposed Rulemaking, 7 FCC Rcd 1542, 1544 (1992) ("[T]he private operational fixed licensees [in the 2 GHz band] are local governments (including public safety), petroleum producers, utilities, railroads, and other business users such as the manufacturing, banking and service industries. Systems range from a few links to very large systems that use hundreds of links. They are used as part of communications systems for local government and public safety organizations. These facilities are also used to control electric power, oil and gas pipeline and railroad systems, and to provide routine business voice, data and video communications. The common carrier licensees are telephone, cellular telephone, and paging providers. Telephone companies use this band to provide telephone service to remote areas, cellular companies to interconnect cell sites with mobile telephone switching offices, and paging companies for control and repeater stations.").

[73] *See, e.g., 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; Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, Report and Order, 10 FCC Rcd 9589, 9610 (1995) ["*BRS Auction Order*"]. As acknowledged in Paragraph 20 of the *Fifth NPRM*, BRS relocation also represents the first time in which the spectrum at issue is frequently leased to non-licensee system operators who provide service to the public.

on the 2150-2162 MHz band system, as the service provider could no longer spread many of its costs across an entire subscriber base.

Because of the point-to-multipoint nature of BRS, the standards referenced in Paragraph 28 of the *Fifth NPRM* for determining whether a given PCS system interferes with a point-to-point microwave link are wholly inapplicable. A different approach, one that is based on the point-to-multipoint nature of BRS and the particular manner in which AWS licensees will utilize the 2110-2155 MHz band, is required.

The Commission has mandated that AWS systems deploy Frequency Division Duplex ("FDD") technology, and has dictated that AWS licensees utilize their spectrum in the 2110-2155 MHz band solely for base-to-mobile communications. By contrast, as discussed at note 4 *supra*, BRS channels 1 and 2 are primarily used for upstream, customer-to-base station transmissions in FDD wireless broadband systems. In a handful of cases, BRS channels 1 and 2 are used for downstream transmission of analog video programming. To the best of WCA's knowledge, BRS channels 1 and 2 are not used for downstream digital transmissions, whether data or video. Thus, the task before the Commission is to identify when AWS base station transmissions threaten to cause interference to the types of systems deployed on BRS channels 1 and 2.

A link-by-link approach is particularly inappropriate with respect to those situations in which the spectrum is being used for communications from subscribers to the BRS base station. In such a case, the interference will occur at the base station, and such interference will impact multiple subscribers. As is discussed in detail in the comments being filed today by Sprint Nextel Corporation, regardless of their frequency block, AWS base stations in the 2110-2155 MHz band pose a substantial threat of interference to any incumbent BRS upstream operation to which they have a direct line of sight. Thus WCA believes that an AWS licensee should be

required to relocate any BRS *system* before the AWS licensee deploys a base station transmitting in the 2.1 GHz band that is within the line of sight to any BRS base station antenna system that receives upstream transmissions from subscribers using the 2150-2162 MHz band. For purposes of conducting these analyses, AWS licensees should be required to utilize the methodology used prior to the January 10, 2005 effective date of the new 2.5 GHz rules for identifying interference to Multipoint Distribution Service ("MDS") "response station hubs" (the term of art used for MDS base station receivers).[74]

With regard to the few systems that still utilize the 2150-2162 MHz band for the transmission of downstream analog video programming, the analysis is somewhat different because it is at the subscriber location, not at the transmission headend, that interference occurs. BRS licensees have been authorized to serve subscribers at any location within their GSA, and have historically been entitled to interference protection at every point within that authorized service area. Thus, an AWS licensee should be required to commence mandatory negotiations with any BRS licensee and spectrum lessee engaged in the downstream transmission of analog video programming whenever the AWS licensee proposes to deploy a base station that has a line of sight to the BRS station's GSA. For purposes of this analysis, it should be assumed that BRS reception equipment is installed 30 feet above ground level at each point within the GSA, and calculations should be conducted based on the actual height of the AWS transmission antenna, actual terrain elevations and assuming 4/3 earth radius propagation characteristics. This is the approach that was utilized successfully in connection with MDS and Instructional Television Fixed Service interference analyses for more than two decades until the Commission's recent

[74] *See* "Commission Amends Methodology Used For Calculation Of Interference Protection And Data Submissions For MDS And ITFS Station Applications For Two-Way Services," *Public Notice*, DA 00-938 (rel. April 27, 2000).

move to a purely geographic licensing system,[75] and it has proved to protect BRS receive sites from interference. There is no reason to reinvent the wheel here.[76]

E. *Until Migrated To Replacement Spectrum, Operating BRS Systems Must Be Free To Serve New Subscribers And, Where Necessary To Meet Growing Subscriber Demand, Modify Existing Facilities Or Add New Base Stations Within Their GSAs.*

Citing a desire to provide AWS licensees with "a stable environment in which to plan and implement new services," the *Fifth NPRM* proposes "that major modifications and extensions to existing BRS systems" deployed after the effective date of the order resolving the *Fifth NPRM* be limited to secondary status (and thus subject to interference from AWS) and that such deployments be ineligible for relocation compensation.[77] WCA vigorously objects – adoption of the proposed rule would be fundamentally unfair to BRS system operators, placing the interests of AWS licensees that may never construct facilities in a given area far ahead of the BRS interests that are today providing the public with valuable services.[78] Indeed, the proposal is patently absurd when viewed in the context that an AWS licensee has no obligation to ever construct near a given BRS facility. It is impossible to see the equity of giving an AWS licensee who has no immediate pressure to build its facilities the right to stop a competing BRS provider

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[75] *See, e.g.* 47 C.F.R. § 21.902(f)(5)(2004).

[76] Although WCA believes that the standards it proposes today are sufficiently conservative as to require relocation of virtually all BRS systems operating within the 2150-2162 MHz band that are threatened by AWS interference, the Commission should recognize the possibility that in some cases newly-deployed AWS systems may nonetheless cause actual interference to BRS. The Commission should make clear that if an AWS system does cause actual interference to BRS, the AWS licensee is responsible for curing that interference.

[77] *Fifth NPRM*, 20 FCC Rcd at 15867-68. To define what modifications are "major," the Commission proposes 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." *Id.* at 15868.

from improving its facilities while the AWS licensee develops its own deployment plans at its leisure. If AWS licensees are truly concerned about any preclusive effect of ongoing BRS system development in the 2150-2162 MHz, they can eliminate the problem simply by commencing a mandatory negotiation and relocating BRS service providers sooner rather than later.

Once again, the problem here is that the Commission is proposing a rote application of the rules developed to guide the PCS/microwave migration, despite fundamental differences between the two situations. Indeed, although the *Fifth NPRM* pays lip-service to the Commission's pronouncement in the PCS/microwave decision that "[e]xisting licensees must be allowed to operate without devaluing the usefulness of their 2 GHz facilities,"[79] the proposal advanced by the Commission would substantially devalue existing facilities to the detriment of the BRS operations the Commission has promised to protect.

Given the nature of point-to-point microwave, one can understand the Commission's conclusion during the 1990s that a restriction on future growth of point-to-point microwave in the PCS band would not substantially devalue existing microwave facilities. Each link in a point-to-point microwave system is, for all practical purposes, free standing. When the Commission banned new point-to-point links in the spectrum reallocated for PCS, it did not affect the value of the existing ones, nor did it preclude point-to-point microwave licensees from going about their business. All it did was drive new point-to-point microwave deployments to

[78] The Commission must not forget that an AWS licensee has no obligation to serve any particular area, so long as it provides service 15 years after securing a license to 20% of the population of its authorized service area.

[79] *Emerging Technologies First R&O*, 7 FCC Rcd at 6891. *See also Fifth NPRM*, 20 FCC Rcd at 15867-68.

other bands reserved for such use. Doing so, however, had no impact on the existing point-to-point microwave facilities, the system operator, or the public.

The same certainly cannot be said here. The system operator that is today providing broadband and video services in the 2150-2162 MHz band has made substantial investment in point-to-multipoint facilities that are capable of serving not only its current subscriber base, but also meeting the ever-growing demand for its service offerings. Very simply, the problem is that BRS is a geographically licensed service in which licensees are authorized to construct facilities anywhere within their Commission-designated service areas, rather than merely between two specifically licensed points. If the proposal advanced in the *Fifth NPRM* is adopted, however, the expansion capacity system operators have already built into their networks in reliance on this authority will be rendered unusable. That, in turn, could jeopardize the economic viability of the current system. BRS businesses depend on the their ability to add new subscribers, both to replace those that inevitably churn off a system and to spread the cost of the system over a larger subscriber base, thus allowing the fees charged to the public for service to remain competitive. If the Commission were to halt system development and subscriber growth, those systems that are not profitable might be forced to shut down because their would be no hope of future growth, while those that are marginally profitable today would slowly descend into non-profitability as the system operator would be banned from replacing the inevitable churn.

None of this serves the public interest. The *Fifth NPRM* never explains how the consumer will be better off if BRS is precluded from offering its 2150-2162 MHz band service when the AWS licensee is not itself ready to offer service over the band. Particularly in those areas of the country where BRS may be the only broadband service available, it would be absurd to prevent BRS from adding new subscribers at 2150-2162 MHz, or making system

modifications necessary to meet growing demand for service in that band, unless and until the migration to comparable facilities has occurred.

WCA trusts that the AWS community will appreciate the position of BRS licensees and system operators and not contest WCA's position. Indeed, it was not long ago that the Commercial Mobile Radio Service ("CMRS") industry was faced with a threat to relocation of its backhaul facilities, and vigorously fought any freeze on new deployments or modifications of old ones. According to the Cellular Telephone Industry Association at the time:

> "[T]he Commission proposes to grandfather existing terrestrial fixed users in the portion of the [18 GHz] band being redesignated for primary satellite use. Under the proposed rule, the grandfathered licensees would not be able to expand or change their point-to-point microwave operations in any aspect if it causes increased interference to satellite users who have primary use of that spectrum. In effect, grandfathering would freeze a licensee's operations, preventing expansion of services that by definition are not existing services. Since CMRS networks are characterized by rapid growth which requires the continual construction and operation of new sites, the inability to use new point-to-point microwave links to backhaul traffic from new sites will require CMRS carriers to abandon their existing grandfathered facilities, since a chain with broken links is no use.
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> With respect to the spectrum for which terrestrial fixed services have co-primary status [with satellite services], there are serious concerns that microwave fixed service can not share spectrum with satellite operators. This would prohibit future growth in the proposed co-primary channels, forcing incumbents to relocate or stagnate. . . . *The pulse of a competitor in a competitive marketplace is dependent on its ability to expand to meet consumer demand.* Offering CMRS carriers the choice between freezing their existing point-to-point microwave networks, or abandoning their incumbent links, is not prudent spectrum management policy.[80]

The same thinking should apply here.

Moreover, a ban on system modifications or expansions would compromise the rights that BRS BTA holders have already bought and paid for at auction, and thus the Commission

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[80] Comments of The Cellular Telecommunications Industry Association, IB Docket No. 98-172, at 4-5 (filed Nov. 19, 1998) (emphasis added).

must consider whether such a ban would constitute an impermissible *post hoc* change to the terms and conditions of the MDS BTA auction. As the Commission explained when it adopted the BTA licensing system for MDS in 1995:

> The MDS station facilities within the auction winner's BTA may be expanded or modified throughout the BTA service area so long as the system continues to be in compliance with our technical rules and protects incumbent MDS and ITFS facilities. The facilities may be expanded beyond the BTA or into the protected service area of an incumbent with an agreement from the entity that controls the adjacent BTA or the incumbent protected 35-mile circular area.[81]

Thus, the ability to freely add new facilities was part and parcel of what BRS BTA authorization holders have purchased. The D.C. Circuit "start[s] from the intuitive premise that an agency cannot, in fairness, radically change the terms of an auction after the fact,"[82] and has confirmed that a "bidder in a government auction has a 'right to a legally valid procurement process'; a party allegedly deprived of this right asserts a cognizable injury."[83] Clearly, had successful bidders at the MDS BTA auction known that the Commission might suspend their rights to modify and expand their facilities for an extended period of time, they would have adjusted their bids and subsequent investments in MDS deployment to account for that risk. Thus, if the Commission moves forward with the proposal advanced in the *Fifth NPRM*, it will open the entire relocation regime to legal challenge that could add a cloud of uncertainty to this summer's auction of the AWS spectrum.

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[81] *BRS Auction Order*, 10 FCC Rcd at 9610-11.

[82] *U.S. Airwaves v. FCC*, 232 F.3d 227, 235 (D.C. Cir. 2000).

[83] *Id.* at 232, *quoting DIRECTV, Inc. v. FCC*, 110 F.3d 816, 829 (D.C. Cir. 1997). It is also clear that post-auction decisions that defeat the auction process are actionable, even where the auction itself was conducted properly – as the D.C. Circuit has noted, "[t]here is no basis for suggesting . . . that *ex post* changes can never affect the validity of a government auction." *Id.* at 232.

F. *BRS Licensees And Lessees Should Enjoy The Same Right To Self-Relocation Afforded Point-To-Point Microwave Licensees Under the PCS/Microwave Model.*

To promote an expedited clearing of the 2150-2162 MHz without compromising the customer relations and confidentiality concerns discussed above, the Commission should permit BRS licensees/lessees to self-relocate to comparable facilities at any time, and to be funded in that effort by the F Block AWS licensee (the licensee that gains the most by migration of BRS channels 1 and 2 from the 2150-2162 MHz band).[84] In providing for PCS reimbursement of point-to-point microwave incumbents who voluntarily relocated themselves out of the 2 GHz band before the commencement of any negotiations, the Commission recognized that:

> incumbent participation will accelerate the relocation process by promoting system-wide relocations. Incumbent participation will also give microwave incumbents the option of avoiding time-consuming negotiations, allowing for faster clearing of the 2 GHz band in some instances. We believe that promoting system-wide relocation in this way may even reduce the overall cost of clearing the 2 GHz band.[85]

WCA submits that the same results will attach here if the Commission allows BRS licensees and lessees to self-relocate prior to the conclusion of any mandatory negotiation period (at the expense of the F Block AWS auction winner). In such cases, the BRS interests would deploy and migrate to comparable facilities as if they were doing so following an unsuccessful mandatory negotiation. The BRS incumbents would seek reimbursement from the AWS auction winner of the F Block license whose licensed REAG service area encompasses the centroid of the GSA of the BRS channel 1 or 2 facilities in question. As with any relocation conducted by the BRS incumbents, the F Block winner will be protected from excess costs by the requirement

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[84] This would permit a BRS service provider to self-relocate before an AWS auction winner has initiated mandatory negotiations, or where mandatory negotiations have commenced but no agreement has been reached.

[85] *Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation*, Second Report and Order, 12 FCC Rcd 2705, 2717 (1997) (citations omitted).

that only costs associated with comparable facilities be reimbursed and the prior approval procedures discussed above (not to mention whatever rules the Commission ultimately adopts in this proceeding regarding the sharing of band-clearing costs among AWS interests).[86]

The self-relocation approach proposed by WCA will not only benefit the BRS system operator, but will also reduce the disruption of consumers resulting from the refarming of the 2150-2162 MHz band. For example, as previously explained in this docket, one of the primary concerns BRS system operators have with any migration from 2150-2162 MHz is the negative impact on the subscriber, who will be required to remain at home for a service call during which its current consumer premises equipment will be exchanged for equipment capable of operating on the new spectrum.[87] The loss of customer good-will caused by this disruption is a "soft cost" that simply cannot be fully reimbursed, and must be minimized wherever possible. Operators may choose to minimize the disruption by starting to migrate BRS customers immediately to currently-available alternate spectrum whenever a routine service call is made to the home, without awaiting the completion of a mandatory negotiation and involuntary relocation. While some operators are spectrum constrained and may not be in a position to avail themselves of this option, others may have spectrum that had been set aside initially for future use as the customer

[86] The *Fifth NPRM* proposes to deny relocation to any facilities "newly-authorized" in the 2150-2160 MHz band after the effective date of the next *Report and Order* in this proceeding. It appears that the Commission is using the phrase "newly-authorized" to refer to the issuance of new geographic licenses authorizing operations in the band. WCA agrees that, as the Commission auctions new BRS geographic licenses to replace the handful of BTA authorizations that have been forfeited since the 1996 initial auction, the auction winner should not have a right to relocation, but instead should have an immediate authority to operate at 2496-2500 MHz and 2686-2690 MHz pre-transition, or 2496-2502 MHz and 2618-2624 MHz following transition. However, the Commission should make clear that to the extent a BRS licensee is operating in the 2150-2162 MHz band prior to the effective date of the next *Report and Order* in this proceeding and must file an application pursuant to Section 27.1209 of the Rules in connection with a new or modified facility because of proximity to a quiet zone, environmental issues, etc., such facility will be entitled to relocation. Again, to the extent the AWS community desires to minimize its relocation costs, its solution is to relocate the existing BRS operations in the band sooner rather than later.

[87] *See* WCA 00-258 NPRM Comments, at 48-53; MDS Industry 2.1 GHz Proposal, at App. A note 8.

base expands. This expansion spectrum could be put to use more rapidly as part of a migration plan, and the designated BRS channel 1 and 2 replacement spectrum in the 2.5 GHz band would then become that operator's expansion spectrum once it is cleared.

G. *Both The BRS Licensee And Any Spectrum Lessee Should Be Necessary Parties To Any Mandatory Negotiation Or Involuntary Relocation.*

As the Commission is well-aware, in many instances BRS channels 1 and 2 have been leased by their licensee to system operators that utilize the spectrum for the provision of wireless broadband services. The *Fifth NPRM* solicits comment on the appropriate role of the spectrum lessee in the refarming process.[88] WCA respectfully submits that, while the licensee remains in *de jure* control of the spectrum and is clearly a necessary party to mandatory negotiations or involuntary relocations, the spectrum lessee should also be a necessary party.

WCA's position is based on a simple fact of life – BRS spectrum lessors have generally very little invested in their facilities, as it is generally the BRS spectrum lessee that has constructed all of the facilities associated with the wireless broadband or video operations. Thus, the incentives and motivations of the licensee do not necessarily mirror those of the lessee, and it cannot be said that all existing lease agreements – most of which were entered into long before the Commission's decision to refarm the 2150-2160 MHz band – specifically address refarming.[89] Unless the Commission assures that the spectrum lessee can participate in mandatory negotiations and has a role in any involuntary relocation, there is a substantial risk that the very companies that have invested the most in bringing BRS-based services to the public will be grievously harmed. That is not a result the Commission should be looking to promote.

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[88] *See Fifth NPRM*, 20 FCC Rcd at 15866-67.

[89] While the *Fifth NPRM* suggests that issues between the licensee and the lessee be addressed in a private agreement between the parties (*see id.* at notes 68 and 69), unless the lessor is a necessary party, the licensee will have no incentive to negotiate such a private agreement.

The issue before the Commission here will have applicability far beyond the BRS refarming, as it will set a precedent to be applied whenever the Commission explores the relocation of spectrum in which leasing has been permitted. And, while BRS was one of the first services where licensees leased spectrum, the Commission's *Secondary Markets* initiative assures that the issues presented by migration of leased BRS operations will be presented in many future cases of spectrum refarming. Since refarming will presumably become more common in the coming years as the Commission seeks to squeeze more use out of prime spectrum, potential spectrum lessees in all bands will have to think long and hard about participating in secondary market leasing transactions unless they are assured protection.

So that there is no confusion, in seeking "a seat at the table" for BRS lessees, WCA is in no way suggesting that BRS licensees and their lessees should be entitled to any double recovery of expenditures in connection with the refarming of the 2150-2162 MHz band. WCA envisions that in migrating to new spectrum, licensees and lessees will be required to coordinate their efforts, but in the end it should be the owner of the BRS facilities at issue that deploys and migrates service to new comparable facilities and secures reimbursement.[90]

H. *The Commission Must Adopt An Alternative 2.5 GHz Bandplan To Provide Relocation Spectrum Designated For BRS Channels 1 And 2 If The Market At Issue Has Not Been Transitioned To The New BRS/EBS Bandplan.*

At various points the *Fifth NPRM* notes that BRS service providers will be transitioning to the new BRS/EBS bandplan adopted in WT Docket No. 03-66, and requests comment on

[90] The *Fifth NPRM* asserts that "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." *Fifth NPRM*, 20 FCC Rcd at 15866-67. Certainly, to the extent a lease gives the licensee the right to terminate in the event of an involuntary relocation, the lessee should not be entitled to any compensation. However, the Commission should make clear that to the extent a licensee breaches its lease agreement in terminating, the lessee is free to pursue appropriate remedies against the licensee and any party that has wrongful procured the breach in court.

certain issues that may arise where the BRS relocation process and the transition to the new bandplan intersect.[91]

Perhaps the most significant issue is one not specifically addressed in the *Fifth NPRM* – the fact that mandatory relocation may occur prior to the time that the 2496-2500 MHz band is transitioned to the new bandplan pursuant to Section 27.1230 *et seq.* of the Commission's Rules. As WCA has previously noted, the problem here is that until a transition occurs, comparable facilities cannot be deployed using BRS channels 1 and 2 because 2500-2502 MHz and 2618-2624 MHz will be allocated to other licensees until the transition has been completed.[92]

Because of the substantial differences between the 2150-2162 MHz band and the designated replacement spectrum for BRS channels 1 and 2 at 2.5 GHz,[93] a BRS licensee or system operator may well reasonably elect to deploy and migrate to comparable facilities that use spectrum other than the designated replacement spectrum. That option should not be foreclosed, particularly where the relocation to alternative spectrum can be accomplished at less cost to the AWS licensee than if comparable facilities were deployed in the designated BRS channel 1 and 2 replacement spectrum. However, BRS channel 1 and 2 licensees and lessees should always have the option of relocating to comparable facilities that utilize their designated replacement spectrum. Where they elect to do so before the market in issue has been transitioned to the new bandplan, (i) the affected BRS channel 1 licensee should be permitted to utilize the 2496-2500 MHz band, and (ii) the affected BRS channel 2 licensee should be permitted to utilize the 2686-

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[91] *See id.* at 15865-67.

[92] That is, in a market that has yet to be transitioned, the relocation spectrum designated for BRS channels 1 and 2 in the new bandplan, *i.e.*, the 2496-2502 MHz and 2618-2624 MHz bands, respectively, remain channelized pursuant to the old BRS/EBS bandplan – EBS channel A1 occupies the 2500-2502 MHz band and BRS channels F2 and E3 occupy the 2618-2620 MHz and 2620-2624 MHz bands, respectively. *See* 47 C.F.R. § 27.5(i)(1).

[93] *See supra* note 4.

2690 MHz band, which is allocated to the virtually unused I channels under the current 2.5 GHz bandplan.[94] Then, after transition of the market to the new bandplan, each licensee could migrate a second time to its designated spectrum under the new bandplan. In most cases, this two-step approach could be implemented at little marginal cost to the AWS licensee responsible for funding the 2150-2162 MHz refarming, given that frequency-agile equipment could be installed as part of the first relocation and then readily retuned to operate under the new bandplan.

Admittedly, this solution leaves BRS licensees with 4 MHz less spectrum than they had at 2150-2162 MHz, at least for an interim period. However, this appears unavoidable given the limited amount of spectrum available for relocation outside the existing 2.5 GHz band, and it least provides operators in non-transitioned markets with access to 8 MHz of replacement spectrum that can be used for wireless broadband service pending a full transition to the new bandplan. Although the adequacy of 8 MHz for BRS channel 1 and 2 operations will require a case-by-case analysis, WCA believes that it generally will be possible for BRS operations to migrate to 2496-2500 MHz and 2686-2690 MHz by deploying systems that achieve "comparable" status by using a cellular structure to both accommodate the shorter path lengths at 2.5 GHz and provide for frequency reuse. In all cases, however, relocation of BRS channels 1 and 2 to 2496-2500 MHz/2686-2690 MHz must remain subject to the overriding requirement that BRS service providers be provided with comparable facilities there.

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[94] This is the "alternate bandplan" proposal that WCA has supported in WT Docket No. 03-66 for BRS multichannel video programming distributors ("MVPDs") who are eligible to "opt out" of the new bandplan and choose to do so. *See* WCA 03-66 Petition for Reconsideration at 35-37. In that case, as here, the need for the rule arises from the fact that relocated BRS channel 1 and 2 licensees need alternative spectrum if they are not transitioned to the new bandplan. The only difference is that in the case of an MVPD opt-out BRS channels 1 and 2 remain at 2496-2500 MHz/2686-2690 MHz permanently, whereas in a non-MVPD situation the channels remain there only until they are subsequently transitioned to 2496-2502 MHz/2618-2624 MHz per the Commission's BRS/EBS transition procedures.

This approach can similarly address the situation of BRS channel 1 and 2 licensees that are not actually operating systems as of effective date of the order resolving the *Fifth NPRM*.[95] WCA does not object to the Commission's proposal to preclude such licensees from deploying new services in the 2150-2162 MHz band after such date.[96] However, WCA cannot agree with the Commission's proposal to modify their BRS channel 1 or 2 licenses to specify operation in the 2496-2502 MHz and 2618-2624 MHz bands pending transition.[97] This approach would leave these licensees and their lessees in a spectral no man's land until the market has transitioned – they cannot use the 2150-2162 MHz band (since there is no longer any underlying license authorizing operation on those channels) *or* the 2500-2502 MHz/2618-2624 MHz bands (since the spectrum is allocated to others pending transition to the new bandplan.). The *Fifth NPRM* attempts to solve this dilemma by suggesting that the BRS service providers "could become proponents in the transition of the 2.5 GHz band and avoid delay in initiating new service . . . ."[98] While that is certainly true, it ignores that the Commission has specifically authorized use of the BRS spectrum under the existing bandplan until transition.[99] There is no reason why BRS

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[95] As the Commission is aware, BRS channels 1 and 2 were once used extensively in the provision of video programming services to millions of households across America. In recent years, however, licensees have been authorized by the Commission to discontinue these obsolete services in preparation for the deployment of wireless broadband networks. Given the more than five years of ongoing uncertainty regarding the future of the 2150-2162 MHz band, it is hardly surprising that many licensees and system operators have refrained from deploying new networks using BRS channels 1 and 2 and have instead focused their efforts on the 2.5 GHz band.

[96] *See Fifth NPRM,* 12 FCC Rcd at 15865-66.

[97] *See id.* (proposing to modify unbuilt BRS channel 1 and 2 licenses to specify their corresponding frequency assignments in the new BRS/EBS bandplan).

[98] *Id.*

[99] *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, Report and Order, 19 FCC Rcd 14165, 14201 (2004) ("Licensees operating in [markets] for which an Initiation Plan has not been filed with the Commission within three years may continue to operate until they are transitioned by another method determined as a result of the *FNPRM*

channel 1 and 2 licensees, and those licensees, alone, should be required to fund the transition of the entire 2.5 GHz band to enjoy the benefits of their BRS licenses.[100] The better course is to provide them with immediate access to the 2496-2500 MHz and 2686-2690 MHz bands, and allow them to transition to their designated spectrum in the new bandplan at the same time as other 2.5 GHz licensees transition.

I. *The Relocation Of BAS Channel A10 From The 2496-2500 MHz Band Must Be Completed At The Expense Of The AWS Auction Winner Within Two Years And In Any Event Prior To Any Involuntary Relocation Of BRS Channel 1 Operations.*

As the record before the Commission in IB Docket No. 02-364 reflects, a substantial impediment to the use of the 2496-2500 MHz band by BRS channel 1 is the current usage of that band by BAS channel A10 for itinerant newsgathering operations pursuant to nationwide licenses.[101] WCA and others in the BRS industry, along with the Society of Broadcast Engineers -- the primary representative of the BAS community -- have agreed that BAS and BRS cannot coexist in the band, and have already proposed a solution to the problem through their extensive filings in IB Docket No. 02-364. That solution, in a nutshell, involves repacking the 2.4 GHz

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attached to this *R&O*. In markets where no transition plan is filed, we will not require licensees to cease existing operations until at least eighteen months after the deadline for proponents to file initiation plans.").

[100] The Commission cites a series of cases in footnotes 62-65 of the *Fifth NPRM* to support its contention that it has authority under Section 316 of the Communications Act to unilaterally modify unbuilt BRS channel 1 and 2 licenses to specify operation on 2496-2502/2618-2624 MHz. Unlike here, however, none of the license modifications in those cases precluded the licensee from operating on the underlying channel or any channels substituted for it. Indeed, given that the Commission has already concluded in WT Docket No. 03-66 that BRS service providers should be permitted to operate in the 2150-2162 MHz band pending their transition to the new BRS/EBS bandplan, it is difficult to see how modifying their underlying BRS channel 1 and 2 licenses to specify unusable frequencies could satisfy Section 316's requirement that Commission-directed license modifications "promote the public interest, convenience and necessity." *See* 47 U.S.C. § 316(a)(1).

[101] Because BAS often uses channel A10 to transmit from itinerant airborne platforms (such as helicopters and blimps) that would have unobstructed views of BRS receivers, no participant in IB Docket No. 02-364 has seriously contended that BAS and BRS can share the spectrum through coordination.

band BAS spectrum and digitizing BAS operations such that BAS will have access to the same three channels it has today, but will only require the 2450-2486 MHz band rather than the 2450-2500 MHz band.[102]

Because refarming of the 2150-2162 MHz band for the benefit of AWS auction winners cannot occur until the BAS repacking plan is implemented, the Commission should require that the AWS auction winners fund the repacking of BAS operations in the 2450-2500 MHz band to the 2450-2486 MHz band no later than two years from the later of the effective date of the reconsideration decision in IB Docket No. 02-364, or the effective date of the decision resolving the *Fifth NPRM*. Absent the repacking of BAS use of the band, use of the 2496-2500 MHz band will be problematic because of the nationwide, itinerant use of BAS channel A10.

The record in IB Docket No. 02-364 establishes that the costs of digitizing BAS operations and refarming the 2450-2500 MHz band should be borne jointly by the AWS auction winners that benefit from the relocation of BRS from 2150-2162 MHz and by the sole MSS licensee in the 2483.5-2500 MHz band, Globalstar, who will benefit by clearing BAS from the spectrum Globalstar intends to use for its ancillary terrestrial component. Thus, ultimately AWS and MSS should be required to share the costs of clearing that spectrum in proportion to its benefit.[103] WCA is ambivalent as to how the Commission elects to allocate the costs of clearing BAS between AWS and MSS, so long as the process is fair to BAS and BRS licensees and does not delay the deadline for repacking BAS.

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[102] *See* Petition of Wireless Communications Int'l Ass'n for Reconsideration, IB Docket No. 02-364, at 19 (filed Sept. 8, 2004)["WCA 02-364 Petition"); Petition of Society of Broadcast Engineers for Reconsideration, IB Docket No. 02-364, at 4-5 (filed Sept. 8, 2004).

[103] *See* WCA 02-364 Petition at 19-23.

J. *Each F Block AWS Auction Winner Must Reimburse The Entity That Serves As The Transition Proponent Under Section 27.1230 Of The Rules For The Pro Rata Transition Costs Associated With BRS Channels 1 And 2, Consistent With Section 27.1233(c) Of The Rules.*

Under Section 27.1230 of the Commission's Rules, certain costs of transitioning the 2496-2690 MHz band from the current bandplan to the new bandplan (which provides the space required to accommodate the relocation of BRS channels 1 and 2) are initially incurred by a Proponent.[104] However, because the transition to the new bandplan ultimately benefits other licensees in the 2.5 GHz band, Section 27.1233(c) calls for BRS licensees in the band to subsequently reimburse the Proponent a *pro rata* share of the transition expenses.[105] In so doing, the Commission has sought to avoid "free riders" taking advantage of the Proponents' efforts.

To achieve that policy objective, it is essential that the Commission obligate AWS auction winners to reimburse a Proponent the *pro rata* transition costs associated with BRS channels 1 and 2. There is no reason why the BRS licensee should be required to pay those costs – save for their involuntary relocation from the 2150-2162 MHz band they would enjoy absolutely no benefit from the transition to the new bandplan at 2.5 GHz. Since the AWS auction winners secure a substantial benefit from the rebanding (as it simplifies the task of migrating BRS operations to comparable facilities), they should pay their fair share of the costs of the 2.5 GHz bandplan transition.[106]

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[104] *See* 47 C.F.R. § 27.1230. Those costs are limited to the installation of new downconverters at certain EBS receive sites and the migration of certain video programming from channels outside the new Middle Band Segment ("MBS") to channels within the MBS. *Id.* at § 27.1233(a)-(b).

[105] *Id.* at § 27.1233 (c).

[106] *See* Petition of Wireless Communications Ass'n Int'l for Reconsideration, WT Docket No. 03-66, at 21 n. 34 (filed Jan. 10, 2005).

III. CONCLUSION.

WCA believes that the proposals discussed herein provide a workable blueprint for BRS relocation and should be adopted. A rote application of the *Emerging Technologies* model will not work – the material differences between BRS and point-to-point microwave services will doom that approach to failure, putting development of both BRS and AWS services at risk and lending new uncertainty to the AWS auction. Consumers gain nothing from that result, and thus it is imperative that the Commission avoid the temptation of reaching for familiar solutions simply because it is expedient to do so. Rather, the Commission can and should do what it has done for other relocated services: use the core principles of *Emerging Technologies*, as modified over the past decade, to chart a new course that addresses the unique needs of BRS service providers.

Respectfully submitted,

THE WIRELESS COMMUNICATIONS ASSOCIATION INTERNATIONAL, INC.

By: /s/ *Andrew Kreig*
Andrew Kreig
President

1333 H Street, NW
Suite 700 West
Washington, DC 20005
202-452-7823

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