

Petitioners have failed to provide sufficient detail about the planned or proposed BRS operations in the band to support the conclusion that these grandfathered operations would significantly impact BRS operations in the band. Instead, the BRS Petitioners offer generalized comparisons of BRS operations to ATC operations as evidence of the potential for mutual interference between BRS operations and the grandfathered terrestrial operations in the band.¹¹⁵ In the *ATC Report and Order*, the Commission recognized the potential for mutual interference between ATC operations and the grandfathered incumbent operations in the band but ultimately determined that these services would be able to share spectrum and that any potential interference concerns would be mitigated through coordination.¹¹⁶ We similarly continue to believe that spectrum sharing between BRS and these grandfathered services is a viable option. We also disagree with the BRS Petitioners' contention that unlike ATC, BRS operators do not have to protect or accept interference from grandfathered licensees. BRS licensees and the grandfathered incumbents have co-primary status under our rules and, thus, BRS licensees are required to protect existing users from interference in the band.¹¹⁷

47. Further, we believe that coordination between BRS operators and the limited number of grandfathered operations in the band would sufficiently mitigate potential interference concerns, if any. As noted above, there are currently fifteen Part 90 and Part 101 incumbent grandfathered licenses in total in this band. Because this total number of grandfathered operations is small and localized, we believe that spectrum sharing is feasible. The nature of these services will also facilitate coordination. The eleven Part 101 grandfathered licenses, which are used primarily to provide temporary fixed communications, are currently coordinated on a case-by-case basis pursuant to the formal coordination procedures contained in Section 101.103 of the Commission's rules.¹¹⁸ These licensees would continue to be responsible for coordinating with other systems in order to protect their own receivers. Although the four Part 90 grandfathered licenses are not required to coordinate, because these public safety operations are generally localized and are critical to public safety, the information necessary for coordination with BRS – e.g., site and antenna information, as well as usage patterns – should be easily obtainable through the appropriate land mobile frequency coordinator or directly from the licensees. Because BRS, Part 90, and Part 101 licensees are co-primary, we expect all of these parties to cooperate in sharing spectrum and, as necessary, coordinate their operations. We believe that the small number and discrete localized nature of these incumbent licenses will permit efficient spectrum sharing in the band and we, therefore, deny the BRS Petitioners' request to require the relocation of Part 90 and Part 101 incumbent grandfathered licenses.¹¹⁹

¹¹⁵ See, e.g., WCA Petition at 19-23.

¹¹⁶ See *ATC Report and Order*, 18 FCC Rcd at 2060-2063 ¶¶ 201-206.

¹¹⁷ See 47 C.F.R. § 2.106 NG147, which provides in part that “. . . in the segment 2495-2500 MHz, these grandfathered stations may also continue to operate on a primary basis with stations in the fixed and mobile except aeronautical mobile services that are licensed under Part 27 (Miscellaneous Wireless Communication Services) of the Commission's rules.” See also 47 C.F.R. §§ 90.20(d)(73), 90.35(c)(74), 101.147(f)(2). The BRS is now licensed under Part 27 of our rules. See *BRS/EBS R&O*, 19 FCC Rcd 14165.

¹¹⁸ 47 C.F.R. § 101.103.

¹¹⁹ Because we have decided herein that the relocation of the grandfathered incumbents in the 2496-2500 MHz band is not necessary, we need not address the petitioners' arguments with respect to digitization of Part 90 licensees or who should bear the costs of relocation.

5. Industrial, Science, and Medical Operations

48. *Petitions.* The BRS Petitioners argue that the Commission should modify Part 18 of the Commission's rules to limit the emissions of ISM devices that operate in the ISM band centered at 2450 MHz (*i.e.*, the 2400-2500 MHz band).¹²⁰ Currently, the Commission's rules do not impose any radiated emission limits on ISM equipment within the bands specifically allocated for ISM equipment, although there are limits on those emissions outside the ISM bands.¹²¹ Even under this condition, we previously declined to relocate ISM devices, concluding that BRS could coexist with ISM operations present in the band.¹²² As background, ISM equipment is designed to generate and use radio frequency (RF) energy for industrial, scientific, medical, domestic, or similar purposes, excluding telecommunication applications. Common ISM equipment includes industrial heating, magnetic resonance, medical diathermy, and ultrasonic equipment, as well as consumer microwave equipment intended for use in a residential environment, such as domestic microwave ovens, jewelry cleaners, and ultrasonic humidifiers.¹²³

49. The BRS Petitioners contend that the Commission failed to demonstrate that BRS providers could share spectrum with ISM equipment operating in the 2400-2500 MHz band.¹²⁴ According to these Petitioners, AWS applications – a potential use for the BRS band – create a sharing scenario different from that which currently exists.¹²⁵ For example, WCA claims that because existing users of the band are more likely to operate in remote areas, and use high power, high-gain antenna systems, they are less likely to receive interference from ISM devices than will future BRS operations, which are anticipated to operate in urban areas where ISM devices are heavily used.¹²⁶

50. The BRS Petitioners propose that the Commission require that all ISM devices operating in the 2496-2500 MHz band and marketed after December 31, 2006, adhere to emissions limits of 500 microvolts/meter, measured at three meters, consistent with the emissions limits for unlicensed intentional radiators under Section 15.209 of the Commission's rules. WCA explains that, although this approach is less than ideal for BRS operators, it provides BRS licensees with the assurance that interference from ISM equipment should not worsen in that band.¹²⁷ The BRS Petitioners, in subsequent

¹²⁰ Sprint Petition at 6-7; WCA Petition at 23-26. *See also* Nextel Petition at 11. *See* 47 C.F.R. § 18.301 for a listing of frequency bands allocated for ISM.

¹²¹ *See* 47 C.F.R. § 18.305.

¹²² *Big LEO Spectrum Sharing Order*, 19 FCC Rcd at 13386 ¶ 67.

¹²³ 47 C.F.R. §§ 18.107(d)-(g), (j).

¹²⁴ *See* Nextel Petition at 9-10; Sprint Petition at 6; WCA Petition at 23-24.

¹²⁵ Sprint Petition at 6; WCA Petition at 24.

¹²⁶ WCA Petition at 24. *See also* Nextel Petition at 10; Sprint Petition at 6-7. WCA also argues that ISM emissions could worsen as filter technology evolves to permit ISM devices to operate with higher signal strengths unless the Commission amends Section 18.305(a) of its rules to limit signal strength in the 2496-2500 MHz band. WCA Petition at 24-25.

¹²⁷ WCA Petition at 25-26. *See also* Sprint Petition at 7; Nextel Petition at 11 n.31 (stating that the Commission could utilize the Part 15 emissions limits for ISM devices). The Association of Home Appliance Manufacturers (AHAM) opposes this proposal, citing the lack of a clear demonstration that any interference actually exists and the need to adhere to internationally-harmonized ISM standards. *See Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated (continued...))

ex parte communications, have set forth a proposal to expand the out-of-band emissions limits set forth in Section 18.305 of the Commission's Rules, which currently apply to ISM equipment emissions below 2400 MHz and above 2500 MHz, to ISM equipment emissions in the 2496-2500 MHz band. As with their other proposals, the BRS Petitioners maintain that such restrictions are necessary to protect future BRS operations in the band.¹²⁸

51. Fusion UV Systems, a manufacturer of industrial ISM equipment in the band, refutes the BRS Petitioners' claims, stating that the BRS Petitioners have failed to show how ISM equipment will interfere with the BRS systems planned for the band.¹²⁹ Fusion argues that the location of the BRS channel at the extreme top end of a 100 megahertz-wide ISM band serves to minimize the potential of harmful interference from ISM equipment to BRS because most ISM emissions are concentrated towards the center of the band. It further states that distance and shielding between ISM and BRS devices can serve to attenuate potentially harmful signals. Thus, Fusion contends, the BRS Petitions are substantively deficient.¹³⁰ AHAM contends that just because there are no in-band emission limits does not mean that there are no emission limits at all, and notes that the out-of-band limits on ISM devices' emissions effectively operate as a limit on the radio frequency energy that such devices, especially microwave ovens, can emit.¹³¹ Motorola, however, contends that reasonable power limits must be placed on ISM equipment operating in the 2496-2500 MHz band, including microwave ovens, in spite of their intermittent use, in order to allow other co-frequency systems to be planned around a certain level of interference.¹³² Manufacturers of consumer ISM equipment also claim that the BRS Petitioners have not

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September 27, 2005) at 1-2, 4. See also *Ex Parte* Letter from William Keane, Counsel for Fusion UV Systems, Inc., to Marlene H. Dortch, Federal Communications Commission (dated October 3, 2005).

¹²⁸ See *Ex Parte* Letter from Paul Sinderbrand, Counsel for WCA, to Marlene H. Dortch, Federal Communications Commission, at 4-5 (dated September 9, 2005); *Ex Parte* Letter from Trey Hanbury, Counsel for Sprint Nextel, to Marlene H. Dortch, Federal Communications Commission at 1 (dated September 20, 2005). See also *Ex Parte* Letter from Paul Sinderbrand, Counsel for WCA, to Marlene H. Dortch, Federal Communications Commission (dated October 19, 2005) at 1-2 and 15-20; *Ex Parte* Letter from Steve B. Sharkey, Director, Spectrum and Standards Strategy for Motorola, Inc. to Marlene H. Dortch, Federal Communications Commission (dated December 1, 2005); and *Ex Parte* Letter from Steve B. Sharkey, Director, Spectrum and Standards Strategy for Motorola, Inc. to Marlene H. Dortch, Federal Communications Commission (dated January 10, 2006) at 1-3.

¹²⁹ See generally Fusion Opposition. On March 1, 2005, the International Bureau granted the Motion for Leave to Accept Late-Filed Opposition of Fusion UV Systems, filed January 21, 2005, and the Joint Motion for Leave to File Replies of WCA, Sprint, and Nextel filed February 3, 2005.

¹³⁰ Fusion Opposition at 9-10. Fusion also claims that the petitions are untimely because the BRS Petitioners should have raised their ISM arguments earlier in the proceeding. Because we conclude, below, that our decision not to impose on ISM operations the in-band emission limits associated with Part 15 devices was proper, we need not address that procedural argument at this time. See also *Ex Parte* Letter from William Keane, Counsel for Fusion UV Systems, Inc., to Marlene H. Dortch, Federal Communications Commission (dated October 3, 2005) (discussing and refuting the BRS Petitioners' petitions as well as arguments contained in their subsequent *ex parte* submissions).

¹³¹ See *Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (filed January 23, 2006) at 1-2; *Ex Parte* Presentation from Russell H. Fox, Counsel for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated January 24, 2006) at 8-9; and *Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated February 10, 2006) at 1.

¹³² See *Ex Parte* Letter from Steve B. Sharkey, Director, Spectrum and Standards Strategy for Motorola, Inc. to Marlene H. Dortch, Federal Communications Commission (dated January 10, 2006) at 1-3.

offered a sufficient demonstration of harmful interference and contend that compliance with the proposed standards would result in more expensive and less effective consumer products.¹³³ AHAM contends that limitation of emissions within the ISM bands would not be consistent with international regulations.¹³⁴ AHAM also asserts that the BRS Petitioners' claims regarding the potential for interference to BRS devices from microwave ovens are faulty because they are based on invalid interpretations of outdated and improperly generated interference potential study data.¹³⁵

52. *Discussion.* As Fusion notes, the BRS Petitioners have failed to provide sufficient detail about the planned or proposed BRS operations in the band to support the conclusion that there would be harmful interference from ISM equipment.¹³⁶ Instead, the BRS Petitioners offer generalized conclusions about the inability of ubiquitous portable and mobile BRS equipment to coexist with ISM equipment.¹³⁷ Similarly, because the study cited by Motorola is several years old, and contains facts and analysis that are in dispute, we conclude that is not useful as a basis for imposing restrictions on the use of ISM equipment. Based on the nature of use of the ISM band, however, as well as the proven ability of existing services to coexist successfully on these frequencies, we continue to believe that BRS operations can share the band with ISM equipment operating under the current Part 18 rules and find that the BRS Petitioners have failed to give us cause to deviate from the well established and internationally-harmonized ISM standards. As such, we deny the BRS Petitioners' request to modify our rules pertaining to ISM operations in the 2400-2500 MHz band.

¹³³ See, e.g., *Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated January 21, 2005) at Appendix A (stating that a study by Panasonic shows that, in order to comply with the BRS Petitioners' proposal, it would have to alter the microwave oven design in a way that would substantially increase its weight and cost to produce, reduce its effectiveness, and more generally "shake the basics of microwave oven design"). See also GE Company Reply, Matsushita Electric Corporation of America Reply, and Whirlpool Reply.

¹³⁴ See *Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated December 23, 2005) at 2-3 (refuting Motorola's *Ex Parte* assertions).

¹³⁵ See *Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated December 23, 2005) at 1-2. Motorola had claimed that a study of microwave ovens conducted by the National Telecommunications and Information Administration (NTIA) in 1994 showed that all but one of the microwave ovens that met the Part 18 limits above 2500 MHz also met the Part 18 limits starting at 2496 MHz. See *Ex Parte* Letter from Steve B. Sharkey, Director, Spectrum and Standards Strategy for Motorola, Inc. to Marlene H. Dortch, Federal Communications Commission (dated December 15, 2005) Attachment, page 4. AHAM contends that the NTIA study, which had different measurement methods and load size than specified in Part 18 of the Commission's rules, was not designed to support the analyses or conclusions that Motorola presented in support of the BRS Petitioners' claims. In addition, AHAM refutes Motorola's claim that the NTIA study demonstrates that all but one of the microwaves tested that meet the Part 18 limits outside the 2400-2500 MHz band also meet those limits starting at 2496 MHz. See *Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated December 23, 2005) at 1-2.

¹³⁶ Fusion Opposition at 10.

¹³⁷ See, e.g., Sprint Petition at 6 (describing BRS operations as "likely to be ubiquitously deployed, and operat[ing] at relatively lower power levels and in closer proximity to ISM operations [than current users of the band]"); WCA Petition at 23 (characterizing the combination as "a recipe for disaster").

53. We note that the frequencies in question represent only the upper four megahertz of the 100-megahertz-wide ISM band and are 46 megahertz away from the nominal operating frequency of most ISM equipment.¹³⁸ There is no requirement that ISM equipment use all 100 megahertz, and many ISM applications may not even radiate in the 2496-2500 MHz portion of the band that will be used by BRS. ISM equipment also must adhere to emission limits above 2500 MHz and below 2400 MHz, and therefore the emissions at the upper end of the band where sharing with BRS would occur will tend to be of lower magnitude than those of frequencies towards the center of the band.¹³⁹ We also find it significant that an analogous sharing situation occurs at the lower end of the ISM band where the Amateur Radio Service shares spectrum in the 2400-2450 MHz band.¹⁴⁰ As the Amateur Radio Service has successfully shared spectrum with ISM equipment over a wide swath of frequencies, we believe that BRS can similarly share spectrum with ISM equipment in the four megahertz in question here.

54. In addition to amateur operations, existing MSS, BAS, and private radio licenses successfully operate in this band with ISM equipment without significant interference problems. The ability of these services to share the spectrum suggests that it is not necessary to impose in-band restrictions on ISM equipment emissions, notwithstanding the BRS Petitioners' assertions to the contrary.¹⁴¹ Given these services' successful use of the band, we would, at a minimum, expect the BRS proponents to explain how, in planning their BRS at the 2496-2500 MHz band, they have considered and rejected interference mitigation designs – a discussion missing from the record – before we would consider whether we should resort to the imposition of in-band radiated emissions limits on ISM

¹³⁸ See Fusion Opposition at 10 (agreeing with the Commission's earlier conclusion that ISM energy is most often concentrated at the center of the ISM band). See also J. Park, S. Park, D. Kim, P. Cho, K. Cho, *Experiments on Radio Interference Between Wireless LAN and Other Radio Devices on a 2.4 GHz ISM Band*, in Proc. 57th IEEE Semiannual Vehicular Technology Conference, Jeju, Korea, April 2003, at 1798-1801; A. Kamerman, N. Erkocevic, *Microwave Oven Interference on Wireless LANs Operating in the 2.4 GHz ISM Band*, in Proc. 8th IEEE Int. Symp. Personal, Indoor and Mobile Radio Communications, Helsinki, Finland, Sept. 1997, at 1221-1227; B. Despres, France Telecom, CNET DMR/RMC, *Measurement of microwave oven radiation between 1 & 18 GHz in relation with the CISPR standardization activities*; and T. Rondeau, M. D'Souza, D. Sweeney, *Residential Microwave Oven Interference on Bluetooth Data Performance*, in IEEE Transactions on Consumer Electronics, Vol. 50, No. 3, August 2004.

¹³⁹ See 47 C.F.R. § 18.305(b). In a series of recent *ex parte* filings, Sprint Nextel and AHAM have discussed whether the lack of an in-band power restriction on microwave oven operations is incompatible with the low-power broadband BRS operations that are anticipated to be deployed in the band. See, e.g., *Ex Parte* Letters of Trey Hanbury, Director, Sprint Nextel Corporation to Marlene H. Dortch, Federal Communications Commission (dated September 20, 2005, October 3, 2005, and October 18, 2005); *Ex Parte* Letter from Russell H. Fox, Counsel for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated October 11, 2005); and *Ex Parte* Letters from David Calabrese, AHAM, to Marlene H. Dortch, Federal Communications Commission (dated October 21, 2005, and November 1, 2005). As AHAM notes in its filings, the existing Part 18 out-of-band emission limitations serve to restrict such microwave oven equipment power at the upper end of the ISM band – specifically within the 2496-2500 MHz band at issue. In a similar vein, while the BRS Petitioners have suggested that potential future efficiencies in filter design might allow for greater ISM use of the 2496-2500 MHz portion of the band, we note that future ISM equipment will continue to need to attenuate power at the upper end of the ISM band in order to meet these out-of-band limits. Because of this practical limit on ISM design, and the speculative nature of the BRS Petitioners' concerns, we cannot conclude that in-band ISM emission limitations should be imposed.

¹⁴⁰ Specifically, with respect to the Amateur Radio Service, the 2402-2417 MHz portion of the band is primary, while the remaining portion is secondary.

¹⁴¹ See, e.g., Sprint Petition at 6.

equipment.¹⁴² More fundamentally, we observe that the manufacturers do not view interference between ISM equipment and Part 15 devices as an impediment to use, as at least one ISM device manufacturer – Panasonic – also produces cordless telephones that operate in the same 2400 MHz band as its microwave ovens. Similarly, Wi-Fi systems have been widely deployed in the band and have become an important means for the delivery of broadband access in commercial and public settings.¹⁴³ The success of Wi-Fi systems operating in the 2400 MHz band, whose operations use the same spectrum as the ISM devices in question, has not been diminished by reported or anticipated interference from ISM operations. The ability of both unlicensed operations – such as Wi-Fi and cordless phones – and licensed services to thrive in the band strongly suggests that BRS operations will be able to do likewise.

55. Finally, we believe that a number of factors will mitigate the potential for interference to BRS systems from ISM equipment emissions and obviate the need to impose additional limits on those emissions. As an initial matter, when signal losses due to fading, antenna discrimination (angular and polarization), and antenna efficiency are taken into account, we believe there is little potential for interference from ISM operations in the band. Moreover, because ISM equipment generally operates in easily identifiable locations – whether within an industrial setting or a residence – mobile BRS equipment can easily be moved to areas where no interference exists and fixed BRS equipment can be sited such that the potential for interference is minimized.¹⁴⁴ For example, industrial ISM operations often take place in heavily shielded factory settings.¹⁴⁵ For consumer equipment, a further mitigating

¹⁴² Readily available academic literature offers insight into the types of the techniques that can be used to allow for different types of applications to be deployed in the band. See, e.g., S. Vasudevan, J. Horne, and M.K. Varanasi, “Reliable Wireless Telephony using the 2.4 GHz ISM Band: Issues and Solutions,” *IEEE Fourth International Symposium on Spread Spectrum Techniques and Applications*, September 1996 (ISSSTA '96), Mainz (Germany), pp. 790-94 (discussing how receivers that incorporate signal processing techniques such as interference cancellation algorithms are intrinsically more robust to any such interference and, hence, are more easily deployable). Those BRS licensees that intend to deploy entirely new types of services in the band will be able to incorporate a variety of interference mitigation designs into their system architecture as part of the overall planning and development process.

¹⁴³ See, e.g., Comments of the Wi-Fi Alliance in ET Docket 04-186 (filed Nov. 30, 2004) (stating that “[i]ndeed, over the past few years Wi-Fi has been the shining star of the telecom industry and has become a billion dollar industry”); *Cities ponder offering wireless coverage for free*, available at http://www.insidebayarea.com/businessnews/ci_2922941 (discussing efforts by municipalities to provide municipal Wi-Fi access covering “hot zones” that are geographically larger than the discrete “hot spots” typically offered in coffee shops and hotel lobbies).

¹⁴⁴ This situation is similar to consumers’ simultaneous use of microwave ovens and Part 15 unlicensed devices, such as cordless telephones and 802.11b equipment. Because no remedy is offered for interference to Part 15 equipment, consumers quickly learn how to operate their devices such that interference is not problematic. Additionally, we note that in many cases, ISM and BRS equipment will be separated by obstructions such as walls which offer significant attenuation in the 2400 MHz frequency band. For example, simply passing through one wall can result in 10 to 12 dB of attenuation. See J. Unger, *Deploying License-Free Wireless Wide-Area Networks*, Cisco Press, Feb. 2003, at 191.

¹⁴⁵ See, e.g., *Ex Parte* Letter from Dennis A. Robitaille, Vice President and Chief Patent Counsel for Axcelis Technologies Incorporated (Axcelis), to Chairman Martin and Commissioners Copps, Adelstein, and Tate, Federal Communications Commission (dated February 16, 2006) at 1-2, describing how Axcelis’ processes, which, *inter alia*, use microwave-excited ultraviolet lamps in the ISM band to produce high intensity, uniform wavelength radiation for use in manufacturing semiconductor chips, take place deep within steel and concrete buildings nowhere near the general public, and are unlikely to interfere with BRS operations at 2496-2500 MHz.

factor is that such equipment is generally operated for only short durations (such as while cooking foods).¹⁴⁶

56. While we continue to believe that there is insufficient evidence to conclude that additional restrictions on ISM equipment are necessary to enable use of BRS in the 2496-2500 MHz band, we are also convinced that granting the BRS Petitioners' request would come at a high cost to ISM users in the band. Such action would put the United States at odds with internationally-harmonized ISM standards, which would negatively affect both the quantity and cost of ISM equipment that would be developed for the U.S. market and would jeopardize the ability of domestic manufacturers to compete in the global marketplace.¹⁴⁷ We also note that, even if we did believe that there was a reasonable case for interference from ISM equipment, the remedy that the BRS Petitioners propose is not well crafted to address the alleged problem. ISM equipment that does not operate in the BRS portion of the band (*i.e.*, operates in the lower portion of the band) would be subject to costly in-band emission rules under the BRS Petitioners' initial proposal. Moreover, if ISM use in the band were problematic, the BRS Petitioners' proposal to grandfather existing ISM equipment indefinitely would afford BRS licensees minimal relief as the average lifespan of the approximately 115 million microwave ovens in use in the United States ranges from 9 to 14 years. Thus, a significant period of time would elapse before BRS would actually begin to reap any benefits of such an emission limitation.¹⁴⁸ For all of the reasons detailed above, we conclude that the BRS Petitioners' proposal does not represent a "reasonable measure" for mitigation of any claimed potential for interference, especially in light of the burdens such limits would impose on ISM users and the lack of demonstrated benefits to BRS licensees.¹⁴⁹ Thus, we reject the BRS Petitioners' petition with respect to the Part 18 ISM rules.¹⁵⁰ Because it would jeopardize international harmonization of the ISM band to address a problem we are not persuaded will occur, we likewise reject the BRS Petitioners' most recent proposal that would have us alter the spectrum range for

¹⁴⁶ See *Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated January 21, 2005) at 2-3 and n.5 and n.6. AHAM has noted that recent studies have determined that the average U.S. household uses its microwave oven nine minutes per day. *Ex Parte* Letter from Russell H. Fox, Counsel for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated July 22, 2005) at 1.

¹⁴⁷ See Fusion Opposition at 15-16. See also Fusion Opposition at 16 (stating that "international harmonization benefits manufacturers and consumers by lowering costs and increasing economies of scale"). See also *Ex Parte* Letter from David Calabrese, Vice President, Government Relations for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated January 21, 2005) at Appendix A (describing a Panasonic study that concluded that microwave ovens would have to be designed without front windows or air intake and exhaust ports, and would need to operate at a reduced output power that would necessitate longer cooking times). Furthermore, these redesign costs could not be spread on a world-wide basis because consumers residing outside the United States would likely continue to prefer the more useful traditional microwave oven designs.

¹⁴⁸ See *Ex Parte* Letter from Russell H. Fox, Counsel for AHAM, to Marlene H. Dortch, Federal Communications Commission (dated July 22, 2005) at 12. Both the BRS Petitioners' initial proposal and subsequent *ex parte* filings would permit existing ISM equipment to operate in the band indefinitely – even if it would not meet the proposed new emissions criteria.

¹⁴⁹ See Joint Reply at 2.

¹⁵⁰ We also find that WCA's suggestion that future filter technology may permit ISM equipment to operate at higher signal levels that could interfere with BRS users in the band is, at best, speculative. See WCA Petition at 24-25. Our decision does not preclude us from evaluating future technological developments and proposing appropriate rule changes, when warranted.

the out-of-band emissions limits of ISM equipment set forth in Section 18.305.

6. Procedural issues

57. AHAM claims that we should deny the BRS Petitioners' ISM-related arguments for failure to present new facts or circumstances needed to justify reconsideration pursuant to Section 1.106 of the Commission's rules.¹⁵¹ Fusion similarly contends that the BRS Petitioners' do not satisfy the requirements under Sections 1.429(b)(2) and 1.106(c) of the Commission's rules because their petitions for reconsideration fail to raise any facts that they did not know about (or should have known about) prior to the Commission's decision on this issue.¹⁵²

58. *Discussion.* We deny AHAM's request to deny the BRS Petitioners' petition on procedural grounds. Under Section 1.429(b), the Commission may review the merits of a petition for reconsideration when: (1) it is based on new facts previously unknown to the petitioner or unknowable even with due diligence; (2) it is based on changed circumstances; or (3) reconsideration would serve the public interest.¹⁵³ Even if we were to determine that those petitions were procedurally flawed under Section 1.429(b)(1) and (2) of our rules, the importance of ensuring proper spectral management and spectral efficiency warrants our review of the substance of the petitions pursuant to Section 1.429(b)(3).

B. BRS/EBS 3rd MO&O

1. Transition

59. The rules governing the transition of the 2500-2690 MHz band adopted in the *BRS/EBS R&O* are designed to reconfigure the 2500-2690 MHz band to enable the provision of new and innovative wireless services.¹⁵⁴ To accomplish this goal, the transition rules create a market-oriented process for relocating EBS licensees and BRS licensees from their current interleaved channel locations to their new contiguous spectrum blocks in the LBS, MBS, or UBS. The transition rules also provide for the relocation of EBS and BRS licensees from 2500-2502 MHz and 2618-2624 MHz to allow for the relocation of BRS Channels No. 1 and No. 2/2A licensees from the 2150-2162 MHz band to the 2496-2690 MHz band.

60. According to the rules adopted by the Commission in the *BRS/EBS R&O*, the transition occurs by Major Economic Area (MEA) and is undertaken by a proponent or multiple proponents. The transition occurs in the following five phases: (1) initiating the transition process by filing a Initiation Plan with the Commission; (2) planning the transition; (3) reimbursing the costs of the transition; (4) terminating existing operations in transitioned markets; and (5) filing the post-transition notification.¹⁵⁵

¹⁵¹ AHAM Reply at 4. See also LG Electronics Comments at 2-3; Whirlpool Reply at 3. AHAM also contends that any objections to sharing the band with ISM devices should have been raised in response to the *Big LEO Spectrum Sharing Notice*. AHAM Reply at 3. See also LG Electronics Reply at 2.

¹⁵² Fusion Opposition at 6.

¹⁵³ 47 C.F.R. § 1.429(b).

¹⁵⁴ See 47 C.F.R. §§ 27.1230-27.1235 (2005).

¹⁵⁵ *BRS/EBS R&O*, 19 FCC Rcd 14165, 14198 ¶ 74.

a. Transition areas

(i) Size

61. *Background.* As mentioned above, in the *BRS/EBS R&O*, the Commission decided that the 2.5 GHz band should be transitioned by Major Economic Area (MEA).¹⁵⁶ There are fifty-two MEAs in the United States which, in turn, are comprised of Economic Areas (EAs). In addition to the fifty-two MEAs in the United States, the Commission added the following three EA-like areas as transition areas: Guam and Northern Mariana Islands; Puerto Rico and the U.S. Virgin Islands; and American Samoa. Thus, under the Commission's plan, proponents would be responsible for transitioning 55 distinct areas. The Commission indicated that it believed that transitioning the 2.5 GHz band by MEA would enable proponents to transition large areas of the country at once, which will ensure that the 2.5 GHz band is transitioned quickly and will enable the provision of new and innovative services for all Americans, including those in rural areas.¹⁵⁷

62. Most of the petitioners on this issue ask that the Commission reconsider its decision and instead require the transition of the 2.5 GHz band by Basic Trading Area (BTA).¹⁵⁸ There are 493 BTAs including areas in all fifty states, the District of Columbia, and the following BTA-like areas added by the Commission: American Samoa; Guam; Northern Mariana Islands; San Juan, Puerto Rico; Mayaguez/Aguadilla-Ponce, Puerto Rico; and the U.S. Virgin Islands. Only one party, NY3G, supported the Commission's decision.¹⁵⁹ One commenter to the *FNPRM* argued that Section 307(b) of the Act requires the Commission to base the size of the transition area on discrete governmental jurisdictions, which should be counties because school districts tend to coincide with county boundaries.¹⁶⁰

63. According to the petitioners, the large size of MEAs would make it extraordinarily difficult to transition the 2.5 GHz band from an administrative, technical, and financial perspective, primarily because of the large number of licensees in such a large geographic area.¹⁶¹ Specifically,

¹⁵⁶ *Id.* at 14201 ¶ 82.

¹⁵⁷ *Id.*

¹⁵⁸ The following parties filed petitions for reconsideration (PFR) of the Commission's decision to transition by MEAs: BellSouth Corporation, BellSouth Wireless Cable, Inc. and South Florida Television, Inc. (collectively, BellSouth); BRS Rural Advocacy Group; C&W Enterprises, Inc. (C&W); Catholic Television Network (CTN); Cheboygan-Ostego-Presque Isle Educational Service District/Pace Telecommunications Consortium (Pace); Choice Communications, LLC (Choice); National ITFS Association (NIA); Digital Broadcast Corporation (DBC); Grand Wireless Company (Grand Wireless); Hispanic Information and Telecommunications Network (HITN); Illinois Institute of Technology (IIT); ITFS/2.5 GHz Mobile Wireless Engineering & Development Alliance, Inc. (IMWED); Luxon Wireless, Inc. (Luxon); Nextel Communications (Nextel); SpeedNet, LLC (SpeedNet); Sprint Corporation (Sprint); Wireless Communications Association, International (WCA); and Wireless Direct Broadcast System (WDBS). *See* BellSouth PFR Opposition; BRS Rural Advocacy Group PFR Reply; C&W PFR; CTN/NIA PFR; Pace PFR; Choice PFR; DBC PFR; Grand Wireless PFR; HITN PFR; IIT PFR Opposition; IMWED PFR; Luxon PFR Opposition; Nextel PFR; SpeedNet PFR; Sprint PFR; WCA PFR; WDBS PFR. *See also* EBS Parties Reply Comments; George Mason University Reply Comments.

¹⁵⁹ NY3G PFR Opposition at 7.

¹⁶⁰ Miami-Dade Comments at 2.

¹⁶¹ *See* Nextel PFR at 3-4; SpeedNet PFR at 4; HITN PFR at 4.

petitioners note that the use of MEAs will delay the transition because the large number of licensees in a given MEA is unlikely to uniformly agree to a proponent's transition plan.¹⁶² Petitioners further note that certain MEAs are extraordinarily large, and they specifically mention MEA Nos. 18, 20, and 33.¹⁶³ The Catholic Television Network (CTN) and the National ITFS Association (NIA), both organizations of EBS licensees, and the Hispanic Information Television Network (HITN), a large EBS licensee, argue that the large size of an MEA will prevent EBS licensees from acting as a proponent or a co-proponent in any transition.¹⁶⁴ Moreover, petitioners contend that the Commission's plan to permit more than one proponent to transition an MEA will not be practical. To the contrary, these petitioners argue, the Commission has inadvertently created a scenario in which no one proponent will want to transition an MEA single-handedly and most will wait to see if someone else will take the lead before they are forced to take action at the end of the process to save their license.¹⁶⁵ Instead of transitioning the 2.5 GHz band by MEA, most petitioners suggest that the band be transitioned by BTA.¹⁶⁶

64. *Discussion.* As mentioned above, almost all of the petitioners on this issue argued against the use of MEAs to transition the 2.5 GHz band and for the use of BTAs. In light of the record, we agree with petitioners that we should reconsider the Commission's decision to transition the 2.5 GHz band by MEA. While the Commission initially believed transitioning 2.5 GHz based on MEA would accelerate the transition of the band, on re-examination in light of the record, we now find that use of MEAs would actually thwart rather than advance the transition of the 2.5 GHz band, thus inhibiting the deployment of new and innovative wireless services. We agree with petitioners that MEAs are very large and bear no relation to the actual service area of most EBS and BRS licensees.¹⁶⁷ We note that EBS licensees are licensed based on a geographic service areas (GSA), which are derived from each EBS licensee's 35-mile protected service area (PSA). BRS licensees are licensed based on a GSA basis, derived from their original 35-mile PSA, or on a BTA basis in the case of BRS-BTA auction winners. Moreover, we reject Miami-Dade's interpretation of Section 307(b) as requiring the 2.5 GHz band be transitioned on a county-wide or school district basis. Section 307(b) addresses license applications and modifications for broadcasters and is not relevant here where we are discussing the size of the areas to be

¹⁶² See DBC PFR at 2-3; WDBS PFR at 2-3; HITN PFR at 3-4; Nextel PFR at 3-4; IMWED PFR at 4; WCA PFR at 9-10.

¹⁶³ MEA No. 18 exceeds 100,000 square miles, covers five states, including 94 counties (61 in Illinois, 25 in Indiana, 3 in Michigan, 3 in Missouri, and 2 in Wisconsin), includes a population of 15 million people, and contains 212 EBS licensees. IIT PFR Opposition at 4-5. MEA No. 20 covers the entire state of Minnesota, a portion of Western Wisconsin, all of North Dakota, most of South Dakota, and a small part of Montana. IMWED PFR at 3. MEA No. 33 covers almost all of Colorado, most of Wyoming, and parts of South Dakota, Nebraska, Kansas, and New Mexico. *Id.*

¹⁶⁴ See CTN/NIA PFR at 4; HITN PFR at 4.

¹⁶⁵ See DBC PFR at 2-3; WDBS PFR at 2-3; SpeedNet PFR at 2-3. Petitioners are concerned about losing their licenses if the Commission pursues an option to auction spectrum that will not be transitioned by a proponent. See *BRS/EBS R&O*, 19 FCC Rcd 14165, 14201 ¶ 82.

¹⁶⁶ See WCA PFR; C&W PFR; Pace PFR; CTN/NIA PFR; DBC PFR; WDBS PFR; IMWED PFR; Nextel PFR; Grand Wireless PFR; SpeedNet PFR; Sprint PFR; BellSouth PFR Opposition; IIT PFR Opposition; BRS Rural Advocacy Group PFR Reply.

¹⁶⁷ See WCA PFR at 5.

transitioned.¹⁶⁸

65. We agree with petitioners that the 2.5 GHz band should be transitioned by BTA instead of by MEA. Because BTAs are significantly smaller than MEAs and involve fewer licensees and lessees, transitioning by BTA would be less costly, less complicated, and more manageable than transitioning by MEA.¹⁶⁹ Thus we believe that transitioning the band by BTA will provide the appropriate incentives to proponents to undertake the challenging task of transitioning licensees to the new band plan. Specifically, as mentioned above, BTAs correspond to the licensing area of many BRS licensees. Moreover, operators and licensees have developed interference and other interoperating relationships based on BTAs.¹⁷⁰ We believe that transitioning the 2.5 GHz band by BTA will facilitate the transition of the band to a reconfigured plan that fosters broadband deployment and efficient spectrum use. Accordingly, we require proponents to transition the 2.5 GHz band by BTA. We note that BTAs were designed and copyrighted by Rand McNally & Company and an agreement must be reached with Rand McNally to use BTAs to transition the 2.5 GHz band. Rand McNally has entered into an agreement to allow the use of BTAs for these purposes.¹⁷¹

(ii) Overlapping GSAs

66. *Background.* As mentioned above, EBS licensees are licensed by GSA, while BRS licensees are licensed by GSA or BTA. Frequently, a GSA overlaps two or more BTAs. Several petitioners asked the Commission to clarify how a GSA that overlaps two or more BTAs should be transitioned. WCA and Sprint recommend that all of the stations licensed in a BTA should be transitioned, along with all incumbent facilities associated with GSAs that have their geographic center points within the BTA.¹⁷² In addition, WCA and Sprint recommend that the proponent should be permitted, at its sole discretion, to transition: (i) any station outside the subject BTA that it believes necessary to transition to avoid interference within the BTA; and (ii) any station outside the subject BTA where the proponent believes that such a transition will assist it in meeting the interference protection obligations set forth in Section 27.1233(b)(3).¹⁷³ C&W, Pace, Speednet, DBC, and WDBS propose that if an incumbent licensee's GSA overlaps one or more BTAs the proponent should be able to elect to transition one or more BTAs as desired.¹⁷⁴ Where the proponent seeks to transition an incumbent within

¹⁶⁸ 47 U.S.C. § 307(b) states that:

In considering applications for licenses, and modifications and renewals thereof, when and insofar as there is demand for the same, the Commission shall make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same.

¹⁶⁹ See Luxon PFR Opposition at 8; C&W PFR at 3; Pace PFR at 3; SpeedNet PFR at 3.

¹⁷⁰ See Sprint PFR at 2-3.

¹⁷¹ *Ex Parte* Letter from Paul J. Sinderbrand, Counsel to WCA to Marlene H. Dortch, Federal Communications Commission (dated Apr. 12, 2005) at 2 (stating that WCA had renegotiated its License Agreement with Rand McNally & Company).

¹⁷² WCA PFR at 5-6; Sprint PFR at 4.

¹⁷³ WCA PFR at 5-6.

¹⁷⁴ C&W PFR at 3-4; Pace PFR at 3-4.

its BTA that overlaps into an adjacent BTA, the proponent should only be obligated to transition the BTA plus that licensee's incumbent GSA, but not additional BTAs, unless the proponent chooses to do so either individually or as a co-proponent.¹⁷⁵

67. *Discussion.* We agree that a proponent should not be required to transition two or more BTAs when a GSA overlaps two or more BTAs. However, we are concerned about situations where stations inside a GSA, but outside of the BTA, may be stranded and not transitioned. We believe that it is in the interest of the public and the licensees in the 2.5 GHz band to avoid this result. Therefore, we conclude that if the geographic center point of a GSA¹⁷⁶ is located in a BTA, then the proponent must transition all facilities associated with the GSA within the BTA, and those stations within the GSA but outside the BTA, if the adjoining BTA is not being transitioned. We emphasize, however, that if the other BTA is being transitioned, the proponents from adjoining BTAs may reach an agreement on how to transition overlapping GSAs.¹⁷⁷

b. MVPD opt-out

(i) General discussion

68. *Background.* The Coalition originally proposed a plan to permit a certain category of wireless cable licensees to automatically "opt-out" of the transition. The purpose of the opt-out was to enable those licensees that have a viable business for high-power operations to continue to serve their customers. Specifically, the Coalition proposed that an MVPD licensee could opt-out if: (1) it certified to the Commission within 30 days of the effective date of the rules that it or its affiliate met the definition of an MVPD in Section 522 of the Act;¹⁷⁸ (2) as of the date of its certification, it provided MVPD service to five percent or more of the households within its GSA or it was part of a system that deployed digital technology on more than seven channels as of October 7, 2002; and (3) it certified again at the start of the transition that it still provided service to five percent or more of the households within its GSA.¹⁷⁹ The Coalition Proposal also allowed any BRS or EBS licensee to opt-out of the transition if it is collocated with any qualified MVPD licensee that elects to opt-out.¹⁸⁰

69. The Commission rejected the Coalition's automatic opt-out proposal.¹⁸¹ Instead, the Commission found that it is in the public interest to consider waivers on a case-by-case basis for those operators or their affiliates that: (1) meet the definition of a multichannel video programming distributor

¹⁷⁵ C&W PFR at 3-4; Pace PFR at 3-4; SpeedNet PFR at 3-4; DBC PFR at 3-4; WDBS PFR at 3-4.

¹⁷⁶ The center of an incumbent stations' GSA is the station's reference coordinates, which was the center of previous protected service area (PSA) listed in each license. See 47 C.F.R. 47.1206(a)(1).

¹⁷⁷ See *infra* ¶¶ 165-166 for a discussion of cost allocation for overlapping GSAs.

¹⁷⁸ 47 U.S.C. § 522.

¹⁷⁹ *Coalition Proposal*, Appendix B at 16-18. See also First Supplement to *Coalition Proposal* at 4-5 (filed Nov. 14, 2002); Reply Comments of WCA, the National ITFS Association, and the Catholic Television Network, WT Docket No. 03-66 at 45 (filed Oct. 23, 2003).

¹⁸⁰ *Coalition Proposal*, Appendix B at 18.

¹⁸¹ *BRS/EBS R&O*, 19 FCC Rcd 14165, 14199 ¶ 77.

as defined in Section 522 of the Communications Act of 1934, as amended; and (2) provide MVPD service to five percent or more of the households within their respective GSAs, as calculated in accordance with the requirements Section 76.905(c) of the Commission's rules.¹⁸² The Commission further found that it is in the public interest to consider waivers for any BRS or EBS licensee that is collocated with any qualified MVPD licensee that seeks a waiver to opt-out.¹⁸³ The Commission further found that it is in the public interest to consider waivers for those BRS licensees that have a viable business for high-powered operations, but who need more than seven digitized high-powered MBS channels to deliver their service to their customers. The Commission stated that in reviewing requests to waive the rules, the Commission will consider the actions taken by MVPD or BRS licensees to minimize the effect of interference on neighboring markets, as well as the licensee's explanation as to why it cannot work within the transition rules. The Commission stated that waivers will be granted if it is shown that: (i) the underlying purpose of the rules(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of the unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.¹⁸⁴

70. Several petitioners ask the Commission to reconsider its decision to waive the transition rules on a case-by-case basis.¹⁸⁵ Instead, they recommend that the Commission adopt the automatic "opt-out" as originally proposed by the Coalition, which would permit an entity to certify to the Commission, at two separate times, that it meets criteria specified above and has opted-out of the transition.¹⁸⁶ Generally, these petitioners argue that the Commission's waiver process would complicate the transition process rather than simplify it, while the adoption of definitive opt-out rules would provide long-term certainty for transition planning.¹⁸⁷ Petitioners argue that the waiver process is time-consuming and burdensome, that waivers are granted or not granted at regulator's discretion, that waiver guidelines are not measurable standards, and that the waiver process imposes additional delay without countervailing benefits.¹⁸⁸ Petitioners further argue that the Commission's waiver process promotes uncertainty by raising numerous questions, including the following: what are the justifications necessary or sufficient to receive a waiver, what are acceptable levels of interference mitigation, and must a licensee alter its system.¹⁸⁹ In contrast, petitioners argue, a self-effectuating opt-out standard provides MVPD licensees

¹⁸² 47 CFR § 76.905(c).

¹⁸³ *BRS/EBS R&O*, 19 FCC Rcd 14165, 14199 ¶ 77.

¹⁸⁴ 47 C.F.R. § 1.925(b)(3).

¹⁸⁵ See BloostonLaw PFR at 9; BRS Rural Advocacy Group PFR at 2; Central Texas PFR at ii; Choice PFR Opposition at 2; C&W PFR at 3; Digital TV One PFR Reply at 3-4; NTCA Comments in Support of PFR at 2; WATCH TV PFR at 2; WCA PFR at 32; WDBS PFR Reply at 2.

¹⁸⁶ We note that BellSouth proposed specific automatic "opt-out" procedures. See BellSouth PFR Reply at 11-12. See also Ex Parte Comments of BellSouth Corporation from Karen B. Possmer, BellSouth Corporation to Marlene H. Dortch, Federal Communications Commission (filed May 20, 2005).

¹⁸⁷ Central Texas PFR at 8-9.

¹⁸⁸ See BRS Rural Advocacy Group PFR at 10-11; NTCA Comments in Support of PFR at 3.

¹⁸⁹ See BRS Rural Advocacy Group PFR at 10-11.

the certainty of a safety net. Specifically, an automatic opt-out allows MVPD licensees to guard their investment, make business plans, design their systems now, and allocate resources accordingly.¹⁹⁰ Petitioners further argue that an automatic opt-out is demonstrably less burdensome than requiring MVPD licensees to prepare and file a waiver, which would force both the MVPD licensee and the proponent to wait for Commission resolution of the request at some undetermined future date.¹⁹¹ Moreover, petitioners argue that requiring case-by-case adjudications is inconsistent with the Commission's general preference for streamlined regulatory processes.¹⁹²

71. In addition, two petitioners, Central Texas Communications and BRS Rural Advocacy Group, ask the Commission to expand the Coalition's criteria for an automatic "opt-out."¹⁹³ Specifically, they ask the Commission to permit a BRS/EBS licensee or its affiliate to automatically "opt out" of a transition if:

(a) the center of its geographic service area ("GSA") (*i.e.*, the site of its main transmitter) is located in a county that is a defined "rural area" under FCC rules;¹⁹⁴ and

(b)(i) it is part of system that provides MVPD and/or broadband service to more than 15 percent of the households within that "rural area" as of October 7, 2002; or

(ii) it is part of a system that provides MVPD service to at least 500 customers as of October 7, 2002; or

(iii) it is part of system composed of at least 20 collocated analog BRS/EBS channels that provides MVPD service (as few as 11 channels if the licensee can demonstrate that channels were not available because of the 1995 EBS filing "freeze").¹⁹⁵

They also request that licensees collocated with a licensee meeting any of the above criteria be eligible to automatically "opt out."¹⁹⁶

72. *Discussion.* We decline to reconsider our decision to waive the transition rules on a case-by-case basis.¹⁹⁷ We continue to believe that waiving the transition rules on a case-by-case basis

¹⁹⁰ See *id.* at 11.

¹⁹¹ WCA PFR at 32.

¹⁹² *Id.*

¹⁹³ See *Ex Parte* Letter from Stephen E. Coran, Rini Coran, PC and Donald L. Herman, Jr., Bennet & Bennet, PLLC to Marlene H. Dortch, Federal Communications Commission (filed June 29, 2005), Attachment at 1 (CTC-Rural Advocacy Group *Ex Parte*). See also Central Texas PFR at 11-12; BRS Rural Advocacy Group PFR at 14.

¹⁹⁴ Facilitating the Provision of Spectrum-Based Services to Rural Areas and providing Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, *Report and Order and Further Notice of Proposed Rule Making*, 19 FCC Rcd 19078 (2004) (*Rural Order*).

¹⁹⁵ See CTC-Rural Advocacy Group *Ex Parte* Attachment at 1.

¹⁹⁶ *Id.*

¹⁹⁷ See *infra* ¶¶ 75-84 for a discussion of the WATCH TV waiver request.

will not only protect the rights of all parties, but will also promote the transition of the 2.5 GHz band. Individually waiving the new technical rules and band plan permits us to make decisions based on the individual facts of the case rather than trying to craft an automatic “opt-out” rule that risks either “opting-out” too many or too few MVPD operators. Evaluating an individual waiver will also permit us to examine the effect of interference from the MVPD operator on other operators in the transitioning or adjacent market. The record is incomplete concerning how many licensees would qualify under the Coalition’s original proposal or under the expanded proposal set forth by Central Texas Communications and the BRS Rural Advocacy Group. Thus, we agree with Sprint that the automatic opt-out process itself could unintentionally result in opt-outs throughout the country, which may affect the transition in adjacent markets, thus creating uncertainty for the transition as a whole.¹⁹⁸

73. Because MVPD operators can deliver high power signals over very large geographic areas, we find that a case-by case review is in the best interests both of the MVPD operator seeking to opt-out and adjacent licensees seeking to transition to the new rules and band plan. We further believe that a waiver process balances the need of the MVPD operators to provide service to their customers with the interests of the public in the development of new and innovative wireless services throughout the nation, including rural areas.

74. To assist a proponent in transitioning a BTA, a MVPD operator that is intending to seek a waiver must so indicate to the proponent when it responds to the Pre-Transition Data Request.¹⁹⁹ In any event, the MVPD operator must then seek a waiver from the Commission by April 30, 2007. If a proponent files an Initiation Plan with the Commission prior to April 30, 2007, an MVPD operator must file its waiver request within sixty days after the Initiation Plan is filed with the Commission. We believe that establishing such a deadline will provide certainty to the process, permit the Commission to address each waiver before the Initiation Plans are due, and allow the proponent to draft the Transition Plan knowing which licensees will be exempted from the transition. Furthermore, to enable the transition of the 2.5 GHz band to proceed quickly and efficiently and to protect the operations of MVPD licensees that have developed successful systems under the old band plan, we expect the Bureau to act on unopposed requests for waiver within 180 days.

(ii) WATCH TV Waiver Request to “Opt-Out”

75. *Background.* On April 29, 2005, W.A.T.C.H. TV Company (WATCH TV) filed a request for waiver to allow it to opt out of transitioning to the new band plan.²⁰⁰ WATCH TV is the licensee of BRS spectrum and lessee of EBS spectrum in the Lima, Ohio area.²⁰¹ WATCH TV launched

¹⁹⁸ See Sprint PFR Reply at 3.

¹⁹⁹ See *infra* ¶¶ 96-102 for a discussion of Pre-Transition Data Requests.

²⁰⁰ Request for Waiver (filed Apr. 29, 2005) (WATCH TV Waiver Request).

²⁰¹ WATCH TV is the licensee of the following BRS stations: WMI386 (Channel BRS1), WMI390 (Channel BRS2), WMH228 (E Group), WMH528 (F Group), WNTH924 (H Group). It also leases capacity on the following EBS stations: WLX987 (Cory Rawson Local Schools, A Channel Group); WLX979 (Indian Lake Local Schools, B Channel Group); WLX977 (St. Mary’s City Schools, C Channel Group); WLX 762 (Parkway Local Schools, D Channel Group); and WLX905 (Lima City Schools, G Channel Group). WATCH TV Waiver Request at 5.

one of the first wireless cable systems in the United States in 1992, offering 11 channels.²⁰² In December 2000, WATCH TV became one of the first systems in the country to offer digital wireless cable service after the Commission revised its rules to allow digital technology.²⁰³ In October 2001, WATCH TV began offering high-speed internet service using BRS channels.²⁰⁴

76. WATCH TV currently provides over 200 channels of digital audio and video programming to over 12,000 subscribers in the Lima, Ohio area.²⁰⁵ It also provides high-speed internet access to over 4,000 subscribers as of the date it filed its Waiver Request, and it has the capability to serve up to 8,000 subscribers.²⁰⁶ WATCH TV represents that its parent telephone company has invested over \$22,000,000 in its system.²⁰⁷

77. WATCH TV requests waiver of Sections 27.1230 *et. seq.* of the Commission's Rules,²⁰⁸ and also requests that the Commission issue certain clarifications. In support of its waiver request, WATCH TV highlights that its system uses more than seven digitized channels to deliver digitally compressed multichannel video service.²⁰⁹ As such, WATCH TV's current operations cannot be accommodated in the seven channels designated for high-power transmissions in the Middle Band Segment.²¹⁰ Rather, WATCH TV calculates that if it was required to move all of its video programming into the MBS, it would lose 75 percent of its video programming.²¹¹ WATCH TV also notes that it is the only operator in the market that is able to provide both video programming and broadband services that are fully competitive with cable system operators.²¹² In fact, WATCH TV contends that many of its video subscribers live in remote areas in which over the air reception of television is not feasible.²¹³

78. In addition to a waiver of Sections 27.1230 *et. seq.* of the Commission's Rules, WATCH TV specifically requests that grant of its requested waiver state that:

- (1) WATCH TV and its EBS channel lessors will have permanent authority to operate pursuant to Section 27.1209 on the "pre-transition" BRS/EBS band plan set forth in Section 27.5(i)(1), as such may be modified in the future to accommodate the eventual

²⁰² WATCH TV Waiver Request at 5.

²⁰³ *Id.* at 6.

²⁰⁴ *Id.*

²⁰⁵ *Id.* at 7.

²⁰⁶ *Id.* at 6-7.

²⁰⁷ *Id.* at 6.

²⁰⁸ 47 C.F.R. § 27.1230 *et. seq.*

²⁰⁹ WATCH TV Waiver Request at 2.

²¹⁰ *Id.*

²¹¹ *Id.* at 8.

²¹² *Id.* at 7.

²¹³ *Id.* at 8 n. 15.

displacement of WATCH TV's operations on BRS channels 1 and 2 from the 2150-2162 MHz band to new spectrum for the benefit of Advanced Wireless Service licensees at 2150-2155 MHz;

(2) WATCH TV and its EBS channel lessors must participate in good faith in any transition planning process relating to any geographic area that overlaps their GSAs. In conjunction with any transition, WATCH TV and its EBS channel lessors will subsequently make such modifications to their facilities at the Proponent's expense as the proponent may reasonably request in an effort to reduce interference to licensees in other markets that are transitioning, provided that such modifications can be accomplished without cumulatively resulting in more than a *de minimis* reduction in WATCH TV's ability to serve its then-existing subscribers;

(3) Every main, booster and base station currently used in conjunction with WATCH TV's system shall be permitted to continue operating under the maximum EIRP limits set forth for "pre-transition" operations in Section 27.50(h)(1)(i) and (ii);

(4) Any channels used for the transmission of digital video programming on WATCH TV's system shall be permitted to continue operating under the "pre-transition" emission limits for digital video programming channels set forth in Section 27.53(1)(3). In addition, per Section 27.53(1)(5), WATCH TV and its EBS channel lessors shall be permitted to operate fixed, temporary fixed and mobile data stations deployed as of January 10, 2005, provided that those facilities are in compliance with the emission limits set forth in former Sections 21.908 and 74.936;

(5) Consistent with Section 27.55(a)(4)(i), all of the BRS and EBS channels in WATCH TV's system will be permitted to operate at any point along their respective GSA boundaries at the greater signal strength of 47 dBu or the strength authorized in their underlying licenses as of January 10, 2005;

(6) Sections 27.1220 (regarding 5.5 MHz wide channels in the LBS and UBS) and 27.1222 (regarding the establishment of guard bands around the MBS) shall not be applicable to WATCH TV and its EBS channel lessors; and

(7) WATCH TV and its EBS channel lessors shall not be subject to the height benchmarking obligations set forth in Section 27.1221.

79. The waiver request has received support on the record. Prior to its merger with Nextel, Sprint expressed support for granting an opt-out to WATCH TV.²¹⁴ Similarly, Sprint/Nextel acknowledges that the facts surrounding the WATCH TV request represent a unique market circumstance that could justify a waiver to opt-out of the transition.²¹⁵ Sprint/Nextel's comments are notable for two reasons: (1) as a general matter, Sprint/Nextel opposes granting an automatic opt-out to MVPD providers; and (2) Sprint/Nextel and its subsidiaries currently hold all of the active BRS BTA authorizations in the Lima, Ohio and surrounding BTAs.

²¹⁴ Sprint PFR Reply at 4.

²¹⁵ *Ex Parte* Letter from Trey Hanbury, Director, Sprint Nextel Corporation to Marlene H. Dortch, Federal Communications Commission (filed Oct. 25, 2005) at 6.

80. *Discussion.* The Commission has stated that it would be sympathetic to waiver requests from MVPD providers who needed more than seven digitized MBS channels to deliver service to their customers.²¹⁶ WATCH TV fits within that description because it currently offers over 200 channels of programming to its subscribers. Given the current state of digital technology, it would be impossible for WATCH TV to provide that much programming in the MBS using only seven channels. As noted above, WATCH TV was an early adopter of digital technology when it began offering digital wireless cable services in December 2000. Accordingly, we consider WATCH TV to be within the class of MVPD providers for which we would favorably consider waiver requests.

81. With respect to evaluating requests to opt-out of the transition, the Commission has stated:²¹⁷

In reviewing requests to waive the rules adopted today, we will consider the actions taken by MVPD or BRS licensees to minimize the affect of interference on neighboring markets, as well as the licensee's explanation as to why it cannot work within the transition rules we have adopted. Waivers will be granted if it is shown that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of the unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.

Based upon our evaluation of WATCH TV's request, we conclude that requiring WATCH TV to transition pursuant to the new band plan would be inequitable, unduly burdensome, and contrary to the public interest.

82. WATCH TV has developed an extensive business providing video, audio, and broadband service to customers in the Lima, Ohio area. The 12,000 customers that receive video programming and the 4,000 customers that receive wireless broadband service from WATCH TV represent a substantial customer base. WATCH TV has demonstrated that is a meaningful competitive presence in the Lima market. Requiring WATCH TV to move its video programming into the MBS would require it to drop over 75 percent of its video programming. Such a result would cause major disruption to WATCH TV's customers and would likely greatly diminish WATCH TV's ability to compete with cable television systems in its area.

83. In evaluating whether a grant of a waiver to WATCH TV would be in the public interest, we believe it is necessary to compare the harm that would result to WATCH TV and its customers from requiring a transition with the effect that allowing an opt out would have on neighboring licensees. As noted above, the record demonstrates that there would be substantial harm to WATCH TV and its customers if WATCH TV was required to transition to the new band plan. In contrast, it appears that the effect on neighboring licensees of allowing an opt out would be minimal. We first note that since WATCH TV holds licenses or leases for all of the BRS and EBS spectrum in the Lima, Ohio area, there is no other licensee in the immediate Lima area that would be negatively affected by allowing WATCH TV to opt out. Second, we find it significant that Sprint/Nextel, which owns all of the active BRS BTA authorizations in Lima and the surrounding area, supports WATCH TV's waiver request. Third,

²¹⁶ *BRS/EBS R&O & FNPRM*, 19 FCC Rcd at 14199 ¶ 77.

²¹⁷ *Id.*

WATCH TV has committed to participating in the transition planning process in adjacent areas and is willing to make modifications to its system so long as a proponent pays for such modifications and such modifications do not affect its ability to serve existing customers.²¹⁸ In light of these factors, we conclude that a grant of a waiver is in the public interest because any effect on neighboring licensees would be far outweighed by the harm that would result to WATCH TV and its customers if it was not allowed to opt out.

84. Finally, we have reviewed the waiver conditions proposed by WATCH TV and determined that they strike the appropriate balance between maintaining service to WATCH TV's customers and minimizing disruption to neighboring licensees. Accordingly, WATCH TV and the EBS licensees that lease WATCH TV excess capacity will be granted a permanent waiver to opt-out of the transition to the new BRS/EBS band plan, subject to conditions (1) through (7), *supra*.

c. Proponents

85. A proponent is critical to the success of a transition. During the Initiation Phase, a proponent is responsible for sending the Pre-Transition Data Request and transition notice to all BRS and EBS licensees in the BTA and for filing the Initiation Plan with the Commission. During the Transition Planning Phase, the proponent is responsible for developing the Transition Plan and for negotiating with the BRS and EBS licensees. Then the proponent is responsible for replacing downconverters at all eligible EBS receive sites, migrating eligible video and data transmission program tracks to the MBS, and filing the Post-Transition Notification along with the other EBS and BRS licensees. After the transition is completed, the proponent is responsible for seeking reimbursement for the costs of the transition.

(i) Eligibility to be a proponent

86. *Background.* WCA and other petitioners seek reconsideration of Section 27.1231(d)²¹⁹ of the Commission's rules, which permits BRS and EBS licensees or EBS lessees to serve as proponents of the 2.5 GHz band. Specifically, they request that Section 27.1231(d) be amended to permit BRS lessees to serve as a proponent.²²⁰

87. *Discussion.* We agree with WCA that we should clarify that BRS lessees are eligible to be a proponent. In addition, we believe that we should clarify the language of the *BRS/EBS R&O* and the language of Section 27.1231(d) of the Commission's rules. Paragraphs 78 and 79 of the *BRS/EBS R&O* can be read to mean that proponents *must* be BRS licensees or EBS licensees or lessees, whereas Section 27.1231(d) can be read to mean that a proponent *may* be a BRS or EBS licensee or lessee.²²¹ We hereby clarify that a proponent *must* be a BRS licensee or lessee or an EBS licensee or lessee.

²¹⁸ WATCH TV Waiver Request at 11.

²¹⁹ Section 27.1231(d) (2005).

²²⁰ See WCA PFR at 13-14. See also C&W PFR at 4; Pace PFR at 3-4; DBC PFR at 4; WDBS PFR at 4; SpeedNet PFR at 4; BellSouth PFR Opposition at 19; IMWED PFR Opposition at 8.

²²¹ Paragraph 78 states, in relevant part, that "During this three-year period, a proponent or multiple proponents, BRS or EBS licensees or EBS lessees, initiate a transition by filing an Initiation Plan with the Commission." Paragraph 79 states, in relevant part, that "As mentioned above, a transition is initiated by a proponent, which will generally be either a current BRS or EBS licensee or EBS lessee." *BRS/EBS R&O*, 19 FCC Rcd 14165, 14200 ¶¶ 78-79.

(ii) Determining single and multiple proponents

88. *Background.* As mentioned above, the Commission originally required proponents to transition the 2.5 GHz band by MEA. In order to enable the 2500-2690 MHz band to be transitioned in an efficient manner and to give flexibility to proponents, the Commission adopted a rule that would permit more than one proponent to transition a given MEA.²²² The Commission further adopted a rule that would require multiple proponents to agree before they submit the Initiation Plan on how they will transition an MEA and to identify the specific portion of the MEA that each proponent will transition.²²³

89. Several petitioners seek reconsideration of the Commission's decision to allow multiple proponents to transition a given geographic area.²²⁴ In essence, petitioners maintain that the Commission's rules regarding multiple proponents are too open-ended. Specifically, petitioners maintain that the Commission failed to define when an entity becomes a proponent or even to impose a deadline (aside from the three-year deadline for submitting Initiation Plans) by which the universe of co-proponents must declare themselves.²²⁵ In effect, petitioners argue, this open-ended approach could award slow responders a veto right over the transition plans of licensees that are ready, willing, and able to deploy.²²⁶ In addition, petitioners argue, getting two or more competitors to agree on the complex details of transitioning the 2.5 GHz band will be expensive, time consuming, and perhaps impossible.²²⁷

90. In response to the deficiencies raised by the petitioners, Nextel proposes that the Commission either adopt a mechanism to determine a single proponent for a geographic area or adopt a "first-in-time" rule to ensure that the transition proceeds quickly.²²⁸ Nextel proposes that the Commission amend Section 27.1231 to specify that the first party to submit an Initiation Plan pursuant to Section 27.1231(d)²²⁹ is the proponent for the area in question, and that the addition of co-proponents should be at that proponent's discretion.²³⁰ Nextel further requests that the Commission change the "one-strike rule" adopted by the Commission in the *BRE/EBS R&O*, in which the Commission stated that an entity that withdraws an Initiation Plan may not then seek to transition that particular area in the future.²³¹ Nextel maintains that even if a proponent exercises enormous diligence, it may have inadvertently omitted a licensee or made some other error.²³² Nextel recommends that the proponent be permitted to withdraw an Initiation Plan and resubmit a corrected version if no other entity has filed an Initiation Plan

²²² *Id.* at 14200 ¶ 80.

²²³ 47 C.F.R. § 27.1231(d)(6) (2005).

²²⁴ See WCA PFR at 10-11; C&W PFR at 3; Pace PFR at 2-3; DBC PFR at 3; Nextel PFR at 6.

²²⁵ See Nextel PFR Reply at 3.

²²⁶ See *id.*

²²⁷ See Nextel PFR at 6.

²²⁸ Nextel PFR Reply at 5.

²²⁹ 47 C.F.R. § 27.1231(d)(2005).

²³⁰ Nextel PFR Reply at 14.

²³¹ See Nextel PFR at 15. See also *BRS/EBS R&O*, 19 FCC Rcd 14165, 14203 ¶ 87.

²³² Nextel PFR at 15.

for that area in the interim.²³³ Nextel recommends that the Commission adopt a “two-strike” rule.²³⁴

91. *Discussion.* We agree with petitioners that we should clarify when an entity becomes a proponent and whether that entity must accept a co-proponent. At the outset, we note that because we have changed the size of the transition area from MEA to BTA, we believe that we have significantly reduced the burden on the proponent to transition one area, thus making co-proponents unnecessary in most instances. We reject the suggestion that the licensee with the most spectrum, licensed or leased, should be designated the proponent because we agree with Clearwire that the entity with the most spectrum in a BTA is not necessarily the entity with the greatest incentive to transition a given BTA.²³⁵ Our goal, as we have stated repeatedly, is to encourage a quick transition of the 2.5 GHz band. To encourage a quick transition of the band, we believe that it is necessary to encourage proponents to come forward. We believe that adopting a “first-in-time” rule, as suggested by Nextel, would help accomplish that goal. Not only is such a rule fair and unequivocal, but it will also encourage those entities most interested in transitioning an area and instituting service to quickly file an Initiation Plan and start the transition process.

92. We further believe that the adoption of a “first-in-time” rule will clarify who the proponent is and will avoid the problem of forcing competitors to be co-proponents in the event that more than one entity wishes to transition a BTA. We reiterate that the Commission permitted the use of co-proponents to give entities the flexibility to undertake the extremely challenging task of transitioning an entire MEA.²³⁶ We therefore reject SBC’s argument that a sole proponent has too much power to dictate the terms of the transition to non-proponent licensees.²³⁷ The transition process, through the development of the Transition Plan, is designed to be a process to satisfy the needs of both proponents and non-proponents alike, while enabling the transition to occur with a minimum of disputes. The proponent does not dictate the terms of the transition. The proponent negotiates with every EBS and BRS licensee in the BTA to reach a mutually agreeable Transition Plan. During the transition planning process, the non-proponent licensees may object to the terms of the Transition Plan. It is in the interest of the proponent to reach a mutually agreeable Transition Plan to ensure that the transition proceeds quickly and efficiently. We believe that the Transition Plan we have adopted balances the needs of the proponent with the needs of the EBS licensees and lessees and commercial operators in the 2.5 GHz band.

93. We now turn to determining the “first-in-time” rule. We believe that under the transition plan adopted by the Commission, we have the option of using one of the following three events to trigger a “first-in-time rule:” when the Pre-Transition Data Request is sent; when the Transition Notice is sent; or when the Initiation Plan is filed. Of these three events, we believe that it is most appropriate to designate as the proponent the entity who first files the Initiation Plan for a given BTA. We do not designate the proponent at an earlier stage because any entity that sends a Pre-Transition Data Request or a Transition Notice is under no obligation to actually file an Initiation Plan with the Commission and

²³³ *Id.*

²³⁴ *Id.*

²³⁵ See Clearwire PFR Opposition at 11.

²³⁶ *BRS/EBS R&O*, 19 FCC Rcd 14164, 14200 ¶ 79.

²³⁷ See SBC PFR Opposition at 10.

then actually transition a given BTA. In light of the penalty assessed by the Commission for withdrawing an Initiation Plan, we believe that only those entities that are serious about transitioning a BTA will file an Initiation Plan.²³⁸ Moreover, we note that of these three documents, only the Initiation Plan is filed with the Secretary of the Commission, where it will be date-stamped, thus making it easy to determine which entity filed first. Therefore, the first entity to file an Initiation Plan with the Commission shall automatically be designated as the proponent for a given BTA without any action required by the Commission. We note, however, that several petitioners have asked the Commission to release a Public Notice whenever an entity files an Initiation Plan so that BRS and EBS licensees and lessees can stay informed.²³⁹ We hereby adopt that recommendation and direct the Bureau to release a Public Notice noting that Initiation Plans have been filed with the Commission. The purpose of the Public Notice will be for informational purposes only and will not be a Commission action designating the proponent.

94. Although we still believe that, in certain circumstances, the use of multiple proponents may promote the rapid transition of BTAs, we agree with petitioners that it would be difficult for competitors to work cooperatively to transition a particular BTA. Thus, we conclude that the use of co-proponents to transition a given BTA is voluntary and the parties have complete control over how they contact each other, when they contact each other, and if they reach an agreement at all. Because we have adopted a voluntary process, we reject the recommendations of petitioners to adopt a particular time frame for potential co-proponents to identify themselves or the adoption of a 30-day "Proponent Election Period."²⁴⁰ We note that the transition process adopted by the Commission is a public process. At least twice during the Initiation Planning Period, entities that are interested in being a proponent contact all the EBS and BRS licensees in a given BTA.²⁴¹ Therefore, entities that are interested in being a proponent must know when other entities are interested as well. Thus, the parties may agree to be co-proponents either before or after the Initiation Plan is filed. As a practical matter, however, parties may wish to reach an agreement before the Initiation Plan is filed and the proponent is designated. Once an entity is designated the proponent, it may then permit a co-proponent at its sole discretion. Before the Initiation Plan is filed, however, neither party is the proponent, therefore both parties may be more open to reaching an agreement on transitioning a given BTA.

95. We now discuss Nextel's suggestion to permit a proponent two opportunities to file an Initiation Plan with the Commission. Although we are sympathetic to the arguments presented by Nextel, we do not believe that changing the "one-strike" rule is the appropriate way to resolve them.²⁴²

²³⁸ See *BRS/EBS R&O*, 19 FCC Rcd 14165, 14203 ¶ 87.

²³⁹ See *C&W PFR* at 4; *Pace PFR* at 4. See also *WCA PFR Opposition* at 3.

²⁴⁰ See *Nextel PFR Reply* at 14; *BellSouth PFR Reply* at 6. Although the recommendations of petitioners differ somewhat, generally, they recommend that the entity that sends a Transition Notice to all BRS and EBS licensees in the BTA be considered the first mover. Other entities that desire to be co-proponents would be given a period of time following the sending of the Transition Notice to contact the first mover about being a co-proponent. Then they recommend that the first mover and the potential co-proponent be given a period of time to reach an agreement on transitioning a given BTA. If they cannot reach an agreement then the first to file an Initiation Plan or the entity with the most spectrum, licensed or leased, should be designated as the proponent.

²⁴¹ See *BRS/EBS R&O*, 19 FCC Rcd 14165, 14202 ¶¶ 84-85.

²⁴² See *supra* ¶ 90 for a discussion of the issues raised by Nextel.

Instead we will permit a proponent to amend the Initiation Plan to correct minor or inadvertent errors. We believe that retaining the “one-strike” rule, but permitting amendments to the Initiation Plan will encourage entities to become proponents and hasten the transition of the 2.5 GHz band. Moreover, we believe that retaining the “one-strike” rule provides a date certain for determining who the proponent is and for establishing the time-line for the transition of that particular BTA.

d. Initiation Phase

(i) Pre-Transition Data Requests

96. The purpose of the Pre-Transition Data Request is to assist the potential proponent in assessing whether to transition a particular BTA.²⁴³ A potential proponent asks all EBS and BRS licensees in a BTA to provide it with certain information about their facilities.²⁴⁴ Petitioners ask that the Commission clarify Section 27.1231(f) of the Commission’s rules in four respects.²⁴⁵ First, they ask that the Commission require BRS and EBS licensees to provide additional information to the potential proponent.²⁴⁶ Second, they ask that the rule be clarified to ensure that BRS and EBS licensees must respond to the Pre-Transition Data Request.²⁴⁷ Third, they ask that the Commission establish a deadline for responding to the Pre-Transition Data Request.²⁴⁸ Fourth, they ask that penalties be assessed for BRS and EBS licensees who fail to respond within the newly established deadline.²⁴⁹

(a) Contents of the Pre-Transition Data Request

97. *Background.* Petitioners request that the Commission amend Section 27.1231(f)²⁵⁰ of the Commission’s rules to permit the proponent to ask the non-proponent BRS and EBS licensees to provide additional technical and contact information.²⁵¹ In addition, BellSouth requests that the Commission clarify Section 27.1231(f) to require potential proponents to send the Pre-Transition Data Request to the BTA authorization holder in addition to each BRS and EBS licensee in the transition area.²⁵²

98. *Discussion.* To enable the proponent to arrange for the installation of the required equipment, we will amend Section 27.1231(f) of the Commission’s rules to require BRS and EBS licensees to provide the following information to the potential proponent: the transitioning licensee’s full

²⁴³ See *BRS/EBS R&O*, 19 FCC Rcd 14165, 14202 ¶ 84.

²⁴⁴ See 47 C.F.R. § 27.1231(f)(2005); *BRS/EBS R&O*, 19 FCC Rcd 14165, 14202 ¶ 84.

²⁴⁵ See WCA PFR at 18; Nextel PFR at 9-10; BellSouth PFR Opposition at 19-20.

²⁴⁶ See WCA PFR at 19-20; Nextel PFR at 10-11; Clearwire PFR Opposition at 12.

²⁴⁷ See Nextel PFR at 9-10; BellSouth PFR Opposition at 19-20.

²⁴⁸ See WCA PFR at 18; Nextel PFR at 9-10; Clearwire PFR Opposition at 11.

²⁴⁹ See WCA PFR at 18; Clearwire PFR Opposition at 11.

²⁵⁰ 47 C.F.R. § 27.1231(f)(2005).

²⁵¹ See WCA PFR at 19; Nextel PFR at 10-11; Clearwire PFR Opposition at 12.

²⁵² BellSouth PFR Opposition at 19-20.

name; postal mailing address, contact person; e-mail address; and phone and fax number.²⁵³ In addition, MVPD operators that intend to seek waivers from the Commission to “opt-out” of the transition also must inform the proponent that they are seeking waivers.²⁵⁴ We agree with WCA that because the Commission’s ULS database does not contain information concerning the desired signal level at each EBS receive site entitled to protection during the transition, potential proponents must get this information directly from EBS licensees.²⁵⁵ Therefore, to provide EBS operations being migrated to the MBS with interference protection based on D/U ratios, we will amend Section 27.1231(f) of the rules to permit potential proponents to seek the following information from EBS licensees:

- The location (street address and geographic coordinates) of the main station or booster serving each EBS receive site entitled to protection;
- The make and model of the antenna for that main station or booster, along with the radiation pattern if it is not included within the Commission’s database;
- The ground elevation, above mean sea level (AMSL), of the building or antenna supporting structure on which the main station or booster transmission antenna is installed, the height, above ground level (AGL), of the center of radiation of the transmission antenna, the orientation of the main lobe of the transmission antenna, and any mechanical beamtilt or electrical beamtilt not reflected in the radiation pattern provided or included within the Commission’s database;
- The bandwidth of each channel or subchannel, the emission type for each channel or subchannel, and the EIRP measured in the main lobe for each channel or subchannel;
- The make and model of the receive antenna installed at that site, along with the radiation pattern if it is not included within the Commission’s database.²⁵⁶

Moreover, in response to a request from Nextel, the Commission will work with industry to encourage all transitioning licensees to use a standard format, such as Microsoft Excel or ASCII text files, and a standard electronic medium, such as e-mail or an industry coalition website, for compiling and transmitting information in response to a Pre-Transition Data Request.²⁵⁷ Also, we agree with petitioners that permitting proponents to serve licensees based on information in the ULS database will encourage licensees to ensure that their information is accurate and up-to-date, which we believe is the obligation of every licensee.²⁵⁸

²⁵³ See Nextel PFR at 10-11.

²⁵⁴ See *supra* ¶ 73.

²⁵⁵ See WCA PFR at 19.

²⁵⁶ See *id* at 19-20.

²⁵⁷ See Nextel PFR at 10-11.

²⁵⁸ See C&W PFR at 4; Pace PFR at 4; DBC PFR at 4; WDBS PFR at 4; SpeedNet PFR at 4. See also WCA PFR Opposition at 3.

99. We do not, however, adopt the recommendation of Clearwire²⁵⁹ to require EBS licensees to certify that the receive site is, at the time the data request is received, actively using EBS distance learning services for the permissible purpose of formal education of full-time students at accredited schools.²⁶⁰ We believe that such a certification is unnecessary because EBS receive sites may be used for other purposes.²⁶¹ Moreover, certifications are generally used by the Federal Government to assure that a private party doing business with the Federal Government or receiving assistance from the Federal government is in compliance with certain Federal statutes and regulations. We do not believe that it is appropriate for us to require one private party to certify to another private party. Also, we will not amend Section 27.1231(f) to require potential proponents to send Pre-Transition Data Requests to BTA authorizations holders in addition to each BRS and EBS licensee in the transition area because it is unnecessary to do so.²⁶² BTA authorization holders are BRS licensees.

(b) Deadline for completing Pre-Transition Data Requests

100. *Background.* As mentioned above, petitioners ask that the Commission establish a deadline for responding to the Pre-Transition Data Request.²⁶³

101. *Discussion.* We agree with petitioners that Section 27.1231(f) of the Commission's rules should be amended to require that BRS and EBS licensees respond to the proponent's Pre-Transition Data Request within a specified deadline. While we agree with IMWED that it is in the interests of EBS and BRS licensees to respond voluntarily to the request and thereby facilitate the transition, we believe that proponents need to commence comprehensive planning activities by a date certain in order to expeditiously and efficiently transition a BTA.²⁶⁴ Establishing a deadline will provide proponents with the assurance that they can move forward toward a transition in conformance with their schedules and business plans. We note that WCA recommends that we require BRS and EBS licensees to respond within 21 days of the receipt of the Pre-Transition Data Request,²⁶⁵ while HITN recommends 45 days.²⁶⁶ In light of the information required in the Pre-Transition Data Request, we believe that 21 days may not provide a sufficient amount of time for licensees to gather, prepare, and deliver the required information. We also believe that 45 days is not an unreasonable, extended period of time that would cause undue delay to the transition. Thus, we will amend our rules to require BRS and EBS licensees to respond within 45 days of receiving the Pre-Transition Data Request.

102. We do not agree with petitioners, however, that we should adopt the penalties proposed

²⁵⁹ See Clearwire PFR Opposition at 12.

²⁶⁰ See *infra* ¶ 146 for a complete discussion of this issue.

²⁶¹ See 47 C.F.R. § 27.1203.

²⁶² See BellSouth PFR Opposition at 19-20.

²⁶³ See WCA PFR at 18; Nextel PFR at 9-10; Clearwire PFR Opposition at 11.

²⁶⁴ See IMWED PFR Opposition at 7-8.

²⁶⁵ See WCA PFR at 18. See also Nextel PFR at 9-10; Sprint PFR Reply at 14; Clearwire PFR Opposition at 11.

²⁶⁶ See HITN PFR Opposition at 3.

by petitioners if licensees do not timely respond to the Pre-Transition Data Request. We believe that sanctions recommended by WCA and Clearwire, such as losing primary status and the right to compensation for migration and replacement downconverters, could be unnecessarily harsh and disproportionate to the violation, in some cases.²⁶⁷ We also believe that these penalties may raise legal concerns that implicate license revocation issues. Rather, in the event that a licensee fails to respond to the Pre-Transition Data Request, we will assess penalties, on a case-by-case basis, such as requiring the tardy licensee to forfeit its right to object to the Transition Plan, if the BRS or EBS licensee's failure to timely respond to the Pre-Transition Data Request has caused harm to the proponent or has delayed the transition in the BTA.

(ii) Initiation Plans

103. *Background.* In the *BRS/EBS R&O*, the Commission adopted a five-phased transition process, the first phase of which is initiating the transition.²⁶⁸ This first phase lasts a maximum of three years, beginning on the effective date of the rules, January 10, 2005 and ending on January 10, 2008.²⁶⁹ Section 27.1231(b) requires a proponent to file an Initiation Plan with the Commission that contains specific information on or before January 10, 2008.²⁷⁰ If an Initiation Plan is not on file with the Commission on or before January 10, 2008 for particular geographic areas, the Commission stated that it would use an alternative method of transitioning those areas.²⁷¹ Petitioners ask the Commission to extend the length of this phase of the transition process and modify the required contents of the Initiation Plan.

104. WCA, Sprint, and BellSouth request that the Commission extend the initiation planning period until 30 months (two and one-half years) following the effective date of the amendatory rules.²⁷² This additional time is necessary, they reason, because they cannot begin to transition the 2.5 GHz band until the Commission adopts smaller transition areas.²⁷³ NY3G, however, opposes any modifications that would delay the transition and argues that three years is sufficient time for licensees to initiate a transition.²⁷⁴ WCA further asks the Commission to remove two required components of the Initiation Plan, which are codified at Sections 27.1231(d)(3) and 27.1231(d)(4) of the Commission's rules. Section 27.1231(d)(3) requires the proponent to include a statement that an engineering analysis to transition all BRS and EBS licensees in the MEA has been completed.²⁷⁵ WCA maintains that an engineering analysis at the Initiation Planning stage is unnecessary because a proponent will not know the channel locations of various operations and their facilities and interference protection needs until the Transition Planning

²⁶⁷ See WCA PFR at 18; Clearwire PFR Opposition at 11.

²⁶⁸ *BRS/EBS R&O*, 19 FCC Rcd 14165, 14200 ¶ 78.

²⁶⁹ *Id.*

²⁷⁰ See *id.* at 14202 ¶ 86.

²⁷¹ *Id.* at 14203 ¶ 87.

²⁷² WCA PFR at 13. See also Sprint PFR at 5; BellSouth PFR Opposition at 15-16.

²⁷³ WCA PFR at 13.

²⁷⁴ NY3G PFR Opposition at 9-10.

²⁷⁵ WCA PFR at 14-15. See also BellSouth PFR Opposition at 20; Sprint PFR at 9.