

consumers is disrupted due to out-of-band emission interference, and minimize the number of disputes that are presented to the Commission for resolution.¹⁷⁰

64. *Discussion.* As with the height benchmarking rule, we have some concern about requiring the licensee of a new or modified base station to curtail its out-of-band emissions within 24 hours of receipt of a documented interference complaint from an existing base station. We will adopt WCA's proposal, however, because we are committed to insuring that existing facilities are able to provide continuous service, without impermissible interference. We also note that the proposal is unopposed. Therefore, any new or modified outdoor antenna user station, within 24 hours of receipt of a documented interference complaint from an existing base station regarding out-of-band emissions, must make adjustments to limit out-of-band emissions into that adjacent channel operation.

65. We conclude, however, that WCA has not established a need for special rules for outdoor fixed user stations. Rather, we believe that applying the existing deadlines to disputes between base stations and outdoor user stations will be sufficient. WCA has not demonstrated that outdoor fixed user stations are sufficiently different from other types of facilities to justify a unique 14-day deadline for compliance. Furthermore, WCA has not explained why a special rule provision mandating good faith cooperation is needed. Accordingly, we deny WCA's petition on this issue.

(ii) Limiting Right to File Documented Interference Complaints to First Adjacent Channel Licensees

66. *Background.* Section 27.53(m)(2) of the Commission's Rules states that only adjacent channel licensees may file documented interference complaints.¹⁷¹ In its petition for reconsideration of the *BRS/EBS R&O*, WCA asserts that any LBS or UBS licensee should be able to invoke the more stringent dual mask set forth in Section 27.53(m)(2) so long as such licensee has a GSA overlapping the GSA of the recipient of the request, regardless of whether it is licensed to operate on a first adjacent channel.¹⁷² In the *BRS/EBS 3rd MO&O*, the Commission affirmed that the right to file a documented interference complaint should be limited to first adjacent channel licensees because the level of interference that would be most severe and most likely to affect a licensee would be from first adjacent channel operations.¹⁷³

67. WCA again urges the Commission to adopt the proposal advanced by the Coalition to allow an out-of-band emission complaint to be filed by any LBS or UBS licensee that had an overlapping GSA, regardless of whether the interferer is licensed to operate on the first channel adjacent to the other party.¹⁷⁴ While the Commission in the *BRS/EBS 3rd MO&O* acknowledged the potential of interference, it reasoned that "the level of interference that would be most severe and most likely to affect a licensee would be from adjacent channel operations."¹⁷⁵

68. While WCA recognizes that the potential for interference due to out-of-band emissions increases when the frequencies involved are immediately adjacent, it contends permitting all licensees with overlapping GSAs to submit documented interference complaints would help to avoid harmful

¹⁷⁰ WCA PFR at 5.

¹⁷¹ 47 C.F.R. § 27.53(m)(2).

¹⁷² *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5690 ¶194.

¹⁷³ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5690-5691 ¶195.

¹⁷⁴ WCA PFR at 7.

¹⁷⁵ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5690-5691 ¶195.

interference in the band.¹⁷⁶ According to WCA, because the rules permit TDD and FDD in the band and do not require synchronization of TDD operations, interference due to out-of-band emissions is a greater threat than in bands like PCS and 1.7/2.1 GHz Advanced Wireless Services (AWS), where FDD is mandated and upstream and downstream channels are designated.¹⁷⁷

69. *Discussion.* The Commission has twice affirmed a limitation on the right to file a documented interference complaint to first adjacent channel licensees because the level of interference that would be most severe and most likely to affect a licensee would be to first adjacent channel operations. WCA's petition repeats arguments previously considered and rejected. We believe that the Commission's previous decisions strike the right balance between protecting against interference that is most likely to occur and avoiding unnecessary limitations on a licensee's ability to operate. Accordingly, we deny WCA's request to amend Section 27.53(m)(2) to allow any licensee to file a documented interference complaint.

3. GSA Boundaries

a. Straight Line v. Great Ellipses

70. *Background.* In the *BRS/EBS R&O*, the Commission established GSAs for all BRS and EBS stations.¹⁷⁸ The Commission noted that in other bands where it contemplated the development of mobile or other wide-area services, it concluded that geographic licensing based on predefined service areas has significant advantages over site-based licensing because of the greater operational flexibility and reduced operating costs for licensees.¹⁷⁹ In addition, the Commission concluded that geographic area licensing reduces administrative burdens for consumers, licensees, and regulators by allowing licensees to modify, move, and add to their facilities within specified geographic areas without prior Commission approval.¹⁸⁰ Therefore, the Commission adopted geographic area licensing for all operations in all segments of the band.¹⁸¹ The Commission stated that the GSAs for BRS and EBS stations would be based on the licensee's current protected service area, which would extend 56.3255 km (35 miles) from the transmitter site, as provided by former Sections 21.902(d) and 74.903(d) of the Commission Rules.¹⁸²

71. The Commission also recognized that the rules defining protected service areas have changed or otherwise been modified in a manner that has resulted in overlapping PSAs being assigned to co-channel incumbent BRS and EBS licensees.¹⁸³ Accordingly, in establishing GSAs, the Commission adopted a mechanism for resolving overlaps by drawing a boundary line or chord through a "football" shaped area where the PSAs intersect, with each licensee agreeing to limit the interference it generates across the boundary line.¹⁸⁴

¹⁷⁶ WCA PFR at 8.

¹⁷⁷ WCA PFR at 8.

¹⁷⁸ *BRS/EBS R&O*, 19 FCC Rcd at 14189 ¶54.

¹⁷⁹ *BRS/EBS R&O*, 19 FCC Rcd at 14189 ¶53.

¹⁸⁰ *BRS/EBS R&O*, 19 FCC Rcd at 14189 ¶53.

¹⁸¹ *BRS/EBS R&O*, 19 FCC Rcd at 14189 ¶54.

¹⁸² *BRS/EBS R&O*, 19 FCC Rcd at 14189 ¶55.

¹⁸³ *BRS/EBS R&O*, 19 FCC Rcd at 14192 ¶59.

¹⁸⁴ *BRS/EBS R&O*, 19 FCC Rcd at 14192 ¶59.

72. In WCA's Petition for Reconsideration of the *BRS/EBS R&O*, WCA requested that the Commission modify Section 27.1206 to clarify how GSA boundaries would be established under certain circumstances.¹⁸⁵ To avoid conflicts regarding GSA boundaries, WCA proposed that the Commission modify this section of the rules to clarify that "great ellipses" should be used instead of straight lines or chords to "split the football."¹⁸⁶ WCA argued that if the ellipses were not employed, there would be areas, sometimes as wide as a kilometer, which would not be assigned to either GSA.¹⁸⁷ In the *BRS/EBS 3rd MO&O*, the Commission rejected WCA's proposal because it received minimal support and the Commission was not convinced that the proposal was "necessary or beneficial."¹⁸⁸

73. WCA now renews its request to use "great ellipses" in calculating GSA boundaries.¹⁸⁹ WCA argues that the failure to use "great ellipses" will result in areas that will not be assigned to any licensee because licensees could use different methodologies for calculating a straight line.¹⁹⁰ WCA also cites to support it received for its proposal from ComSpec Corp. and CelPlan Technologies, Inc. in comments to the *BRS/EBS NPRM*.¹⁹¹

74. *Discussion.* In establishing GSAs, the Commission recognized that there would be overlap of geographical service area boundaries in certain areas and situations and adopted the industry's proposal to "split the football" to bifurcate overlapping GSA boundaries as a means to determine a licensee's service area. We disagree with WCA's proposal that the "great ellipses" methodology should be standardized in the rules to establish GSA boundaries to preclude an area from being unserved. Licensees have been using the splitting the football methodology since January 10, 2005, and it has worked well. Accordingly, we affirm the Commission's prior determination that WCA's proposal to establish the "great ellipses" methodology to establish GSA boundaries is neither necessary nor beneficial.

b. GSA Boundaries – Pending Applications

75. *Background.* In the *BRS/EBS 3rd MO&O*, the Commission addressed the issue of how to handle pending applications for new or modified stations in the newly established geographic area licensing framework.¹⁹² The Commission adopted WCA's unopposed suggestions as to how to accommodate pending applications.¹⁹³ One of the suggestions adopted by the Commission was: "Where there is pending as of January 10, 2005, an application for a new incumbent station with a PSA that overlaps that of a licensed incumbent station, the GSA of the incumbent station is created by splitting the football and, if the pending application is ultimately dismissed or denied, the territory covered by the

¹⁸⁵ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5694 ¶205.

¹⁸⁶ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5694 ¶ 205.

¹⁸⁷ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5694 ¶205.

¹⁸⁸ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5694 ¶ 205.

¹⁸⁹ WCA PFR at 10-12.

¹⁹⁰ WCA PFR at 11.

¹⁹¹ WCA PFR at 11-12, citing Comments of ComSpec Corp. (filed Sep. 8, 2003) at 2-3; Reply Comments of CelPlan Technologies, Inc. (filed Oct. 22, 2003) at 6.

¹⁹² *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5694 ¶ 206.

¹⁹³ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5695 ¶ 208.

GSA of the applied for station reverts to the BRS BTA holder (if a BRS application) or to EBS white space (if an EBS application).¹⁹⁴

76. Although HITN did not comment on this issue earlier, HITN now seeks reconsideration of that decision.¹⁹⁵ HITN argues that the decision not to restore to an incumbent station the portion of a GSA split with a pending application is inconsistent with other decisions made by the Commission.¹⁹⁶ Specifically, HITN contends that this decision is inconsistent with the treatment of pending modification applications, where the pending application does not affect the GSA until granted.¹⁹⁷ HITN contends that the decision to take away a portion of an incumbent's GSA because of the pendency of an application for a new station is arbitrary and capricious because it is inconsistent with the treatment of GSAs involving modification applications.¹⁹⁸

77. WCA, Sprint Nextel, and WiMAX oppose HITN on this issue.¹⁹⁹ Those parties contend that there is no inconsistency in the two scenarios because they involve different situations.²⁰⁰ WCA points out that in the situation involving modification applications, there is no territory to be forfeited, and the only question is where to draw the boundary of the GSA.²⁰¹ In contrast, when an application for a new station is involved, there are three interested parties: the incumbent licensee; the applicant for a new station; and the BRS BTA license holder or future EBS licensee.²⁰² WCA and WiMAX contend that the Commission's approach is reasonable and prevents the incumbent licensee from reaping a windfall.²⁰³ Sprint Nextel argues that the auction winners purchased the rights to acquire forfeited spectrum and that the Commission cannot award those same rights a second time to another party.²⁰⁴ Sprint Nextel also contends that the two situations are different because applicants for new stations had to "satisfy a more stringent threshold showing" than applicants for modifications.²⁰⁵

78. *Discussion.* We disagree with HITN that the rules are inconsistent. We agree with WCA, Sprint Nextel, and WiMAX that the two situations are distinct and that the rules the Commission adopted in the *BRS/EBS 3rd MO&O* strike the appropriate balance among the interests of incumbent licensees, parties with pending applications for new stations, BRS BTA license holders, and possible future EBS licensees. We therefore affirm the existing rules and deny HITN's petition for reconsideration.

¹⁹⁴ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5694 ¶ 206.

¹⁹⁵ HITN PFR at 7-9.

¹⁹⁶ HITN PFR at 7-8.

¹⁹⁷ HITN PFR at 8.

¹⁹⁸ HITN PFR at 8-9.

¹⁹⁹ WCA Opposition at 21-23, Sprint Nextel Opposition at 11-12, WiMAX Comments at 10-11.

²⁰⁰ WCA Opposition at 23, Sprint Nextel Opposition at 12, WiMAX Comments at 11.

²⁰¹ WCA Opposition at 23.

²⁰² WCA Opposition at 23.

²⁰³ WCA Opposition at 23, WiMAX Comments at 10-11.

²⁰⁴ Sprint Nextel Opposition at 12.

²⁰⁵ Sprint Nextel Opposition at 12.

4. Grandfathering of EBS facilities under Section 27.55 (a)(4)(iii)

79. *Background.* In the *BRS/EBS R&O*, the Commission established signal strength limits at the boundary of each licensee's GSA.²⁰⁶ In the MBS, the Commission decided to retain the -73.0 dBW/m² limit for post-transition operations "because it provides adequate service for high-power stations operating in the MBS."²⁰⁷ No party sought reconsideration of the *BRS/EBS R&O* on this point, and the rule was not modified in the *BRS/EBS 3rd MO&O*. Now, however, WCA asks that we modify the rule and allow licensees in the MBS to exceed that limit if the facilities "otherwise comport with the Commission's mandate that an EBS licensee be provided with facilities in the MBS that are substantially similar to the licensee's pre-transition facilities."²⁰⁸ WCA contends that the rule modification is needed to ensure that EBS licensees are provided with comparable facilities after the transition.²⁰⁹ WCA cites to the Commission's statement in the *BRS/EBS R&O* that the transition plan "must provide for the MBS channels to be authorized to operate with the transmission parameters that are substantially similar to those of the [EBS] licensee's current operation."²¹⁰

80. WiMAX supports WCA's proposed rule change.²¹¹ CTN and NIA also support WCA's proposal, but assert that the grandfathering of signal levels should only apply to the EBS licensee's pre-transition operations (including modifications to those facilities).²¹² CTN and NIA point out that an EBS licensee should not be subject to interference from an adjacent licensee that has discontinued high-powered video operations and converted to cellularized, low-power operations.²¹³ In response, WCA agrees that licensees should not be allowed to exceed the power limit in perpetuity and urges the adoption of CTN's and NIA's proposal with one modification (the underlined material represents WCA's proposed modification):

Following transition, for stations in the MBS, the signal strength at any point along the licensee's GSA boundary must not exceed the greater of (a) $-73.0 + 10 \log(X/6)$ dBW/m², where X is the bandwidth in megahertz of the channel, or (b) for facilities that are substantially similar to the licensee's pre-transition facilities (including modifications that do not alter the fundamental nature or use of the transmissions), the signal strength at such point that resulted from the station's operations immediately prior to the transition, provided that such operations comported with § 27.55(a)(4)(i).²¹⁴

81. HITN supports WCA's original proposal as striking the best possible balance under the circumstances between the competing interests of maintaining existing pre-transition service and allowing adjacent licensees to fully utilize their spectrum.²¹⁵ HITN urges the Commission to require that a grandfathered facility transitioned pursuant to this provision inform the Commission of the transition and

²⁰⁶ *BRS/EBS R&O*, 19 FCC Rcd at 14208-14210 ¶¶ 105-110.

²⁰⁷ *BRS/EBS R&O*, 19 FCC Rcd at 14209 ¶ 108.

²⁰⁸ WCA PFR at 19-20.

²⁰⁹ WCA PFR at 20.

²¹⁰ WCA PFR at 20, citing *BRS/EBS R&O*, 19 FCC Rcd at 14206 ¶ 96.

²¹¹ WiMAX Comments at 14-15.

²¹² CTN NIA Opposition at 5.

²¹³ CTN NIA Opposition at 5.

²¹⁴ WCA Reply at 5.

²¹⁵ HITN Opposition at 5.

provide the Commission with a copy of its last site-based authorization.²¹⁶ HITN also urges that the Commission note in the Universal Licensing System (ULS) that the station has been grandfathered and that the site-based license be placed in the ULS.²¹⁷ WCA responds that such a requirement is unnecessary because the post-transition notification required by Section 27.1235(b) of the Commission's Rules provides the information necessary to calculate a predicted signal strength.²¹⁸ Finally, HITN asks that the Commission state that any grandfathering shall expire ten years after any new rules are adopted pursuant to WCA's request, unless the EBS licensee requests an extension.²¹⁹ WCA believes that such a requirement would be an unnecessary regulatory burden, although it does not object to a requirement that a licensee report when it is no longer eligible to be grandfathered because it discontinued or modified its pre-transition operations.²²⁰

82. *Discussion.* We will amend our rules as suggested by WCA, CTN, and NIA and allow MBS licensees to exceed the authorized -73.0 dBW/m² limit at the border provided the facilities are needed to comply with the Commission's mandate that an EBS licensee be provided with facilities in the MBS that are substantially similar to the licensee's pre-transition facilities. We agree with the parties that the proposed modification is appropriate to ensure licensees are provided with substantially similar facilities after the transition.

83. We also agree with CTN and NIA that licensees should not be subject to interference from an adjacent licensee and that grandfathering of signal levels should only apply to the licensee's pre-transition operations (including modification to those facilities). A facility in the MBS should not be subject to interference from an adjacent licensee that has discontinued high-powered operations and converted to cellularized, low-power operations. Therefore, we are amending our rules and adopting CTN's and NIA's proposed modification, with WCA's noted exception. Accordingly, stations operating in the MBS, subsequent to transition, may not exceed the greater of (a) $-73 + 10 \log X/6$ dBW/m², where X is the bandwidth of the channel in megahertz, or (b) for facilities that are substantially similar to the licensee's pre-transition facilities (including modifications that do not alter the fundamental nature or use of the transmissions), the signal prior to the transition, provided that such operations comport with Section 27.55(a)(4)(i). We decline to adopt the additional filing requirements proposed by HITN because we believe the information contained in the post-transition notification will provide adequate information to all licensees.

5. Technical corrections

84. We make several rule corrections on our own motion. Specifically, we correct an error in the channel plan for post-transition EBS Channel KG2. Section 27.5(i)(2)(iii) of the Commission's Rules mistakenly assigns EBS channel KG2 at 2615.33333-2616.66666 MHz.²²¹ The correct assignment for EBS Channel KG2 is 2615.33333-2615.66666 MHz. We further correct an error in Section 27.5(i)(2)(iii), which mistakenly assigns Channels G1-G3 to the BRS. The correct assignment of channels G1-G3 is to the EBS. We also correct an error in Section 27.55(a)(4)(i), which references 47 dB [mV]/m. The correct reference is 47 dBμV/m. In addition, we correct a typographical error in Section 27.53(m)(4) of our Rules. The second sentence states that "Mobile Service Satellite licensees. . ." when it

²¹⁶ HITN Opposition at 6.

²¹⁷ HITN Opposition at 6.

²¹⁸ WCA Reply at 6.

²¹⁹ HITN Opposition at 6.

²²⁰ WCA Reply at 6-7.

²²¹ 47 C.F.R. § 27.5(i)(2)(iii).

should state "Mobile Satellite Service licensees . . ." Finally, we correct an omission and incorporate the existing license terms for BRS and EBS into Section 27.13 of the Commission's Rules.²²²

F. Simultaneous Operation on Old and New BRS Channels 1 and 2/2A

85. *Background.* In the *BRS/EBS 3rd MO&O*, the Commission discussed the relationship between the transition within the 2.5 GHz band and the relocation of the BRS Channels No. 1 and No. 2/2A incumbents currently operating within the 2150-2160/62 MHz band.²²³ In that regard, the Commission held that licensees on these channels may operate in either 2150-2156 or 2496-2500 MHz (for BRS Channel 1) or 2156-2160/62 or 2686-2690 MHz band (for BRS Channel 2/2A) pre-transition, but not in both bands.²²⁴

86. WCA seeks reconsideration of the Commission's decision prohibiting BRS Channels No. 1 and No. 2 from simultaneously operating in their old channel locations in the 2150-2160/62 MHz band and their temporary, pre-transition locations at 2496-2500 MHz (BRS Channel 1) and 2686-2690 MHz (BRS Channel 2) before they are transitioned to their new permanent channel locations at 2496-2502 MHz (BRS Channel 1) and 2618-2624 MHz (BRS Channel 2).²²⁵ WiMAX supports WCA's position.²²⁶

87. *Discussion.* WCA argues persuasively that it will be impossible to make a "flash cut" of all subscribers from the old frequency band to their pre-transition locations in the 2.5 GHz band and that it is therefore necessary to have simultaneous operation in order to ensure a seamless relocation.²²⁷ We also are concerned that attempting a "flash cut" will unnecessarily jeopardize service to existing customers. Thus, we agree with WCA and conclude that BRS Channels 1 and 2/2A licensees may operate simultaneously in their old channel locations in the 2150-2160/62 MHz band and their temporary, pre-transition locations at 2496-2500 MHz (BRS Channel 1) and 2686-2690 MHz (BRS Channel 2) until every subscriber is relocated to the 2.5 GHz band, at which point the licensees must cease all operations in the 2150-2160/62 MHz band.

G. 2496-2502 MHz Band Sharing Issues

88. *Background.* The new BRS Channel 1 band at 2496-2502 MHz, relocated from the 2150-2156 MHz band, partly overlaps a number of services in the 2483.5-2500 MHz band, including Broadcast Auxiliary Service (BAS) Channel A10 operations at 2483.5-2500 MHz. As an initial matter, we note that a pending petition for reconsideration filed by the Society of Broadcast Engineers asks us to adopt a revised band plan for BAS Channels A8-A10 that would remove BAS operations from the 2496-

²²² See 47 C.F.R. § 21.45 (2004); 47 C.F.R. § 21.929 (2004); 47 C.F.R. § 74.15(e) (2004). In 2006, the Wireless Telecommunications Bureau declined WCA's request to initiate a proceeding to adopt a 15-year license term for BRS and EBS. See Letter from Joël D. Taubenblatt, Chief, Broadband Division, Wireless Telecommunications Bureau to Paul J. Sinderbrand, Esq. and Robert D. Primosch, Esq. (Sep. 14, 2006).

²²³ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5669-5670 ¶¶ 129-132.

²²⁴ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5670 n.358. As WCA notes, the footnote does not list the frequencies for BRS Channel 2, although BRS Channel 2 is mentioned.

²²⁵ WCA PFR at 21-22. As discussed *infra*, the permanent channel location for BRS Channel 2 is intended to incorporate both BRS Channels 2 and 2A. Thus, references to BRS Channel 2 should be read to include BRS Channel 2A, as appropriate.

²²⁶ WiMAX Comments at 14.

²²⁷ WCA PFR at 21.

2502 MHz band.²²⁸ We defer consideration of this matter to a separate decision. The 2496-2502 MHz band also partially overlaps the Big LEO MSS band at 2483.5-2500 MHz, with Code Division Multiple Access (CDMA) MSS downlink operations operating on an unprotected basis vis-à-vis BRS licensees.²²⁹ In the *Big LEO Order on Reconsideration and AWS 5th MO&O*, to provide protection to BRS-1 operations, the Commission codified requirements for CDMA MSS operators in the 2483.5-2500 MHz band not to exceed the existing, world-wide, ITU power-flux density (pfd) coordination trigger limits established for the band.²³⁰ These pfd limits are set forth in the ITU Radio Regulations at Appendix 5, Annex 1 (ITU-RR App. 5, Annex 1).²³¹ The Commission stated that these coordination trigger limits would permit BRS-1 licensees to construct and operate comparable facilities to those being relocated from the 2150-2156 MHz band.²³² Although the Commission recognized that the pfd coordination threshold values in ITU-RR App. 5, Annex 1 do not address all potential interference cases between MSS and BRS, such as mobile terrestrial use, the lower gains of antennas associated with mobile handheld units make them less vulnerable to the emissions of satellite systems than antennas of fixed systems, and thus, the ITU-RR App. 5, Annex 1 pfd coordination threshold values should protect mobile terrestrial uses as well.²³³

89. The Commission noted that Globalstar, the only currently operational MSS provider in the 2483.5-2500 MHz band, has the capability to control its pfd in the 2496-2500 MHz band by limiting the number of users on a particular channel in a given geographical region.²³⁴ The Commission also noted that, since BRS-1 systems were not yet operational, BRS-1 networks could be designed to accept interference-to-noise ratios higher than they might find in a non-shared environment, which should compensate for the effect of low-level, external noise sources, thereby yielding systems with the same throughput, availability and operating costs as currently exist in the 2150-2156 MHz band.²³⁵ To further protect BRS-1 operations, the Commission stated that if MSS operators intend to operate at power levels that exceed the codified pfd limits, or if actual operations routinely exceed the codified pfd limits, those operators are required to receive approval from each operational BRS-1 system in the region in which the pfd limits are exceeded.²³⁶ Furthermore, the Commission emphasized that, if the MSS footprint overlaps

²²⁸ See SBE Petition for Reconsideration, IB Docket No. 02-364 (filed May 22, 2006) at 2-3. See also Sprint Nextel Corporation and Society of Broadcast Engineers, Inc. *Ex Parte*, IB Docket No. 02-364, ET Docket No. 00-258 (filed June 4, 2007) supporting SBE's petition.

²²⁹ See generally *Big LEO Spectrum Sharing Order*, 19 FCC Rcd at 13387-13388 ¶¶ 69-71. Big LEO satellite systems provide voice and data communication to users with handheld mobile terminals via non-geostationary satellites in Low Earth Orbit (LEO). For additional background about MSS in the Big LEO bands, see Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, CC Docket No. 92-166, *Report and Order*, FCC 94-261, 9 FCC Rcd 5936 (1994), *on reconsideration*, *Memorandum Opinion and Order*, FCC 96-54, 11 FCC Rcd 12861 (1996).

²³⁰ See *Big LEO Order on Reconsideration and AWS 5th MO&O*, 21 FCC Rcd at 5624 ¶ 31; 47 C.F.R. § 25.208(v).

²³¹ ITU-RR App. 5, Annex 1 includes coordination threshold values of pfd for non-geostationary satellite orbit (NGSO) space stations and degradation of performance values for terrestrial systems, and addresses both analog and digital fixed use in the 2496-2500 MHz band.

²³² *Big LEO Order on Reconsideration and AWS 5th MO&O*, 21 FCC Rcd at 5624 ¶ 31.

²³³ *Id.* (citing ITU-RR App. 5, Annex 1, NOTE 7).

²³⁴ *Id.* (citing Application of L/Q Licensee, Inc. for Modification to Order and Authorization for Globalstar, File Nos. 88-SAT-WAIV-96 and 90-SAT-ML-96 (March 7, 1996) and *Ex Parte* Letter in IB Docket No. 01-185 from William Wallace, Counsel for Globalstar L.P., to Marlene H. Dortch, Federal Communications Commission (dated July 1, 2002), Attachment at 18, 22-23).

²³⁵ *Id.*

²³⁶ *Id.* See 47 C.F.R. § 25.213(b).

multiple BRS areas, later arriving BRS operators are not obligated to accept higher pfd limits previously approved by an adjacent BRS operator.²³⁷

90. BellSouth's petition for reconsideration of the *Big LEO Order on Reconsideration and AWS 5th MO&O* requests that the Commission modify the adopted pfd limits in the 2496-2500 MHz band to correspond to the more stringent pfd limits set forth in draft U.S. proposals to the WRC-07 regarding protection of terrestrial operations in the 2500-2690 MHz band from satellite downlink interference.²³⁸ BellSouth argues that the pfd limits codified by the Commission in the *Big Leo Order on Reconsideration and AWS 5th MO&O* will not be sufficient to provide BRS protection from MSS.²³⁹ According to BellSouth, the current pfd limits are approximately 10 dB less stringent than the draft U.S. proposal for the 2500-2690 MHz band, and therefore, provide less interference protection than the draft proposal.²⁴⁰ WCA agrees with BellSouth, though WCA supports the WRC-07 proposed limits somewhat reluctantly, since it is still not convinced that even the proposed pfd limits can fully protect BRS operations within the United States.²⁴¹ WCA claims that the expectation that most MSS operations will take place below 2495 MHz does not afford BRS real protection against co-channel interference.²⁴² BellSouth's position is also supported by Clearwire²⁴³ and WiMAX.²⁴⁴

91. Globalstar objects to modifying the pfd limits set for MSS licensees.²⁴⁵ Specifically, Globalstar claims that MSS providers have been able to operate service downlinks in the 2483.5-2500 MHz band since the initial allocation was made at the 1992 World Administrative Radio Conference, and that the pfd levels for its operational band adopted initially at the 1995 World Radiocommunication Conference (WRC 95), and now codified in the Commission's rules, were extensively studied and adopted at WRC-95.²⁴⁶ WCA refutes Globalstar's characterization, claiming that the pfd limits Globalstar refers to relate to co-frequency operations with fixed systems and not the types of mobile systems that BRS licensees are likely to deploy in the 2496-2502 MHz band.²⁴⁷ BellSouth says that maintaining the existing pfd rules for 2496-2500 MHz would "unfairly, unjustifiably and inexplicably result in one standard for domestic licensees and another standard for the international community."²⁴⁸

92. Globalstar claims that while the Commission anticipated that both BRS and MSS entities would have to employ engineering solutions – such as network design that would permit BRS to operate

²³⁷ *Big LEO Order on Reconsideration and AWS 5th MO&O*, 21 FCC Rcd at 5624-25 ¶ 31.

²³⁸ BellSouth, *et al.* Petition at 7-8, 10. The actual study was submitted to the ITU-R Joint Task Group 6-8-9 in preparation for developing text for the WRC-07 Conference Preparation Meeting (CPM07). See ITU-R Document 6-8-9/77.

²³⁹ BellSouth, *et al.* Petition at 6-10.

²⁴⁰ *Id.* at 8-9.

²⁴¹ WCA Opposition at 7-12; WCA Reply at 10-13. In that regard, WCA points to the Commission's decision to remove the unused FSS allocation from the 2500-2690 MHz band in setting it aside for BRS. WCA Opposition at 8-11; WCA Reply at 12-13.

²⁴² WCA Opposition at 12.

²⁴³ Clearwire Opposition at 7.

²⁴⁴ WiMAX Comments at 8.

²⁴⁵ Globalstar Opposition at 10-14.

²⁴⁶ *Id.*

²⁴⁷ WCA Reply at 11.

²⁴⁸ BellSouth, *et al.* Petition at 7.

with higher interference-to-noise ratios – BellSouth’s proposed changes to the pfd limits would render three of Globalstar’s channels largely unusable, undermining the shared nature of operations in the band.²⁴⁹ According to Globalstar, such an outcome is particularly unfair in light of the large amount of spectrum available in the larger BRS band.²⁵⁰ WCA claims that Globalstar’s rationale is flawed because it does not take into account MSS spectrum as a whole and does not consider BRS spectrum that it or any other party could potentially lease.²⁵¹

93. *Discussion.* BellSouth accurately describes how U.S. commercial interests, operating through the U.S. International Telecommunication Union – Radiocommunication (ITU-R) process, submitted a study specifying the pfd limits they believe are necessary to protect terrestrial base stations and mobile stations from potential interference caused by selected satellite systems in the 2500-2690 MHz band.²⁵² This study is one of several studies submitted to ITU-R Joint Task Group 6-8-9 (JTG 6-8-9) by a number of administrations to assist in the development of Conference Preparatory Meeting (CPM) text that was prepared for WRC-07 within the ITU-R. The U.S. study indicated that a pfd limit about 10 dB lower than the codified MSS/BRS-1 pfd limits for 2496-2500 MHz would be required to protect the terrestrial systems from the satellite systems that were studied. This study, however, involves the adjacent band beginning at 2500 MHz, not Globalstar’s band below 2500 MHz; there is no international proposal to change the pfd limits in Globalstar’s band. Furthermore, this study only addresses sharing with geostationary and highly elliptical satellites and does not consider a low-orbit satellite constellation such as Globalstar’s. The study also assumes that the satellite system operates across the full terrestrial band instead of the situation at 2496-2500 MHz, which is a partial-band overlap.²⁵³ Additionally, the CPM text outlines a number of potential mitigation measures that terrestrial systems could use to compensate for possible increase in noise levels from satellite systems, if it should occur.²⁵⁴ Specific pfd limits or coordination thresholds were not determined at the CPM and were selected at the WRC-07.²⁵⁵ Finally, because the Commission rejected a request to allocate portions of the 2500-2690 MHz band for MSS,²⁵⁶ there is no reason for the United States to consider the impact of more stringent pfd limits on the operation of MSS systems in the 2500-2690 MHz band at the CPM or WRC.

94. The WRC-07 adopted pfd limits for MSS systems operating in the 2500-2535 MHz that are close to those put forth in the U.S. CPM contribution, mentioned above, and in the U.S. proposals to

²⁴⁹ Globalstar Opposition at 12-14.

²⁵⁰ *Id.* at 14.

²⁵¹ WCA Reply at 13.

²⁵² See ITU-R Document 6-8-9/77, dated 27 January 2006, Entitled "Results of Interference Studies from Satellite Services on Fixed Services in the USA Using Methodology Developed by JTG 6-8-9."

²⁵³ The MSS allocation 2483.5-2500 MHz only overlaps 4 megahertz of the 6 megahertz 2496-2502 MHz BRS Channel I.

²⁵⁴ See ITU-R CPM Report (Geneva 2007) Table 1.9-2.

²⁵⁵ See ITU-R CPM Report (Geneva 2007) Chapter 3, Agenda Item 1.9 Executive Summary: "For each of the [the three possible] methods above, it was not possible to agree within the ITU-R on one suitable PFD mask (limits or coordination thresholds) that would to [sic] be applied to space services in the band 2500-2690 MHz to facilitate sharing with current and future terrestrial services without placing undue constraints on the services to which the band is allocated on a co-primary basis. However, a range of PFD values are provided in this section of the CPM text for further consideration by WRC-07."

²⁵⁶ See Amendment of the U.S. Table of Frequency Allocations to Designate the 2500-2520/2670-2690 MHz Frequency Bands for the Mobile Satellite Service, RM 9911, Order, 16 FCC Rcd 596 (2001), recon. denied, Memorandum Opinion and Order, 16 FCC Rcd 17222 (2001).

the WRC-07.²⁵⁷ In doing so, the ITU stated that for MSS systems that were operational prior to the end of WRC-07, the existing coordination thresholds pfd values applied.²⁵⁸ These are the same pfd values that the Commission codified for the protection of terrestrial systems in 2495-2500 MHz in the *Big LEO Order on Reconsideration and AWS 5th MO&O*, in which the Commission anticipated that both BRS and MSS entities would be able to develop and operate systems on a shared basis using the specified pfd, and employ engineering solutions as necessary to accommodate sharing with the other service. We believe that this is still the proper approach, and therefore, we deny BellSouth's Petition. The use of a study that addresses different satellite systems operating in an adjacent band is an insufficient basis to make changes to the pfd limits, changes that would undermine the shared nature of operations in the band. We continue to believe that the currently codified pfd limits will permit a shared solution if proper engineering techniques are applied to the MSS and BRS systems.

H. BRS 2/2A Channel Issues

95. *Background.* In the *BRS/EBS 3rd MO&O*, the Commission affirmed that the splitting the football methodology it adopted in the *BRS/EBS R&O* should be applied to GSA overlaps of all BRS and EBS licensees, including BRS Channels 1 and 2/2A licensees.²⁵⁹ Ad Hoc MDS Alliance²⁶⁰ requests that the Commission modify its rules so that primary BRS Channel 2 licensees are not required to "split the football" with either BRS Channel 2A or secondary BRS Channel 2 incumbent licensees when they transition to the 2.5 GHz band.²⁶¹

96. Ad Hoc MDS Alliance argues that under the current rules, BRS Channel 2A licensees will uniquely and unilaterally benefit from a license upgrade, a significant part of which will be taken directly out of the BRS Channel 2 licensed areas at the expense of the BRS Channel 2 licensees.²⁶² Specifically, Ad Hoc MDS Alliance claims that, in this situation, an incumbent BRS Channel 2A licensee receives a licensing increase of 50% during the transition/relocation process by being upgraded from a

²⁵⁷ See ITU-R Document 5, 9 February 2007, United States of America Proposals for the Work of the Conference, Agendum Item 1.9 starting on page 37. See also *Ex Parte* Letter from Paul J. Sinderbrand, Counsel WCA to Chairman Martin, Federal Communications Commission (filed Dec. 10, 2007).

²⁵⁸ See ITU-R Provisional Final Acts, Article 5, Footnote 5.4A01. Specifically Footnote 5.A01 states, in part, that "the coordination thresholds in Table 5-2 of Annex 1 to Appendix 5 of the Radio Regulations (edition of 2004), in conjunction with the applicable provisions of Articles 9 and 11 associated with No. 9.11A, shall apply to [MSS] systems for which complete notification information has been received by the Radiocommunication Bureau by 14 November 2007 and that have been brought into use by that date."

²⁵⁹ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5695 ¶ 208, 47 C.F.R. § 27.1206(a)(1).

²⁶⁰ The Ad Hoc MDS Alliance describes itself as being comprised of minority and small business enterprises holding licenses for BRS Channels 1 and 2 in the following sixteen major markets: Atlanta, GA; Chicago, IL; Columbus, OH; Detroit, MI; Houston, TX; Indianapolis, IN; Los Angeles, CA; Milwaukee, WI; Minneapolis, MN; New York, NY; Oklahoma City, OK; Phoenix, AZ; Sacramento, CA; San Francisco, CA; St. Louis, MO; and Washington, DC. Ad Hoc MDS Alliance PFR at 2 and n.3.

²⁶¹ Ad Hoc MDS Alliance Comments at 3. In its Petition for Reconsideration, the Ad Hoc MDS Alliance requested that the Commission clarify or modify Section 27.1206 of the Rules to provide that provisions requiring adjacent licensees to split the football do not apply to either (a) overlapping areas between primary BRS Channel 2 licensees and secondary BRS Channel 2/2A licensees, or (b) in the 2622-2624 MHz band, where a primary BRS Channel 2 licensee overlaps with a primary BRS Channel 2A licensee. Ad Hoc MDS Alliance PFR at 3. Sprint Nextel, WiMAX, and WCA Opposed Ad Hoc MDS Alliance's request. See Sprint Nextel Opposition at 10-11, WiMAX Opposition at 11, WCA Opposition at 20-21. Ad Hoc MDS Alliance changed its request during the opposition stage of the proceeding. See Ad Hoc MDS Alliance Comments. Nevertheless, WCA filed a Reply in opposition to Ad Hoc MDS Alliance's modified request. See WCA Reply at 17-20.

²⁶² Ad Hoc MDS Alliance Reply at 3.

four-megahertz license at 2156-2160 MHz to a six-megahertz license at 2618-2624 MHz, and that a secondary MDS Channel 2 incumbent licensee is getting a similar windfall by being upgraded from a four-megahertz primary license at 2156-2160 MHz to a six-megahertz primary license at 2618-2624 MHz.²⁶³

97. Ad Hoc MDS Alliance recommends that this situation be corrected by not requiring primary BRS Channel 2 licensees to "split the football" with either BRS Channel 2A or secondary BRS Channel 2 incumbent licensees.²⁶⁴ Ad Hoc MDS Alliance notes that it knows of no situation – and believes there is none – in which an incumbent BRS Channel 2A licensee overlaps with a primary BRS Channel 2 incumbent licensee by as much as 50%.²⁶⁵ Therefore, Ad Hoc MDS Alliance argues that, even if the primary BRS Channel 2 incumbent licensee in an overlap situation is afforded the full 35-mile geographic service area normally contemplated by Section 27.1206(a)(1) of the Rules²⁶⁶ – that is, the licensee obtains the entire football rather than splitting it – the incumbent BRS Channel 2A will receive a substantial gain in the transition to 2618-2624 MHz because the increase in channel capacity from 4 megahertz to 6 megahertz is greater than the relative loss of overlapped territory to the primary BRS Channel 2 incumbent.²⁶⁷ Ad Hoc MDS Alliance explains that because the 2-megahertz increase in licensed area by itself is greater than the area the Channel 2A licensee would obtain by splitting the football, the Channel 2A licensee still would net a substantial increase in licensed area at 2.5 GHz even when the adjacent BRS Channel 2 (former Channel 2 primary licensee) is awarded all of the territory within the football.²⁶⁸

98. WCA opposes Ad Hoc MDS Alliance's proposal.²⁶⁹ WCA states that any material departure from the standard splitting the football rules at this late date will frustrate ongoing efforts to make productive use of the 2.5 GHz band.²⁷⁰ WCA notes that Sprint Nextel and other licensees are already in the midst of the network design implementation process, and argues that Ad Hoc MDS Alliance's failure to raise its concerns in a timely manner is critical.²⁷¹ Ad Hoc MDS Alliance denies that it raised this issue too late.²⁷²

99. WCA further argues that grant of Ad Hoc MDS Alliance's approach will yield a windfall for Ad Hoc MDS Alliance's members as it relates to the 4 megahertz that is shared between BRS Channels 2 and 2A licensees.²⁷³ WCA states that where there is an overlap between the PSA of a BRS Channel 2 licensee and the PSA of a BRS Channel 2A licensee, both stations had been co-primary, but

²⁶³ Ad Hoc MDS Alliance Comments at 4. Ad Hoc MDS Alliance believes that this feature of the Commission's plan is of questionable legality because the Commission has never discussed why Channel 2A licensees should receive such an upgrade or made a determination that affording a windfall uniquely to Channel 2A licensees is in the public interest. Ad Hoc MDS Alliance PFR at 3.

²⁶⁴ Ad Hoc MDS Alliance Comments at 3.

²⁶⁵ Ad Hoc MDS Alliance Comments at 4.

²⁶⁶ 47 C.F.R. § 27.1206(a)(1).

²⁶⁷ Ad Hoc MDS Alliance Opposition at 4.

²⁶⁸ Ad Hoc MDS Alliance Opposition at 4.

²⁶⁹ WCA Reply at 17-20.

²⁷⁰ WCA Reply at 18.

²⁷¹ WCA Reply at 18-19, citing Sprint Nextel Opposition at 11.

²⁷² Ad Hoc MDS Alliance Reply at 3.

²⁷³ WCA Reply at 19.

the overlap area was effectively unused by either licensee because of the applicable interference protection rules.²⁷⁴ Thus, notes WCA, when that 4 megahertz is allocated to exclusive GSAs using the splitting the football approach, the effect is to give each party access to territory that it could not previously serve.²⁷⁵

100. *Discussion.* We agree with WCA that Ad Hoc MDS Alliance has not justified a change in Section 27.1206(a)(1) of the Rules that would exempt primary BRS Channel 2 licensees from splitting the football with either BRS Channel 2A or secondary BRS Channel 2 incumbent licensees. Initially, we note that Ad Hoc MDS Alliance ignores the fact that secondary BRS Channel 2 and 2A licensees were secondary to AWS, not to other BRS licensees. Moreover, maintaining the rule as adopted will provide clarity to all licensees, and will not overturn any of the planning which has been ongoing over the years since Section 27.1206(a)(1) of the Rules was adopted. The rule gives all Channel 2 licensees an area in which they have exclusive use of all 6 megahertz of Channel 2, and does not affect the rights of primary BRS Channel 2 licensees that are to be relocated by AWS auction winners. Accordingly, we reject Ad Hoc MDS Alliance's proposal and affirm the use of our regular splitting the football rule for BRS Channel 2 and 2A licensees.

I. Grandfathered E and F Group Channel EBS Stations

101. *Background.* In 1983, the Commission redesignated the E and F Group Instructional ITFS channels from the ITFS service to the MDS.²⁷⁶ The Commission took this action in an effort to spur the development of MDS to promote effective and intense utilization of the spectrum leading to its highest valued use.²⁷⁷ As part of its decision, the Commission grandfathered ITFS licensees operating on the E Group and F Group channels subject to the following limitations:

Grandfathered ITFS stations operating on the E and F channels will only be protected to the extent of their service that is either in the operation or the application stage as of May 26, 1983. These licensees or applicants will not generally be permitted to change transmitter location or antenna height, or to change transmission power. In addition, any new receive stations added after May 26, 1983 will not be protected against interference from MDS transmissions. In this fashion, all facets of grandfathered ITFS operations were frozen as of May 26, 1983.²⁷⁸

The Commission stated that "there may be instances where the natural evolution of an ITFS station may reasonably require the addition of receive stations without changing the nature or the scope of the ITFS

²⁷⁴ WCA Reply at 19, citing *BRS/EBS R&O*, 19 FCC Rcd at 14194 ¶ 65.

²⁷⁵ WCA Reply at 19.

²⁷⁶ See In the Matter of Amendment of Parts 2, 21, 74 and 94 of the Commission's Rules and Regulations in regard to frequency allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service, and the Private Operational Fixed Microwave Service, GN Docket No. 80-112, CC Docket No. 80-116, *Report and Order*, 94 FCC 2d 1203 (1983) (*E and F Group Reallocation Order*). As stated previously, the Commission renamed the ITFS service as the "Educational Broadband Service" (EBS) and MDS service the "Broadband Radio Service" (BRS). *BRS/EBS R&O*, 19 FCC Rcd at 14169 ¶ 6.

²⁷⁷ *E and F Group Reallocation Order*, 94 FCC 2d at 1228-29 ¶¶ 61-63.

²⁷⁸ See In the Matter of Amendment of Parts 2, 21, 74 and 94 of the Commission's Rules and Regulations in regard to frequency allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service, and the Private Operational Fixed Microwave Service, GN Docket No. 80-112, CC Docket No. 80-116, *Memorandum Opinion and Order on Reconsideration*, 98 FCC 2d 129, 132-33 ¶ 12 (1983) (*E and F Group Reallocation Reconsideration Order*). See also 47 C.F.R. § 74.902(c).

operation" that would justify the addition of additional receive sites.²⁷⁹ In those instances, the Commission stated that the grandfathered ITFS licensee could request a waiver of Section 74.902(c).²⁸⁰ The Commission's Rules provided that "in those areas where Multipoint Distribution Service use of these channels is allowed, Instructional Television Fixed Service users of these channels will continue to be afforded protection from harmful co-channel and adjacent channel interference from Multipoint Distribution Service stations."²⁸¹

102. In the *BRS/EBS FNPRM*, the Commission sought comment on how to modify its rules concerning grandfathered E and F Group channel ITFS stations to equitably allow both MDS and ITFS stations to provide advanced broadband wireless services.²⁸² The Commission envisaged three scenarios: (1) the PSA of the grandfathered E and F Group EBS licensee almost entirely overlaps the PSA of the co-channel MDS licensee; (2) the PSA of the grandfathered E and F Group EBS licensee overlaps to some extent, but not as much as in the first scenario, and (3) the grandfathered E and F Group EBS licensee remains frozen, unable to modify its system, and there is no co-channel MDS licensee.²⁸³

103. In the *BRS/EBS 2nd R&O*, the Commission concluded that where there is no overlap between the EBS and BRS licensees, the Commission would free up the grandfathered E and F Group channel EBS licensees, grant these licensees a GSA, and allow them to modify or assign their license.²⁸⁴ In cases where the GSAs of grandfathered EBS and BRS licensees overlap, but that overlap is less than 50%, the Commission would divide the GSAs by splitting the football, as is done with other overlapping GSAs.²⁸⁵ Both the BRS and EBS licensees would be free to add, modify, and remove facilities within their GSAs, consistent with the Commission's new technical rules. In addition, the grandfathered EBS facility would be free to assign its license.²⁸⁶ In cases where the GSAs overlap 50% or greater, the Commission concluded that different treatment was warranted because splitting the football might no longer be the best solution for accommodating the needs of both licensees. In those cases, the Commission established a 90-day mandatory negotiation period during which both the BRS and EBS licensees would have an explicit duty to work to accommodate each other's communications requirements. If, at the end of 90 days, the parties could not reach a mutual agreement, the Commission would then split the football on its own accord.²⁸⁷

104. In their petitions for reconsideration, NY3G, Line of Site, Inc. (LOSI), and BellSouth argue the Commission should address significant overlap situations by dividing channels rather than dividing the geographic overlap itself, which would ensure that each party involved could provide full coverage of its service area on at least some channels.²⁸⁸ They recommend that the EBS licensee receive the high-power channel (E4 or F4) and one low-power channel and the BRS licensee receive two low-

²⁷⁹ *E and F Group Reallocation Reconsideration Order*, 98 FCC 2d 129, 132-33 ¶ 12 n.8.

²⁸⁰ *E and F Group Reallocation Reconsideration Order*, 98 FCC 2d 129, 132-33 ¶ 12 n.8.

²⁸¹ 47 C.F.R. § 74.902(c) (2004).

²⁸² *BRS/EBS FNPRM*, 19 FCC Rcd at 14290 ¶ 337.

²⁸³ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5744-45 ¶¶ 336-338.

²⁸⁴ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5749 ¶ 348.

²⁸⁵ 47 C.F.R. § 27.1206.

²⁸⁶ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5749 ¶ 349.

²⁸⁷ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5750 ¶ 350.

²⁸⁸ NY3G PFR at 3, BellSouth Reply at 6-7, LOSI Opposition at 2-5.

power channels.²⁸⁹ Specifically, BellSouth recommends that BRS licensees be assigned the E1/F1 and E2/F2 channels and the EBS licensees assigned the E3/F3 and E4/F4 channels.²⁹⁰

105. CTN, NIA, and Miami-Dade maintain that the Commission has already considered and rejected NY3G's proposal to mandate a division of channels between the licensees.²⁹¹ CTN and NIA contend that NY3G is still attempting to divide the channels for all grandfathered EBS and BRS licensees with GSA overlaps of more than 50% in a way that will benefit NY3G.²⁹²

106. NextWave recommends that if the parties cannot reach an agreement within the mandatory 90-day negotiation period, the Commission should adopt a formula for splitting the football rather than the Commission randomly splitting the football on its own accord.²⁹³ Specifically, NextWave recommends that the Commission require licensees to split the spectrum between them, within 30 days following the end of 90-day mandatory negotiation period according to the following procedure.²⁹⁴ First, the licensees would determine the total population in the overlap area based upon the most recent official United States Census numbers.²⁹⁵ Licensees can privately agree whether or not they will use population growth factors in this calculation.²⁹⁶ Any discrepancy between the population numbers of the licensees will be averaged for purposes of all calculations.²⁹⁷ Then the overlap area would be split using the traditional splitting the football methodology.²⁹⁸ The population contained in each licensee's half or slice of the overlap area would then be calculated and each licensee's corresponding relative percentage of the total population would be calculated.²⁹⁹ This percentage would then be used to split the spectrum among the licensees in relative proportion to the percentage of population each licensee commands in the overlap area.³⁰⁰ The percentage would be rounded to the percentile closest to 0%, 25%, 50%, 75% or 100%.³⁰¹ A licensee with a population ratio closest to 25%, for example, would retain one of the four channels.³⁰² Finally, the licensees would decide among themselves, according to their individual educational or business needs, the channels each would retain and provide a joint notice to the Commission.³⁰³ The grandfathered EBS licensee would have a right of first refusal to access the MBS channel.³⁰⁴

²⁸⁹ NY3G PFR at 3, BellSouth Reply at 7, LOSI Opposition at 4.

²⁹⁰ BellSouth Reply at 7.

²⁹¹ CTN and NIA Reply at 3, citing BRS/EBS 3rd MO&O, 21-FCC Rcd at 5750-51 ¶ 352, Miami-Dade Opposition at 2.

²⁹² CTN and NIA Reply at 3.

²⁹³ NextWave PFR at 13.

²⁹⁴ NextWave PFR at 13.

²⁹⁵ NextWave PFR at 13.

²⁹⁶ NextWave PFR at 13.

²⁹⁷ NextWave PFR at 13.

²⁹⁸ NextWave PFR at 13.

²⁹⁹ NextWave PFR at 13-14.

³⁰⁰ NextWave PFR at 14.

³⁰¹ NextWave PFR at 14.

³⁰² NextWave PFR at 14.

³⁰³ NextWave PFR at 14.

³⁰⁴ NextWave PFR at 14.

107. By way of example, NextWave offers two scenarios. First, where the geographic service areas of each licensee completely overlap, and thus the licensees have command of the same population number, each licensee would be accorded half of the channels to serve the entire overlapping area (for a four channel group, each licensee would receive two channels).³⁰⁵ In this scenario, the licensees would only need to determine which channels each will retain, and provide the Commission with joint notice.³⁰⁶ Second, where the overlapping geographic service area contains a population of 400,000, and where one licensee's sliver or half of the overlapping area includes a population of 100,000, and the other licensee's sliver or half of the overlapping area includes a population of 300,000, the licensee with the greatest population would receive three channels to serve the entire overlapping area ($300,000 / 400,000 = 75\% = 3$ channels), and the other licensee would receive one channel ($100,000 / 400,000 = 25\% = 1$ channel).³⁰⁷ NextWave argues that this approach serves the public interest by avoiding the random partitioning of the geographic service area by the Commission under the presently adopted approach.³⁰⁸ The resolution would provide each licensee with the ability to preserve its entire geographic service area and the flexibility to serve the entire overlap area with a lesser amount of spectrum.³⁰⁹

108. LOSI, CTN, and NIA oppose NextWave's methodology.³¹⁰ LOSI states that under NextWave's approach only the overlap is assessed, divided, and its spectrum apportioned.³¹¹ LOSI contends that, under this method, a licensee might have all four channels in its non-overlapping area but only a fractional channel within the overlap area.³¹² LOSI argues that such a solution would necessitate the licensing of apportioned overlap areas under new separate call signs, and could ultimately lead to confusion.³¹³

109. If after considering the petitions on this matter, the Commission retains the mandatory 90-day negotiation period, LOSI requests that the Commission provide parties with some guidance as to what is expected from them during and following the negotiation period.³¹⁴ LOSI suggests that the Commission establish: (1) a reporting requirement on the results of such negotiations; (2) a mechanism for Commission approval of negotiated settlements; (3) a timeframe and mechanism for the filing of applications needed to implement a negotiated settlement; (4) a mechanism for Commission intervention should a party refuse to negotiate; (5) penalties for parties refusing to negotiate; and (6) dispute resolution procedures.³¹⁵

110. CTN, NIA, and BellSouth oppose LOSI on this matter.³¹⁶ CTN and NIA state that certain of the proposed requirements, such as Commission intervention where a party refuses to negotiate

³⁰⁵ NextWave PFR at 14.

³⁰⁶ NextWave PFR at 14.

³⁰⁷ NextWave PFR at 14.

³⁰⁸ NextWave PFR at 14.

³⁰⁹ NextWave PFR at 14-15.

³¹⁰ LOSI Opposition at 4, CTN NIA Opposition at 2-3.

³¹¹ LOSI Opposition at 4.

³¹² LOSI Opposition at 4-5.

³¹³ LOSI Opposition at 5.

³¹⁴ LOSI Opposition at 5.

³¹⁵ LOSI Opposition at 5.

³¹⁶ CTN and NIA Reply at 4, BellSouth Reply at 8.

and penalties for parties refusing to negotiate could lead to disputes as to when a party determines the other party is refusing to negotiate.³¹⁷ With respect to proposals such as reporting on the negotiation results and mechanisms for filing applications, CTN and NIA describe these as unnecessary, as the parties reaching a negotiated solution will out of necessity file applications with the Commission if required to implement the solution.³¹⁸ BellSouth states that it is not necessary for the Commission to police private negotiations, which will either succeed because the parties can achieve a better result than the Commission's default solution, or will fail because at least one party believes that the Commission's solution better suits the party's communications requirements.³¹⁹

111. *Discussion.* We conclude that we should retain the existing Section 27.1206 of the Rules³²⁰ to eliminate overlaps of 50 percent or greater between grandfathered E and F Group channel EBS stations and co-channel incumbent BRS stations by splitting the football, as opposed to adopting the petitioners' request to split the channels. Splitting the football would permit grandfathered E and F Group EBS licensees, which have been providing service for 20 years, to modernize their systems to better serve the public, including allowing EBS licensees to transition to low-power cellularized operations, which increases spectrum utilization. Granting the flexibility that negotiations between affected parties allows is consistent with the *BRS/EBS R&O's* approach of utilizing geographic area licensing and promoting greater flexibility, and encourages negotiations and market-based solutions to overlap problems. In addition, this procedure tailors resolutions of overlap situations to the circumstances of each class of licensee.

112. Resolving significant overlap situations by dividing channels rather than dividing the geographic overlap itself is an approach we have already considered and rejected.³²¹ We note that under this approach, one licensee would receive only 5.5 megahertz of UBS spectrum,³²² which may be insufficient to provide any service. While certain commercial commenters support this approach, it has not received support from any educational commenter. In addition, this approach assumes that educational licensees would not be interested in providing broadband-type services. We have seen no support for this assumption. We also find that the record does not support NextWave's population based proposal which is founded on the premise that population should be the primary basis for assessing a licensee's channel requirements. Under NextWave's proposal, for example, in areas where there is a large discrepancy in population, a licensee may be relegated to one channel, which may be insufficient to meet its needs. Furthermore, NextWave's proposal is complicated and difficult to administer, and no other commenter supports it. Accordingly, we deny NY3G's, NextWave's, and BellSouth's petitions on this issue.

113. We next address LOSI's proposal that, having retained the mandatory 90-day negotiation period, we provide parties with some guidance as to what is expected from them during and following the negotiation period. We find that LOSI has not shown that its proposed requirements, which are supported by no other commenter, are necessary or appropriate.

³¹⁷ CTN and NIA Reply at 4.

³¹⁸ CTN and NIA Reply at 4.

³¹⁹ BellSouth Reply at 8.

³²⁰ 47 C.F.R. § 27.1206.

³²¹ See *BRS/EBS 3rd MO&O*, 21 FCC Red at 5750-5751 ¶ 352.

³²² A single UBS post-transition channel in the E and F channel groups is 5.5 megahertz wide. See 47 C.F.R. § 27.5(i)(2)(iii).

114. We note that NY3G filed a supplement to its petition for reconsideration,³²³ which was opposed by Sprint Nextel.³²⁴ Although this supplement was not timely filed, we will address the *substance of the petition to clarify a misunderstanding*. NY3G asks the Commission to adopt a rule to enable co-channel BRS and EBS licensees to exchange or transfer service area territory between one another to facilitate intersystem coordination of co-channel operations or to reduce or mitigate the harmful effects of interference.³²⁵ We do not adopt a rule because it is unnecessary to do so. All BRS and EBS licensees, including grandfathered E and F Group channel EBS licensees and incumbent BRS licenses that “split the football” with such licensees, may partition, disaggregate, assign, or transfer their spectrum.³²⁶ The use of the splitting the football mechanism to divide overlapping service areas does not preclude subsequent agreements to partition, disaggregate, assign, or transfer spectrum. NY3G argues that because of the eligibility restrictions on EBS spectrum, EBS licensees cannot partition their service areas or disaggregate their spectrum to reach a resolution with their co-channel BRS licensees.³²⁷ The E and F channels, however, are classified as both EBS and BRS spectrum.³²⁸ We have granted waivers to allow assignments or transfers of grandfathered EBS stations to BRS licensees upon a suitable public interest showing.³²⁹ Upon a similar showing, an EBS licensee could partition part of its service area or disaggregate its spectrum to its co-channel BRS licensee.

J. Gulf of Mexico Proceeding and Related Issues

115. *Background.* On May 21, 1996, the Gulf Coast MDS Service Company (Gulf Coast) filed a Petition for Rulemaking requesting that the Commission amend its rules to permit licensing of MDS and ITFS spectrum in the Gulf of Mexico.³³⁰ On May 3, 2002, the Commission issued the *Gulf NPRM* seeking comments on whether to authorize two licenses in the Gulf of Mexico and whether to adopt eligibility restrictions to avoid excessive concentration of licenses.³³¹ In the *Gulf NPRM*, the Commission proposed to establish a GSA in the Gulf of Mexico (“Gulf Service Area”), extending approximately 12 nautical miles from the United States coastline.³³²

116. On April 2, 2003, in the *BRS/EBS NPRM*, the Commission incorporated the Gulf of Mexico proceeding into the BRS/EBS proceeding and established a Gulf Service Area.³³³ The Commission noted that it did not receive any comments on its proposal to exclude ITFS channels, sought

³²³ NY3G Supplement to Petition for Reconsideration (filed Dec. 11, 2006).

³²⁴ *Ex Parte* Letter from Trey Hanbury, Director, Government Affairs, Sprint Nextel Corporation to Marlene H. Dortch, Federal Communications Commission (filed Jan. 8, 2007).

³²⁵ NY3G Supplement to Petition for Reconsideration (filed Dec. 11, 2006).

³²⁶ See *BRS/EBS R&O and FNPRM*, 19 FCC Rcd at 14244-14246 ¶¶ 207-210. See 47 C.F.R. § 1.948(f).

³²⁷ NY3G Reply to Opposition to Supplement (filed Jan. 25, 2007).

³²⁸ See 47 C.F.R. § 27.5(i)(2)(ii), (iii).

³²⁹ See, e.g., Alliance for Higher Education, *Memorandum Opinion and Order*, 19 FCC Rcd 23967 (WTB BD 2004), Letter from John J. Schauble, Deputy Chief, Broadband Division, Wireless Telecommunications Bureau to Wayne D. Johnsen, Esq. and Robin J. Cohen (WTB BD Jan. 29, 2007).

³³⁰ Petition for Rulemaking of Gulf Coast MDS Service Company (Gulf Coast Petition) (May 21, 1996).

³³¹ Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico, *Notice of Proposed Rulemaking*, WT Docket No. 02-68, 17 FCC Rcd 8446 (2002) (*Gulf NPRM*).

³³² See *Gulf NPRM*, 17 FCC Rcd at 8447, 8453 ¶¶ 2, 18.

³³³ *BRS/EBS NPRM*, 18 FCC Rcd at 6722, 6761 ¶¶ 5, 93.

further comment on whether to reallocate ITFS channels in the Gulf Service area for other uses, and sought comment on whether it should consider unlicensed uses in the Gulf Service Area.³³⁴

117. In the *BRS/EBS FNPRM*, the Commission noted that WCA and PetroCom (the successor in interest to Gulf Coast MDS Service Company) disagreed on the boundary for the Gulf Service Area.³³⁵ PetroCom preferred establishing the boundary at the land water-line while WCA preferred a boundary twelve nautical miles from shore.³³⁶ The Commission sought comment on the boundaries for the Gulf Service Area.³³⁷ The Commission expressed concern that the record was not sufficiently developed to resolve issues concerning the amount of spectrum to license in the Gulf Service Area, competitive bidding, partitioning and disaggregation, interference protection requirements, construction periods, and the length of the license term, and the Commission asked for additional comment on these issues.³³⁸

118. In the *BRS/EBS 2nd R&O*, the Commission found that the record did not demonstrate a demand for BRS or EBS operations in the Gulf of Mexico, that the record was not sufficiently developed to resolve issues concerning the amount of spectrum to license in the Gulf Service Area, and that no parties demonstrated an interest in providing BRS or EBS in the Gulf of Mexico.³³⁹ In light of these findings, the Commission decided to reverse its decision to create a Gulf Service Area for BRS or EBS.³⁴⁰ The Commission then terminated the Gulf Service proceeding, but reserved the right to revisit the Gulf Service Area issue for BRS and EBS should future circumstances warrant.³⁴¹

119. Now, the American Petroleum Institute (API) asks the Commission to reconsider its decision to terminate the Gulf Service proceeding.³⁴² To further the nation's energy policies, API states that its members require access to the 2.5 GHz spectrum either directly as private licensees or through customer relationships with Sprint Nextel or other carriers.³⁴³ API recommends that the Commission establish a Gulf Service Area,³⁴⁴ adopt essentially the same rules in the Gulf as are used for BTA licensees elsewhere,³⁴⁵ make available the full range of BRS spectrum to potential Gulf Service Area

³³⁴ *BRS/EBS NPRM*, 18 FCC Rcd at 6761 ¶ 94.

³³⁵ *BRS/EBS FNPRM*, 19 FCC Rcd at 14298-14299 ¶¶ 364-365.

³³⁶ *BRS/EBS FNPRM*, 19 FCC Rcd at 14298-14299 ¶¶ 364-365.

³³⁷ *BRS/EBS FNPRM*, 19 FCC Rcd at 14299 ¶ 365.

³³⁸ *BRS/EBS FNPRM*, 19 FCC Rcd at 14300 ¶ 367.

³³⁹ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5762 ¶ 383.

³⁴⁰ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5762 ¶ 383.

³⁴¹ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5762 ¶ 383.

³⁴² API PFR at 2. The American Petroleum Institute (API) is a national trade association representing more than 400 companies involved in all phases of the petroleum and natural gas industries, including exploration, production, refining, marketing, and transportation of petroleum, petroleum products, and natural gas. API PFR at 5. API's members utilize a wide variety of telecommunications systems, including point-to-point, point-to-multipoint microwave, and two-way mobile radio systems in the Gulf of Mexico to serve a variety of telecommunications requirements, including communications between remote oil and gas exploration and production sites, for supervisory control and data acquisition (SCADA) systems used to operate production facilities remotely, and to communicate with onshore operations. API PFR at 6. See also *Ex Parte* Letter from Jack Richards, Counsel for API, to Marlene H. Dortch, Secretary, Federal Communications Commission (dated Aug. 3, 2006).

³⁴³ API Reply at 5.

³⁴⁴ API PFR at 2.

³⁴⁵ API PFR at 9.

licensees,³⁴⁶ permit Gulf Service Area licensees to negotiate interference rights with other BTA authorization holders and incumbents,³⁴⁷ divide the Gulf Service Area into three zones for licensing purposes,³⁴⁸ and consider rules authorizing BRS service in the offshore areas of the Atlantic and Pacific Oceans.³⁴⁹

120. WCA and Sprint Nextel oppose API's petition on procedural grounds.³⁵⁰ They argue that the petition is procedurally defective because API relied on information not previously presented to the Commission.³⁵¹ In addition, WCA argues that because the Commission has never sought comment on whether to license BRS spectrum off the outer continental shelves in the Atlantic and Pacific Oceans, to do so here would be beyond the scope of this proceeding, and consequently, a violation of the Administrative Procedure Act.³⁵² Aside from their procedural concerns, Sprint Nextel and WCA emphasize that they are concerned about interference between land-based facilities and Gulf facilities, caused, in part, by "ducting."³⁵³ WCA recommends that the Commission draw the innermost boundary of a new "Gulf Service Area" at the limit of the territorial waters of the United States in the Gulf, approximately twelve nautical miles from the coastline.³⁵⁴ Sprint Nextel recommends that any Gulf Service Area boundary should begin at the greater distance of either: (1) the edge of the land-based BRS-EBS licensee's GSA boundary; or (2) approximately 12 nautical miles from the shoreline at mean high tide.³⁵⁵

121. In addition, WCA submits the following proposals if the Commission decides to establish a Gulf Service Area. WCA asks that the Commission adopt the licensing and technical rules WCA proposed for the Gulf of Mexico in WCA's earlier filings in this proceeding.³⁵⁶ Second, WCA asks that any auction winner's Gulf Service Area exclude the circular 35-mile radius GSAs of any incumbent BRS or EBS licensee, just as the service area awarded to any land-based BRS BTA auction winner excluded the protected service area of an incumbent pursuant to the Commission's Rules.³⁵⁷ Third, WCA argues

³⁴⁶ API PFR at 9.

³⁴⁷ API PFR at 14.

³⁴⁸ API PFR at 15. These zones would be as follows: Zone A: The boundaries of Zone A should be from the shoreline at high mean tide on Florida's Gulf Coast on the east to longitude 91°00' on the west; Zone B: The boundaries of Zone B should be from longitude 91°00' on the east to longitude 94°00' on the west; and Zone C: The boundaries of Zone C should be from longitude 94°00' on the east, the shoreline at mean high tide on the north and west, a 280 km (175 mile) radius from the reference point at Linares, N.L., Mexico. API PFR at 15-16.

³⁴⁹ API PFR at 17.

³⁵⁰ WCA Opposition at 28, Sprint Nextel Opposition at 2-3.

³⁵¹ WCA Opposition at 31, Sprint Nextel Opposition at 2-3.

³⁵² Sprint Nextel Opposition at 6, citing 5 U.S.C. § 553(b); WCA Opposition at 29.

³⁵³ WCA Opposition at 35-36, Sprint Nextel Opposition at 8. See *Gulf NPRM*, 17 FCC Rcd at 8464 ¶ 39. ("[D]ucting is a phenomenon whereby a radio signal is trapped within and between stratified layers of the atmosphere which have non-uniform refractivity indexes. This layering is caused by climatological processes such as subsidence, advection, surface heating and radiative cooling and the ducts created due to these factors can extend for distances of tens to hundreds of miles.") See also Letter from Paul J. Sindebrand, Esq., counsel for WCA, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 06-136 (Apr. 9, 2007) (*WCA April 9 Ex Parte*).

³⁵⁴ WCA Opposition at 38, citing *Gulf NPRM*, 17 FCC Rcd at 8452-53 ¶¶ 17-18.

³⁵⁵ Sprint Nextel Opposition at 8.

³⁵⁶ WCA Opposition at 33, citing WCA *FNPRM* Comments at 39-43 and WCA *FNPRM* Reply Comments at 38-42.

³⁵⁷ WCA Opposition at 37, citing 47 C.F.R. § 27.1206(a)(2), formerly 47 C.F.R. § 21.933(a)(2003).

that the BRS BTA authorizations for areas bordering the Gulf should extend at least to the boundaries of the counties that comprise the BTA, including areas that are within counties but beyond the coastline.³⁵⁸ Fourth, WCA states that the Commission should follow the approach taken in its recent proceedings regulating cellular service in the Gulf and establish a "Gulf Coastal Zone" that would extend from the boundaries of the BTAs bordering the Gulf to the limit of the territorial waters of the United States. *Within the Gulf Coastal Zone, the holder of either the adjacent BTA authorization or the Gulf Service Area authorization could provide service, provided the one holder meets the new co-channel interference protection requirements at the other's service area boundary.*³⁵⁹ Fifth, subject to WCA's proposals set forth above, operations in any new Gulf Service Area should generally be subject to the rules applicable to the LBS/UBS or MBS, as appropriate, and, specifically, Gulf operations should be required to comply with the signal strength limit at the boundary of the GSAs of incumbent BRS/EBS licensees and BTA authorization holders, and should not be excused even if non-compliance is caused by ducting.³⁶⁰

122. *Discussion.* Although in the *BRS/EBS 2nd R&O* the Commission declined to create a Gulf Service Area for BRS or EBS and terminated the Gulf Service proceeding,³⁶¹ it reserved the right to revisit the Gulf Service Area issue for BRS and EBS should future circumstances warrant.³⁶² We now agree with API and PetroCom that we should re-establish service areas in the Gulf of Mexico for BRS. It is clear that establishing BRS service areas in the Gulf could provide a means for meeting an important communications need in a critical area, as well as enhance emergency communications in the region. Accordingly, we shall grant API's petition and re-establish Gulf of Mexico Service Areas for BRS.

123. Over the course of the past two years, circumstances have significantly changed. In addition to the unprecedented devastation caused by Hurricanes Katrina and Rita in 2005,³⁶³ including the impact on the oil industry, we note the major Gulf of Mexico deepwater oil discovery in 2006.³⁶⁴ We further note the recent enactment of the Gulf of Mexico Energy Security Act of 2006,³⁶⁵ which has opened up 8.3 million acres of the Gulf of Mexico 125 miles or more from the Florida panhandle to offshore drilling. We believe that these circumstances warrant revisiting the issue of Gulf of Mexico Service Areas, as contemplated by the Commission's decision in the *BRS/EBS 2nd R&O*.³⁶⁶ Thus, we reject the arguments of WCA and Sprint Nextel that API's petition should be dismissed as procedurally defective, and, in light of the information presented by API, find under 1.429(b)(3) of our Rules that it is in the public interest to reconsider the Commission's decision to terminate the Gulf Service proceeding.³⁶⁷

124. Specifically, we are persuaded by API's two interrelated reasons for seeking reconsideration of the Commission's decision. First, in light of the devastation caused by Hurricanes Rita

³⁵⁸ WCA Opposition at 37.

³⁵⁹ WCA Opposition at 39-40.

³⁶⁰ WCA Opposition at 40. WCA states that for purposes of the co-channel height benchmarking rule, the distance to the border used in the formula $D^2/17$, should be the distance to the border of the BTA in issue.

³⁶¹ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5762 ¶ 383.

³⁶² *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5762 ¶ 383.

³⁶³ See, e.g., Senate Committee on Homeland Security and Governmental Affairs, Hurricane Katrina: A Nation Still Unprepared, 109th Cong., 2d Sess. (2006).

³⁶⁴ See, e.g., Chevron Announces Record Setting Well Test at Jack (Sep. 5, 2006), <http://www.chevron.com/news/press/2006/2006-09-05.asp>.

³⁶⁵ Gulf of Mexico Energy Security Act of 2006, Pub.L. No. 109-432, Division C, Title I.

³⁶⁶ *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5762 ¶ 383.

³⁶⁷ 47 C.F.R. § 1.429(b)(3). See WCA Opposition at 32-33, Sprint Nextel Opposition at 2-3.

and Katrina, API's members have re-evaluated their communications needs in the Gulf of Mexico. In particular, the oil and natural gas industry has placed increased importance on the use of rapidly deployable IP-enabled broadband services to support both permanent facilities and disaster recovery efforts.³⁶⁸ Although a number of commercial entities currently provide telecommunications service in the Gulf of Mexico through wireless, wireline, or satellite systems, we are concerned that currently the Gulf of Mexico may be an underserved area where spectrum licenses generally are not available.³⁶⁹ Moreover, some oil and gas facilities are too far from shore to receive wireless services from land-based providers.³⁷⁰ We agree with API that licensing BRS spectrum in the Gulf will encourage service providers to explore and offer new services in the underserved Gulf region.³⁷¹

125. Second, API persuasively argues that the 2495-2690 MHz band is one of the few bands available and adequate for operations in support of off-shore oil and gas facilities.³⁷² With respect to Industrial/Business licensees, the 1850-1990 MHz band, the 2130-2150/2180-2200 MHz band, and much of the spectrum previously available in the 2.4 GHz band, have been allocated for other purposes.³⁷³ Although spectrum in the 900 MHz band supports relatively short distance, narrow band point-to-point and point-to-multipoint systems, API notes that, above 900 MHz, the next band with a substantial amount of available spectrum is found at 6 GHz, which API contends is not adequately suited for use in marine environments such as the Gulf.³⁷⁴ Moreover, production platforms are often separated by too much distance to support use of 6 GHz spectrum for point-to-point systems.³⁷⁵ While many energy companies and service providers have deployed systems in the Part 15 bands, according to API, these frequencies are quickly becoming saturated and unsuitable for critical applications.³⁷⁶ Because of the critical role that

³⁶⁸ API Reply at 5.

³⁶⁹ API PFR at 8.

³⁷⁰ API PFR at 7. API cites data from the Minerals Management Service of the United States Department of the Interior that indicates that there are approximately 4000 oil and natural gas platforms in the Gulf, 954 of which are manned. About 152 companies conduct business in the Gulf related to oil and natural gas production, and 23% of U.S. natural gas production and approximately 30% of U.S. oil production occurs in the Federal portion of the Gulf of Mexico. API states that this activity is expanding, especially in the deepwater regions of the Gulf; as of April 2006, there were reportedly 94 wells being drilled in Gulf waters for exploration purposes, and several parties have sought to establish a regassification plant in the waters of the Gulf by which liquefied natural gas could be imported into the U.S. Some 45 of these wells were located in areas with water depths upwards of 1000 feet, while 11 were in water depths of 5000 feet or greater, and exploration wells have been drilled in record water depths of over 11,000 feet. API states that the distances these facilities are located from shore eliminate the possibility of receiving service from land-based providers. *Id.*

³⁷¹ API PFR at 8.

³⁷² We note that the Commission has established service areas in the Gulf of Mexico in the AWS band (1710-1755 and 2110-2155 MHz) which was auctioned in 2006, and the 700 MHz band (698-746, 747-762 and 777-792 MHz), auctioned in 2008. See *In re Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, Report and Order*, WT Docket No. 02-353, 18 FCC Rcd 25162, 25177 ¶ 40 (2003) (*AWS R&O*); *In the Matter of Service Rules for the 698-746, 747-762 and 777-792 MHz bands, Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 06-150, 22 FCC Rcd 8064, 8085 ¶ 49 (2007) (*700 MHz R&O & FNPRM*). Nonetheless, we believe that the potential availability of Gulf of Mexico service areas in these bands does not reduce the public interest benefit of establishing a Gulf of Mexico service area in this band.

³⁷³ API PFR at 8.

³⁷⁴ API PFR at 8.

³⁷⁵ API PFR at 7-8.

³⁷⁶ API Reply at 5.

communications plays in ensuring the safe, effective production of oil and natural gas in the Gulf, we find granting API's petition is in the public interest.³⁷⁷

126. With respect to setting the boundary of the Gulf Service Area, we agree with WCA and establish the boundary at twelve nautical miles from the shoreline, as we proposed in the *Gulf NPRM*.³⁷⁸ Establishing the boundary of a Gulf Service Area at this point will ensure that land-based providers can provide service to land-based areas near the shore, which would not be the case were we to establish the boundary at the shoreline, as providers would need to limit their signal level at the boundary. We believe that this approach is a balanced resolution of the matter and also is consistent with the rules for other Part 27 services.³⁷⁹ While API originally recommended that we establish the boundary at the shoreline, we note that API "no longer opposes establishing the boundary of the Gulf Service Area at 12 nautical miles from the shoreline to the extent that doing so would allow the Commission to move towards the greater objective of licensing the 2.5 GHz band in the Gulf."³⁸⁰

127. We accept API's proposal,³⁸¹ unchallenged by other commenters, that the Gulf Service Area be divided into three zones for purposes of licensing. In response to WCA's concerns, we clarify that the Gulf Service areas will exclude any area currently occupied by an incumbent BRS station. This approach is consistent with other areas, where BTA authorization holders may not operate in areas occupied by incumbent BRS stations.³⁸² Finally, in light of our decision to set the boundary of the Gulf Service Areas twelve nautical miles from the shoreline, we find no basis for considering WCA's proposal to establish a Gulf Coastal Zone where both the land-based BTA licensee and the Gulf of Mexico licensee may operate. We note that when land-based licensees previously had overlapping service areas, such overlap often made it more difficult for both licensees to provide service.

128. We agree with API that the Commission's existing technical rules should be applied to the Gulf Service Areas, and can easily be utilized to resolve any interference problems that may arise on a case-by-case basis. Ducting is not a phenomenon that is limited to the Gulf of Mexico, and the record does not support separate or special rules only for the Gulf. Using our existing rules has the benefit of treating all service providers equally: while land-based licensees will have to protect the service areas of Gulf-based licensees, Gulf-based licensees will still have to meet signal strength limits at the borders of their service areas, protecting land-based licensees. WCA has not shown that Gulf licensees are incapable or unwilling to work out interference problems in the same manner as other licensees. In addition, utilizing our existing rules will provide Gulf licensees with the flexibility necessary to provide service, which would not be the case were we to adopt WCA's proposed rule provisions. Gulf licensees will still have to meet signal strength limits at the borders of their service areas.

129. Finally, with respect to API's proposal that we also consider whether rules authorizing BRS service in the offshore areas of the Atlantic and Pacific Oceans may be warranted,³⁸³ we see no reason to address this issue at this time. API concedes that there is currently little need for licensing in

³⁷⁷ API Reply at 4-5.

³⁷⁸ See *Gulf NPRM*, 17 FCC Rcd at 8453 ¶ 18.

³⁷⁹ See 47 C.F.R. §§ 27.6(a)(2), 27.6(c)(2)(i)-(ii), 27.6(h)(1)(i)-(ii).

³⁸⁰ Ex Parte Letter from Jack Richards, Counsel for API, to John J. Schauble, Federal Communications Commission (dated Jan. 10, 2007).

³⁸¹ API PFR at 15.

³⁸² See 47 C.F.R. § 27.1206(a)(2).

³⁸³ API PFR at 17.

these areas.³⁸⁴ Should circumstances change, API and other interested parties are welcome to return to the Commission with a more fully developed proposal.

K. Leasing

1. Automatic Renewal Provisions in EBS leases executed before January 10, 2005

130. *Background.* Clarendon and HITN ask the Commission to reconsider certain issues regarding EBS excess capacity leases. Clarendon asks the Commission to clarify whether automatic renewal clauses in leases entered into before January 10, 2005 may be interpreted to extend the length of the lease indefinitely.³⁸⁵ This situation arises because of the effect of the Commission's decision in the *BRS/EBS R&O* (applying the rules and policies of the Secondary Markets proceeding to EBS excess capacity leases entered into from January 10, 2005 until July 18, 2006) on the interpretation of a boilerplate clause frequently used in EBS excess capacity leases.³⁸⁶ The boilerplate clause can be interpreted to permit automatic one-year extensions indefinitely, if the Commission revises its rules to permit leases to be longer than 15 years.³⁸⁷ According to Clarendon, some lessees argue that because the length of leases entered into from January 10, 2005 to July 18, 2006 was unlimited, leases entered into before January 10, 2005 may be extended indefinitely by operation of the boilerplate clause.³⁸⁸ Clarendon, however, states that it is unsure that this interpretation of the boilerplate clause is an accurate reflection of the Commission's decision in the *BRS/EBS R&O* because of inconsistent statements made by the Commission in the *BRS/EBS 3rd MO&O* concerning the length of EBS leases entered into before January 10, 2005.³⁸⁹ Thus, to determine the lease term for EBS leases entered into before January 10, 2005, Clarendon asks that the Commission reconcile its statement in paragraph 266 that "the length of the EBS leases entered into between January 10, 2005 and [July 18, 2006] was not limited under the Commission's Rules" with its statement in paragraph 269 that leases entered into before January 10, 2005 "would be grandfathered under the then-existing EBS leasing framework, thus, such leases would be subject to the existing 15-year lease limitation."³⁹⁰ Clarendon notes that a state court has found that an EBS lease could not be interpreted to give a lessee a perpetual lease.³⁹¹

³⁸⁴ API PFR at 17.

³⁸⁵ Clarendon PFR at 2-8. Clarendon provides the following example of such a provision from an EBS excess capacity lease agreement:

Subject to the provisions for earlier termination contained in Section 10 hereof, this Amended Agreement will extend for: (a) an initial term of five (5) years from the Effective Date (the "Initial Term"); (b) two additional terms of five (5) years each (each a "Renewal Term" and collectively, the "Renewal Terms") unless [lessee] notifies [lessor] at least ninety (90) days before the end of the Initial Term or the First Renewal Term, as the case may be, that [lessee] elects not to extend this Amended Agreement for the upcoming Renewal Term; and (c) should the FCC during the Initial Term or any Renewal Term revise its rules and policies to allow the length of leases of ITFS excess capacity to extend beyond fifteen (15) years, such number of additional terms of one (1) year each as are permitted by the FCC...(emphasis in original). Clarendon PFR at 3-4.

³⁸⁶ Clarendon PFR at 4-5.

³⁸⁷ Clarendon PFR at 4-5.

³⁸⁸ Clarendon PFR at 4-5.

³⁸⁹ Clarendon PFR at 4-5.

³⁹⁰ Clarendon PFR at 2-4. See also *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5715-5716 ¶¶ 266, 269.

³⁹¹ See *Nextwave Broadband, Inc. v. Saint Rose Church Schools*, Order, Superior Court of New Jersey, Mercer County, Chancery Division, Docket No. C-53-06 (June 16, 2006); Clarendon PFR at 7 n.5; HITN PFR at 7 n.12.

131. HITN asks the Commission to void EBS leases for one-way only video services entered into prior to the release of the *Two-Way Order* in 1998.³⁹² In addition to the boilerplate clause described above, HITN contends that these leases also contain an unknown start date; thus, not only has the lease term been extended in perpetuity, it has not yet begun.³⁹³ As a result of the operation of these two clauses, HITN argues, many operators have warehoused spectrum for more than ten years without providing service to the public or lease payments to the licensees/lessors.³⁹⁴ And, HITN surmises, lessees intend to continue warehousing spectrum to pressure licensees/lessors who want to take advantage of the new rules into unfavorable lease negotiations or costly litigation.³⁹⁵ HITN further surmises that lessees are using the May 1, 2011 substantial service deadline to further pressure licensee/lessors to renegotiate their leases within the next few years.³⁹⁶ HITN requests that, given the present inability of operators to launch and operate new wireless cable video systems on the majority of this spectrum band, the Commission should declare void all legacy video-only leases entered into under pre-1998 rules, the terms of which have never commenced.³⁹⁷

132. Clearwire, CTN, NIA, and IMWED support the petitions of Clarendon and HITN and ask that the Commission clarify its position on whether EBS excess capacity leases entered into before January 10, 2005, can be interpreted to run in perpetuity.³⁹⁸ Clearwire states that although it believes that the Commission should not become involved in the interpretation of terms of commercial agreements such as EBS leases, it strongly agrees with Clarendon that the Commission should declare such an interpretation a violation of public policy.³⁹⁹ IMWED also supports Clarendon's and HITN's petitions concerning lease limitations.⁴⁰⁰

133. WiMAX, WCA, Sprint Nextel, and BellSouth oppose the petitions and argue that the Commission should not become involved in the interpretation of private contractual agreements.⁴⁰¹ They argue that individualized agreements need individualized scrutiny.⁴⁰² BellSouth further argues, as does Sprint Nextel, that one-way video leases may not be obsolete as HITN describes because if there is

³⁹² HITN PFR at 6 and 7 n.12.

³⁹³ HITN PFR at 7. HITN states that as perhaps the largest licensee of EBS spectrum, it is duty-bound to bring this situation to the attention of the Commission. Furthermore, HITN states that it is not asking the Commission to extricate it from spectrum leases that it executed. HITN states that it has no leases for any of its 70 stations that contain these one-sided lease clauses. HITN Reply at 8-9.

³⁹⁴ HITN PFR at 7 n.12. HITN states that these leases have an unknown start date because the initiation of the term is triggered by commencement of wireless cable video services, construction of the wireless cable video system, or service provision of the first wireless cable video subscriber – none of which, in the vast majority of cases, ever occurred, and which now cannot occur. HITN PFR at 7 n.12.

³⁹⁵ HITN Reply at 9.

³⁹⁶ HITN Reply at 9.

³⁹⁷ HITN PFR at 7 n.12.

³⁹⁸ Clearwire Opposition at 9, CTN/NIA Opposition at 5-6, IMWED Opposition at 6.

³⁹⁹ Clearwire Opposition at 9.

⁴⁰⁰ IMWED Opposition at 6.

⁴⁰¹ WiMAX Opposition at 6-7, WCA Opposition at 24-25, Sprint Nextel Opposition at 18, BellSouth Reply at 4-5.

⁴⁰² WCA Opposition at 27, BellSouth Reply at 5, Sprint Nextel Reply at 4.

sufficient demand for these services, the Commission's Rules provide BRS/EBS licensees with the flexibility to provide these applications.⁴⁰³

134. *Discussion.* The Commission's policy regarding the length of EBS leases has evolved since it first permitted EBS licensees to lease excess capacity in 1983. Originally, the Commission's policy prohibited an EBS licensee from executing a lease agreement that extended beyond the 10-year license term because such provisions were viewed as inconsistent with the terms of the license.⁴⁰⁴ In 1995, however, the Commission changed its policy to permit an EBS licensee to enter into a 10-year lease agreement without regard to the duration of the licensee's license term, but required the lease to note that such an extension was contingent on the renewal of the license.⁴⁰⁵ In 1998, in the *Two-Way Order*, the Commission again changed its policy and permitted an EBS licensee to enter into 15-year lease agreement, and again required that the lease specify that such an extension be subject to the renewal of the underlying license.⁴⁰⁶ The Commission also grandfathered existing EBS excess capacity leases entered into before March 31, 1997.⁴⁰⁷ In 2000, in the *Two-Way Order on Further Reconsideration*, the Commission further grandfathered EBS excess capacity leases entered into before March 31, 1997 that contained an automatic renewal clause that would be effective after March 31, 1997, provided that the total term of the lease did not exceed 15 years.⁴⁰⁸

135. In 2004, in the *BRS/EBS R&O*, the Commission applied the Secondary Markets rules to EBS excess capacity leases executed between January 10, 2005 and July 18, 2006. In 2006, in the *BRS/EBS 3rd MO&O*, the Commission modified the application of the rules and policies of the Secondary Markets proceeding to EBS leases.⁴⁰⁹ With regard to EBS leases, the Commission stated that although the rules and policies of the Secondary Markets proceeding applied to EBS leases, EBS licensees may enter into an excess capacity lease agreement for 30 years so long as the lease agreement ensures that EBS licensees retain the right to review their educational use requirements at year 15 and every 5 years thereafter.⁴¹⁰ Moreover, the Commission permitted the use of "rights of first refusal"

⁴⁰³ BellSouth Reply at 5-6, citing Sprint Nextel Opposition at 19.

⁴⁰⁴ Amendment of Part 74 of the Commission's Rules with Regard to the Instructional Television Fixed Service, MM Docket No. 93-24, *Report and Order*, 10 FCC Rcd. 2907,2914 ¶ 38 (1995).

⁴⁰⁵ Amendment of Part 74 of the Commission's Rules with Regard to the Instructional Television Fixed Service, MM Docket No. 93-24, *Report and Order*, 10 FCC Rcd. 2907,2914 ¶ 38 (1995).

⁴⁰⁶ Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Two-Way Transmissions, MM Docket No. 97-217, *Report and Order*, 13 FCC Rcd 19112, 19183-18184 ¶¶ 133-134 (1998) (*Two-Way Order*).

⁴⁰⁷ *Two-Way Order*, 13 FCC Rcd at 19181 ¶ 130. See also Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket 97-217, *Report and Order on Reconsideration*, 14 FCC Rcd. 12764, 12791 ¶ 59 (2000) (*Two-Way Order on Reconsideration*). The Commission originally declined to grandfather leases subject to automatic renewal after March 31, 1997 because grandfathering these leases could have permitted them to continue in perpetuity under the rules adopted prior to the *Two-Way Order*. The Commission reversed this decision when the petitioners assured the Commission that the leases that would be grandfathered could have a total term of ten years. Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket 97-217, *Report and Order on Further Reconsideration and Further Notice of Proposed Rulemaking*, 15 FCC Rcd. 14566, 14569-14570 ¶ 11 (2000) (*Two-Way Order Further Recon.*).

⁴⁰⁸ *Two-Way Order Further Recon.*, 15 FCC Rcd at 14569-14570 ¶ 11.

⁴⁰⁹ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5715 ¶ 266.

⁴¹⁰ *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5716 ¶ 268.