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

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In the Matter of )
Amendment of Parts 1, 21, 73, 74 and 101 of the )
Commission's Rules to Facilitate the Provision of )
Fixed and Mobile Broadband Access, Educational )
and Other Advanced Services in the 2150-2162 )
and 2500-2690 MHz Bands )
Part 1 of the Commission's Rules - Further )
Competitive Bidding Procedures )
Amendment of Parts 21 and 74 )
of the Commission's Rules With Regard to )
Licensing in the Multipoint )
Distribution Service and in the )
Instructional Television Fixed Service for the )
Gulf of Mexico )
Review of the Spectrum Sharing Plan Among )
Non-Geostationary Satellite Orbit Mobile Satellite )
Service Systems in the 1.6/2.4 GHz Bands )
Amendment of Part 2 of the Commission's Rules )
to Allocate Spectrum Below 3 GHz for Mobile )
and Fixed Services to Support the Introduction of )
New Advanced Wireless Services, Including Third )
Generation Wireless Systems )

WT Docket No. 03-66 RM-10586

WT Docket No. 03-67

WT Docket No. 02-68 RM-9718

IB Docket No. 02-364

ET Docket No. 00-258

THIRD ORDER ON RECONSIDERATION AND SIXTH MEMORANDUM OPINION AND ORDER AND FOURTH MEMORANDUM OPINION AND ORDER AND SECOND FURTHER NOTICE OF PROPOSED RULEMAKING AND DECLARATORY RULING

Adopted: March 18, 2008

Released: March 20, 2008

Comment Date: 60 days after publication in the Federal Register
Reply Comment Date: 90 days after publication in the Federal Register

By the Commission:

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## I. INTRODUCTION

1. In this *Third Order on Reconsideration and Sixth Memorandum Opinion and Order and Fourth Memorandum Opinion and Order and Second Further Notice of Proposed Rulemaking (Big LEO 3rd Order on Reconsideration and AWS 6<sup>th</sup> MO&O and BRS/EBS 4th MO&O and 2nd FNPRM)*, we continue our efforts to transform our rules and policies governing the licensing of the Educational Broadband Service (EBS) and the Broadband Radio Service (BRS) in the 2495-2690 MHz (2.5 GHz band). In particular, we adopt rules for auctioning unassigned BRS spectrum as proposed in the *Further Notice of Proposed Rulemaking (BRS/EBS FNPRM)*,<sup>1</sup> and seek further comment on alternatives for licensing unassigned EBS spectrum. In addition, we address petitions for reconsideration filed in response to the *Order on Reconsideration and Fifth Memorandum Opinion and Order and Third Memorandum Opinion and Order and Second Report and Order (Big LEO Order on Reconsideration and AWS 5<sup>th</sup> MO&O and BRS/EBS 3<sup>rd</sup> MO&O and 2nd R&O*, as appropriate) in this proceeding<sup>2</sup> by, among other things, further refining our technical rules to enable licensees to deploy new and innovative wireless services in the 2.5 GHz band. We believe that the actions we take today will facilitate the promotion of broadband service to all Americans.

## II. EXECUTIVE SUMMARY

2. In the *Big LEO 3<sup>rd</sup> Order on Reconsideration and AWS 6<sup>th</sup> MO&O and BRS/EBS 4th MO&O*, we take the following actions with respect to petitions for reconsideration filed in response to the *Big LEO Order on Reconsideration and AWS 5<sup>th</sup> MO&O and BRS/EBS 3rd MO&O and 2nd R&O*:

- Grant a petition, in part, by adopting the Part 1, Subpart Q competitive bidding rules for future BRS auctions, seeking further comment on rules for future licenses for EBS spectrum, and directing WTb to review inventory and schedule auction(s) of unassigned BRS spectrum as soon as practicable.
- Adopt the small business size standards and bidding credits proposed in the *BRS/EBS FNPRM* ("small business" -- an entity with attributed average annual gross revenues not exceeding \$40 million for the preceding three years; "very small business" -- an entity with attributed average annual gross revenues not exceeding \$15 million for the same period; and an "entrepreneur" -- an entity with attributed annual average gross revenues not exceeding \$3 million for the same period).

<sup>1</sup> Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 03-66, 19 FCC Rcd 14165, 14270, 14271-14272 ¶¶ 281, 286 (2004) (*BRS/EBS R&O and FNPRM*, as appropriate).

<sup>2</sup> Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Third Memorandum Opinion and Order and Second Report and Order*, WT Docket No. 03-66, 21 FCC Rcd 5606 (2006) (*BRS/EBS 3rd MO&O & 2nd R&O*).

- Deny a petition requesting that the Commission permit licensees to self-transition before January 21, 2009, the deadline for proponents to file an Initiation Plan with the Commission.
- Grant a petition asking the Commission to correct the inconsistency between the *BRS/EBS 3rd MO&O* and the text of Section 27.1236(b)(6), and on the Commission's own motion, change references in Sections 27.1231(f), 27.1236(a), 27.1236(b)(1) and 27.1236(b)(6) to dates certain.
- Deny as moot a petition requesting that the Commission clarify the requirements for multichannel video programming distribution (MVPD) operators seeking to opt-out of the transition.
- Deny a petition seeking reconsideration on the effect of MVPD opt-out on adjacent licensees with overlapping geographic service areas (GSAs).
- Grant a petition asking the Commission to modify the height benchmarking rule to establish deadlines for compliance.
- Grant a petition asking the Commission to modify the out-of-band emissions rule to establish deadlines for compliance.
- Grant a petition asking the Commission to modify the out-of-band emissions rule to provide that out-of-band emissions are to be measured from the outermost edge of the channels when two or more channels are combined.
- Deny a petition and reaffirm that only first adjacent channel licensees may file an interference complaint concerning adjacent channel interference.
- Deny a petition and affirm the Commission's decision regarding out-of-band emissions for mobile digital stations.
- Deny a petition asking to establish different deadlines for user stations to cure interference where an existing base station suffers interference from an outdoor antenna user station.
- Grant a petition and allow licensees to maintain existing operations post-transition in the mid-band segment (MBS) at 2572-2614 MHz, even if such operations exceed the current -73.0 dBW/m<sup>2</sup> contour limit.
- Deny a petition asking the Commission to adopt technical standards should it become necessary to "split the football" to determine each licensee's GSA.
- Grant a petition and permit BRS Channels No. 1 and 2/A licensees to operate simultaneously in the 2150-2160/62 MHz and 2496-2690 MHz bands until every subscriber is relocated to the 2496-2690 MHz band.
- Deny a petition asking the Commission to provide greater protection to BRS Channel No. 1 operations by reducing the power flux density (PFD) radiated from the Mobile Satellite Service (MSS) in the 2496-2500 MHz band.
- Deny a petition and affirm the use of splitting the football for BRS Channels No. 2 and 2A licensees.
- Deny petitions concerning overlaps between grandfathered EBS E and F Group licensees and co-channel BRS E and F Group licensees and affirm the existing rule.
- Deny a petition asking for procedural changes to the 90-day negotiation period for significant GSA overlaps (more than 50 percent) between grandfathered EBS E and F Group channel licensees and incumbent BRS E and F Group channel licensees.
- Grant a petition and reinstate a Gulf of Mexico Service Area.

- Establish the Gulf of Mexico boundary 12 nautical miles from the shore.
- Apply the existing technical rules to the Gulf of Mexico Service Area.
- Grant a petition and affirm that EBS excess capacity leases executed before January 10, 2005, are limited to 15 years.
- Deny a petition relating to pre-1998 legacy, video-only excess capacity leases but affirm that leases executed before January 10, 2005, are limited to 15 years.
- Grant a petition and amend rules to permit lessees to offer EBS licensees/lessors the actual equipment used or comparable equipment on lease termination.
- Deny a petition asking that licensees be permitted to demonstrate substantial service based on past-discontinued service.
- Grant a petition asking for a new safe harbor for heavily encumbered or highly truncated Basic Trading Areas (BTAs) and GSAs.
- Grant a petition seeking minor changes in the EBS eligibility rule to conform it to other changes made by the Commission.
- Grant a petition asking the Commission to adopt a rule that clarifies that commercial EBS licensees are not subject to educational programming requirements or the special EBS leasing restrictions.
- Deny a petition asking the Commission to reinstate pending mutually exclusive applications for new EBS stations.
- Grant in part requests for declaratory ruling and clarify how the splitting the football process for determining GSAs works with respect to licenses that were expired on January 10, 2005.

In the *BRS/EBS 2nd FNPRM*, we seek comment on whether and how to license EBS spectrum in the Gulf of Mexico. We also seek comment on various alternatives for licensing unassigned EBS spectrum. Specifically, we seek comment on the following issues:

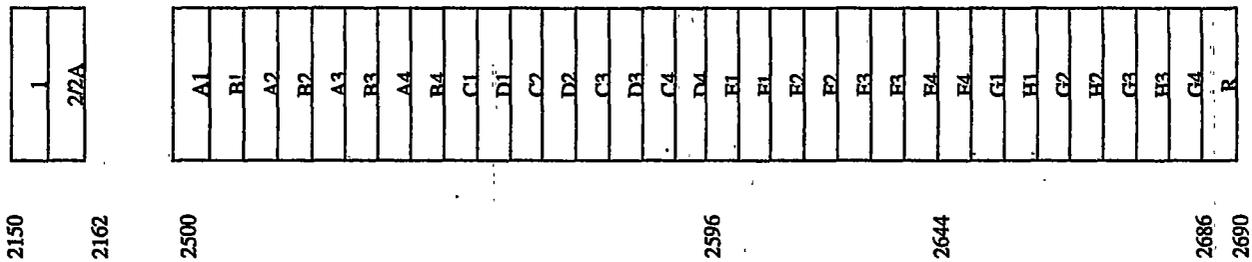
- We ask whether it would be in the public interest to develop a scheme for licensing unassigned EBS spectrum that avoids mutual exclusivity.
- We ask whether EBS eligible entities could participate fully in a spectrum auction.
- We seek comment on the use of small business size standards and bidding credits for EBS if we adopt a licensing scheme that could result in mutually exclusive applications.
- We seek comment on the proper market size and size of spectrum blocks for new EBS licenses.
- We seek comment on issuing one license to a State agency designated by the Governor to be the spectrum manager, using frequency coordinators to avoid mutually exclusive EBS applications, as well as other alternative licensing schemes.

**III. BACKGROUND<sup>3</sup>**

**A. BRS/EBS R&O and FNPRM**

3. On July 19, 2004, the Commission, in response to a "White Paper" submitted by the Wireless Communications Association International, Inc. (WCA), the Catholic Television Network (CTN), and the National ITFS Association (NIA) (the Coalition) released the *BRS/EBS R&O & FNPRM*.<sup>4</sup> In the *BRS/EBS R&O & FNPRM*, the Commission restructured the 2500-2690 MHz band from an interleaved band plan to a three-segment band plan divided into upper and lower-band segments (UBS and LBS, respectively) for low-power operations and a mid-band segment (MBS) for high-power operations, and designated the 2495-2500 MHz band for use in connection with the 2500-2690 MHz band.<sup>5</sup> The following charts illustrate the former and current band plans:

**FORMER BRS/EBS BAND PLAN:**



**CURRENT BRS/EBS BAND PLAN:**

Commission Band Plan		
Channel Designation	Lower Frequency	Upper Frequency
N/A	2495	2496
BRS-1	2496	2502
A1	2502	2507.5
A2	2507.5	2513
A3	2513	2518.5
B1	2518.5	2524
B2	2524	2529.5
B3	2529.5	2535
C1	2535	2540.5
C2	2540.5	2546
C3	2546	2551.5

Guard Band

LBS

<sup>3</sup> A full discussion of the background and history involving this band is contained in Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Notice of Proposed Rulemaking and Memorandum Opinion and Order*, WT Docket No. 03-66, 18 FCC Rcd 6722, 6726-6739 ¶¶ 6-31 (2003) (*BRS/EBS NPRM*); *BRS/EBS R&O & FNPRM*, 19 FCC Rcd at 14171-14176 ¶¶ 9-20, and *BRS/EBS 3rd MO&O & 2nd R&O*, 21 FCC Rcd at 5614-5618 ¶¶ 9-19.

<sup>4</sup> *BRS/EBS R&O and FNPRM*.

<sup>5</sup> *BRS/EBS R&O and FNPRM*, 19 FCC Rcd at 14182-14187 ¶¶ 36-47.

D1	2551.5	2557		
D2	2557	2562.5		
D3	2562.5	2568		
J	2568	2572	Guard Band	
I1	2572	2578		MBS
I2	2578	2584		
I3	2584	2590		
I4	2590	2596		
I5	2596	2602		
I6	2602	2608		
I7	2608	2614		
K	2614	2618	Guard Band	
BRS 2	2618	2624		UBS
E1	2624	2629.5		
E2	2629.5	2635		
E3	2635	2640.5		
F1	2640.5	2646		
F2	2646	2651.5		
F3	2651.5	2657		
H1	2657	2662.5		
H2	2662.5	2668		
H3	2668	2673.5		
G1	2673.5	2679		
G2	2679	2684.5		
G3	2684.5	2690		

The Commission also renamed the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS) as the "Broadband Radio Service" and "Educational Broadband Service," respectively, to better reflect the new services anticipated for this band.<sup>6</sup> In addition, the Commission retained conditions on the use of EBS licenses in continued furtherance of the educational objectives that led to the establishment of ITFS, and removed all non-statutory eligibility restrictions applicable to cable and digital subscriber line (DSL) operators for the BRS (thus permitting these operators to provide non-video services like broadband internet access).<sup>7</sup> Further, the Commission adopted service rules and took actions that gave licensees increased flexibility, reduced administrative burdens on both licensees and the Commission, and promoted regulatory parity. In particular, among other actions, the Commission implemented geographic area licensing for all licensees in the band; consolidated licensing and service rules for EBS and BRS in Part 27; allowed spectrum leasing for BRS and EBS under our secondary markets spectrum leasing policies and procedures; provided licensees with the flexibility to employ the technologies of their choice in the band; applied the Part 1 Wireless Telecommunications Bureau rules to the BRS/EBS spectrum; and dismissed pending mutually exclusive applications for new ITFS stations.<sup>8</sup>

4. To facilitate the transition to the new band plan, the Commission adopted a market-oriented transition mechanism, in which a proponent would transition the 2.5 GHz band within a Major

<sup>6</sup> *BRS/EBS R&O and FNPRM*, 19 FCC Rcd at 14182, 14227 ¶¶ 6, 164.

<sup>7</sup> *BRS/EBS R&O and FNPRM*, 19 FCC Rcd at 14221-14227, 14230-14232 ¶¶ 149-164, 170-176.

<sup>8</sup> *BRS/EBS R&O and FNPRM*, 19 FCC Rcd at 14169-14170 ¶ 6.

Economic Area (MEA).<sup>9</sup> The transition timeline consisted of the following three phases: the Initiation Phase (which was to have lasted three years starting on January 10, 2005), in which potential proponents contact all the BRS and EBS licensees in the MEA by sending them a Pre-transition Data Request and a Transition Notice; the 90-day Transition Planning Phase, in which the proponent and BRS and EBS licensees negotiate the Transition; and the 18-month Transition Completion Phase, in which the proponent replaces downconverters and migrates video programming tracks for EBS licensees in the MEA.<sup>10</sup> Under this transition mechanism, the transition costs of EBS licensees were to be shared by the proponent and all commercial licensees and lessees in the MEA.<sup>11</sup> Transition plans were required to conform to certain safeguards to ensure a smooth transition and equitable treatment of incumbents. The Commission permitted qualifying MVPD operators to seek a waiver to opt-out of the transition.<sup>12</sup>

5. In addition, the *BRS/EBS R&O* resolved certain technical issues as follows: set the signal strength limits for the low-power bands at the boundaries of the geographic service areas to 47 dBµV/m; restricted the transmitter output power of response stations to 2.0 watts; modified emission limits for stations that would operate on the LBS and UBS channels; and refrained from allowing high-power unlicensed operations in the 2500-2690 MHz band, but allowed unlicensed operation under our existing Part 15 rules in the 2655-2690 MHz band.<sup>13</sup>

6. In the *BRS/EBS FNPRM*, the Commission sought comment on a proposal to use competitive bidding to assign any new licenses, as well as competitive bidding mechanisms to transition licensees to the extent that licensee-negotiated transitions do not occur within the three-year transition period.<sup>14</sup> Among other methods, we sought comment on a process whereby the Commission would offer incumbent licensees modified non-renewable licenses that would become secondary to new licenses to be assigned pursuant to the new band plan.<sup>15</sup> Under this process, the Commission also would offer incumbent licensees tradable bidding offset credits that could be used to obtain new licenses, and that would provide spectrum access valued comparably to that provided by the incumbent's existing license.<sup>16</sup> In addition to alternate transition methods, we also sought further comment on the following issues: the Gulf of Mexico service area; performance requirements for licensees in the band; grandfathered ITFS stations on the E and F channel groups; limitations on the holdings of ITFS stations; the "wireless cable" exception to the ITFS eligibility rules; regulatory fees; methods of streamlining our review of transactions involving these services; and continuing our review of rules relating to these services.<sup>17</sup>

#### B. BRS/EBS 3rd MO&O and 2nd R&O

7. In the *BRS/EBS 3rd MO&O*, the Commission made further changes to the transition rules to further encourage the transition of the 2.5 GHz band. In reviewing the petitions filed in response to the *BRS/EBS R&O and FNPRM*, the Commission found that the selection of MEAs as the transition area size

<sup>9</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14198 ¶ 74.

<sup>10</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14200, 14203 ¶¶ 78, 88.

<sup>11</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14205 ¶ 93.

<sup>12</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14198-14199 ¶ 75.

<sup>13</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14208, 14211, 14218 ¶¶ 106, 116, 139.

<sup>14</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14265 ¶ 265-266.

<sup>15</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14266 ¶ 269.

<sup>16</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14273 ¶ 290.

<sup>17</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14282-14301 ¶¶ 320-374.

discouraged potential proponents from filing Initiation Plans.<sup>18</sup> Thus, the Commission changed the transition area size from MEA to the much-smaller Basic Trading Area (BTA).<sup>19</sup> Moreover, since at the time the Commission released the *BRS/EBS 3rd MO&O* not one Initiation Plan had been filed, the Commission changed the timeframe of the Initiation Planning Period from January 10, 2005 through January 10, 2008 to July 19, 2006 through January 21, 2009.<sup>20</sup> Also, in response to petitioners who were afraid that they would lose their licenses if a proponent did not file or withdrew an Initiation Plan on or before January 21, 2009, the Commission adopted a rule permitting licensees to self-transition to their default channel locations after January 21, 2009 if a proponent has not filed or has withdrawn an Initiation Plan on or before January 21, 2009.<sup>21</sup> Other significant changes made by the Commission to the transition included the following: adopting a cost-sharing formula for proponent-driven and self transitions; adopting a "first-in time" rule in which the first entity to file an Initiation Plan with the Commission for a given BTA would be the proponent; requiring licensees to respond to the Pre-transition Data request within 45 days; and permitting proponents to file the Post-transition notification on behalf of itself and all of the BRS and EBS licensees in the BTA.<sup>22</sup> The Commission clarified that BRS licensees and lessees, EBS lessees, and commercial EBS licensees must pay their own transition costs and share the cost to transition EBS licensees; that BRS licensees and lessees and EBS licensees and lessees may be a proponent; and that channel swapping to effectuate the transition is permitted.<sup>23</sup> The Commission declined, however, to permit qualifying multichannel video programming distributors (MVPD) operators to automatically opt-out of the transition, but reaffirmed their right to seek a waiver to opt-out of the transition.<sup>24</sup>

8. The Commission also made a series of decisions concerning the technical rules applicable to BRS and EBS. Specifically, the Commission clarified that during the transition, all downconverters within the EBS geographic service area (GSA) must be replaced regardless of the desired or undesired signal strength, allowed a -10 dB adjacent channel desired-to-undesired signal ratio (D/U) for transitioned EBS receive sites, and reaffirmed its decision to permit licensees to exceed the signal level at the GSA boundary provided no constructed licensee providing service is affected.<sup>25</sup> The Commission also reaffirmed its decision to require that a licensee receive a documented interference complaint before it is subject to a stricter emission mask for base stations, reaffirmed its decision that only the first adjacent channel licensee may submit a documented interference complaint, and amended the rules to permit the interfering licensee 60 days after receiving the documented interference complaint to resolve the complaint.<sup>26</sup> In addition, the Commission declined to modify its decision to apply the attenuation factor, not less than  $43 + 10 \log (P)$  dB at the channel edge and  $55 + 10 \log (P)$  dB at 5.5 megahertz from the channel edges, only to mobile digital stations; and reaffirmed its decision to require licensees to measure emission limits as close to the edges, both upper and lower, of the licensee's bands of operation as the design permits, including BRS Channel No. 1 licensees.<sup>27</sup> Further, the Commission reaffirmed its

<sup>18</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5641 ¶ 64.

<sup>19</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5642 ¶ 65.

<sup>20</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5658-5659 ¶ 106.

<sup>21</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5671, 5673-5674 ¶¶ 135, 142.

<sup>22</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5652, 5656, 5677-5686 ¶¶ 91, 101, 152-176.

<sup>23</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5650, 5665, 5678-5679 ¶¶ 87, 122, 157-158.

<sup>24</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5645-5646 ¶¶ 72-74.

<sup>25</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5687-5689, 5699 ¶¶ 181-190, 219-220.

<sup>26</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5689-5691 ¶¶ 191-197.

<sup>27</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5691-5694 ¶¶ 198-204.

decision to bifurcate and define overlapping GSA boundaries by drawing a chord between the intersection points of the licensee's previous 35-mile Protected Service Area (PSA) and those of the respective adjacent market co-channel licensee.<sup>28</sup> Also, the Commission reaffirmed its decision to permit two-way mobile operations prior to the transition, and reaffirmed its decision to permit low-power unlicensed operations in the 2655-2690 MHz portion of the band.<sup>29</sup>

9. In response to a request from EBS licensees, the Commission modified the application of the Secondary Markets rules and policies to EBS excess capacity leases entered into on or after July 19, 2006.<sup>30</sup> Specifically, the Commission limited the term of these leases to 30 years and required them to permit the EBS licensee/lessor to retain the right at year 15 and every five years thereafter to review the lease in light of their educational requirements.<sup>31</sup> The Commission also stated that these leases could not be automatically renewed, although they could contain a right of first refusal clause.<sup>32</sup> Also, the Commission affirmed its decision not to specify the manner in which EBS licensees reserve 5 percent of the capacity of their channels for educational usage when they lease their channels to a commercial lessee and reaffirmed its decision to permit cable operators and incumbent local exchange carriers (ILECs) to acquire or lease BRS or EBS spectrum for non-MVPD services.<sup>33</sup> The Commission also reaffirmed its decision to dismiss mutually exclusive applications for new EBS stations.<sup>34</sup>

10. In the *BRS/EBS 2nd R&O*, the Commission declined to adopt assignment rules for unassigned BRS or EBS spectrum at that time and terminated the Gulf of Mexico proceeding.<sup>35</sup> The Commission did, however, adopt substantial service as the performance standard for EBS and BRS licensees; established May 1, 2011 as the deadline for licensees to demonstrate substantial service for each license they hold; adopted safe harbors, including safe harbors for EBS licensees and rural areas; and indicated that a licensee's prior, discontinued service may be considered as a factor in the substantial service determination made by the Commission.<sup>36</sup> Also, the Commission adopted rules to resolve conflicts between the overlapping GSAs of grandfathered E and F Group EBS licensees and co-channel BRS E and F Group licensees.<sup>37</sup>

#### IV. DISCUSSION

##### A. Licensing Unassigned Spectrum in the Band

11. *Background.* The Commission previously assigned all spectrum allocated to the MDS and Multichannel Multipoint Distribution Service (MMDS), the predecessor services to BRS. Specifically, in 1996, the Commission conducted competitive bidding and issued 493 BTA licenses

<sup>28</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5694-5695 ¶¶ 205-208.

<sup>29</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5695-5699 ¶¶ 209-218.

<sup>30</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5716 ¶ 268.

<sup>31</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5716 ¶ 268.

<sup>32</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5716 ¶ 270.

<sup>33</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5701-5703 ¶¶ 227, 231-232.

<sup>34</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5703-5704 ¶¶ 236-238. The Commission, however, reinstated one application based on evidence presented by the petitioner showing that its settlement agreement was approved before the April 2, 2003 deadline. *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5704 ¶ 239.

<sup>35</sup> *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5737, 5762 ¶¶ 313, 383.

<sup>36</sup> *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5718-5736 ¶¶ 274-310.

<sup>37</sup> *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5749-5750 ¶¶ 348-350.

granting access to all BRS spectrum nationwide that was not assigned to pre-existing MDS or MMDS site-based licenses.<sup>38</sup> Since the auction, 73 of the 493 BRS overlay licenses have cancelled and the related spectrum access rights are now unassigned although any underlying, pre-existing site-based licenses remain intact. With respect to EBS spectrum, the Commission has extensively, but not exhaustively, assigned this spectrum through site-based licensing. Commission analysis indicates that in 11 of 493 BTAs, there are currently no geographic or site-based BRS or EBS licensees. In addition, there are six additional BTAs where only a very small portion of the BTA is covered by a BRS or EBS license.

12. In the *BRS/EBS FNPRM*, the Commission sought comment on procedures for assigning new licenses in these services by competitive bidding.<sup>39</sup> Commenters were asked to address these issues in addition to a larger proposal to use competitive bidding to transfer existing licensees to the new band plan.<sup>40</sup> Specifically, the Commission asked parties to comment on adopting Part 1 competitive bidding rules for these services, as well as the adoption of three levels of size-based bidding credits.<sup>41</sup>

13. Commenters addressing competitive bidding issues in response to the *BRS/EBS FNPRM* generally focused on when to conduct competitive bidding, and whether and how to distinguish among EBS applicants for purposes of offering small businesses bidding preferences.<sup>42</sup> Then, as now, several parties sought early auctions of currently unassigned spectrum.<sup>43</sup> Organizations representing EBS licensees, however, argued that auctions of EBS licenses should wait until after the transition, so that EBS licensees could devote appropriate attention to the transition process.<sup>44</sup> In addition, there were divergent views regarding what frequencies in the band should be licensed together (particularly whether or not to group low and high power frequencies) and the appropriate geographic area for licensing.<sup>45</sup> These latter concerns primarily pertained to new EBS licenses.

14. In the *BRS/EBS 2d R&O*, the Commission concluded that it would be premature to decide how to license currently unassigned spectrum in the band until after the period for existing licensees to transition to the new band plan expires.<sup>46</sup> The Commission reached this conclusion based on the limited amount of currently unassigned spectrum relative to assigned spectrum subject to transitioning; the limited utility of new licenses in areas where existing licensees were transitioning from the old to the new band plan; and the efficiency of licensing all available spectrum at one time.<sup>47</sup> Moreover, the Commission observed that completion of the transition would permit an assessment of existing and potential uses of new licenses and might lead to the identification of additional spectrum available for

<sup>38</sup> These types of licenses are commonly referred to as geographic "overlay" licenses. See *Winning Bidders in the Auction of Authorizations to Provide Multipoint Distribution Service in 493 Basic Trading Areas, Public Notice* (MMB WTB Mar. 29, 1996).

<sup>39</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14265-14272 ¶¶ 266-288.

<sup>40</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14272-14282 ¶¶ 289-319.

<sup>41</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14270-14272 ¶¶ 281-288.

<sup>42</sup> *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5738-5739, 5741 ¶¶ 317-319, 325.

<sup>43</sup> *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5738 n.786.

<sup>44</sup> *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5738-5739 ¶ 318.

<sup>45</sup> *BRS/EBS 2nd R&O*, 21 FCC Rcd at 5740-5741 ¶ 325.

<sup>46</sup> *BRS/EBS 2d R&O*, 21 FCC Rcd at 5739 ¶ 320.

<sup>47</sup> *BRS/EBS 2d R&O*, 21 FCC Rcd at 5739-5740 ¶¶ 320-324.

assignment.<sup>48</sup> The Commission concluded that waiting to assign new licenses until after the completion of the transition therefore might enable a more effective initial assignment of new licenses.<sup>49</sup>

15. NextWave Broadband, Inc. (NextWave) asks the Commission to reconsider this conclusion and immediately auction "all available and unassigned" BRS and EBS spectrum.<sup>50</sup> In seeking reconsideration, NextWave asserts that the benefits from assigning new licenses prior to the end of the transition outweigh any potential benefits that could be obtained from waiting to assign licenses for more available spectrum at one time.<sup>51</sup> WiMAX Forum (WiMAX), Sprint Nextel, Clearwire Corporation (Clearwire), the Hispanic Information and Telecommunications Network (HITN) and WCA support NextWave's request.<sup>52</sup> Proponents of earlier licensing of BRS BTA licenses contend that new BRS BTA licensees may be more likely to initiate transitions to the new band plan than other existing licensees, thereby furthering the transition.<sup>53</sup> More broadly, WCA and NextWave contend that the sooner the Commission licenses unassigned spectrum, the sooner new licensees can begin planning their post-transition deployments.<sup>54</sup>

16. A few parties, specifically NIA, CTN, and ITFS/2.5 GHz Mobile Wireless Engineering & Development Alliance, Inc. (IMWED), oppose NextWave's petition with respect to assigning EBS spectrum. NIA and CTN contend that "EBS licensees will be significantly occupied with other matters over the next few years, including transitions to the new band plan, spectrum lease negotiations, and, critically, the development of educational service plans that focus on new technologies tailored to the revised plan and rules."<sup>55</sup> IMWED contends that auctioning EBS spectrum in urban areas is unnecessary because there is insufficient white space available to institute new services in those areas.<sup>56</sup> IMWED states that the primary purpose of EBS is educational, not commercial.<sup>57</sup> Finally, IMWED anticipates that auctions would not materially expedite the provision of wireless broadband service because widespread deployment will not occur until after transitions take place.<sup>58</sup>

17. *Discussion.* With respect to BRS spectrum, we now conclude that the public interest favors expeditious relicensing of BTA authorizations in those areas where the authorization was forfeited or turned in for cancellation, regardless of the presence of other BRS or EBS incumbents. BTA authorization holders eligible to pay for their licenses in installments recently submitted their final

<sup>48</sup> *BRS/EBS 2d R&O*, 21 FCC Rcd at 5740 ¶ 322.

<sup>49</sup> *BRS/EBS 2d R&O*, 21 FCC Rcd at 5740 ¶ 322.

<sup>50</sup> NextWave PFR at 3-12. In referring to pleadings filed in response to the *BRS/EBS 3rd MO&O*, we will use the short name of the party as indicated in Appendix D to this document, followed by "PFR" if the document is a petition for reconsideration, "Comments" or "Opposition" if the document is comments on or oppositions to petitions for reconsideration, and "Reply" if the pleading is a reply to an opposition or comment.

<sup>51</sup> NextWave PFR at 5.

<sup>52</sup> WCA Opposition at 12-16. In addition to WCA, WiMAX (a non-profit corporation formed to help promote and certify the compatibility and interoperability of broadband wireless products using the IEEE 802.16 and ETSI HiperMAN wireless MAN specifications), Clearwire, and HITN all support early auction of new licenses. WiMAX Comments at 5-6; Sprint Nextel Opposition at 13-15; Clearwire Opposition at 3-5; HITN Opposition at 3-4.

<sup>53</sup> Clearwire Opposition at 4, NextWave Reply at 4.

<sup>54</sup> WCA Opposition at 15, NextWave Reply at 4.

<sup>55</sup> CTN NIA Opposition at 3-4.

<sup>56</sup> IMWED Opposition at 3.

<sup>57</sup> IMWED Opposition at 4.

<sup>58</sup> IMWED Opposition at 4.

payments. With final payment in hand, the possibility that additional BTA licenses will be added to the FCC's auction inventory due to failure to pay is now foreclosed. In addition, initial action has been taken with respect to requests regarding forfeited authorizations.<sup>59</sup> These developments provide greater certainty regarding the geographic areas available for the grant of new BRS licenses.

18. We find that the expeditious licensing of BRS in those 11 BTAs where there is no existing BRS or EBS licensee serves the public interest by facilitating service in unserved areas.<sup>60</sup> Expedited licensing in those markets will not disrupt the band plan transition process because there are no existing operations. Transitions in adjacent BTAs will be protected by the requirements in our technical rules that new BTA licensees operate pursuant to the post-transition band plan and provide protection to adjacent operations. We also note that Sprint Nextel and Clearwire, two entities that have proposed transitions in other markets, support expeditious relicensing of available BRS spectrum.<sup>61</sup>

19. We also conclude that, on balance, early issuance of BTA authorizations serves the public interest in markets where there are incumbent non-BTA BRS or EBS licensees. Unlike the handful of markets without any existing BRS or EBS licensees, issuance of licenses where there are existing incumbents will supplement – rather than initiate – service within the BTA. Nonetheless, a new BTA authorization will make service more widely available and will increase the opportunities for competitive offerings within the market. We believe that our existing technical rules afford incumbent licensees protection against unwarranted interference. Specifically, any new BTA licenses will be required to limit their signal strength at the border of their GSA,<sup>62</sup> provide adjacent channel protection in the same manner as any other licensee,<sup>63</sup> and comply with the height benchmarking rule to ensure that base stations near the border of GSAs do not interfere with stations in neighboring GSAs.<sup>64</sup> We also note that no party to this proceeding expressed concern that awarding new BRS BTA licenses would cause problems to existing operations. Moreover, we will require new licensees to operate pursuant to the new band plan. This requirement will protect existing licensees by ensuring that any future high-power video operations are restricted to the MBS. To the extent a market has existing pre-transition operations, requiring the BTA operator to operate pursuant to the new band plan will provide that operator with maximum incentive to transition existing operations. Furthermore, as an increasing number of adjacent markets are transitioned, requiring new licensees to operate pursuant to the new band plan will ensure that the new licensees operate in conformity with adjacent markets. We expect that these requirements on how BRS licensees may operate under new BTA licenses pending the transition to the new band plan should provide an incentive for these licensees to propose transitions in markets currently lacking a transition plan.

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<sup>59</sup> See, e.g., *Satellite Signals of New England*, Order, 22 FCC Rcd 1937 (WTB 2007), *petition for reconsideration pending*, *TV Communications Network, Inc.*, Order, 22 FCC Rcd 1397 (WTB 2007), *application for review pending*, *Virginia Communications, Inc.*, Order, 22 FCC Rcd 1386 (WTB 2007), *petition for reconsideration pending*.

<sup>60</sup> Three of these eleven BTAs previously were licensed to TV Communications Network, Inc. (TVCN). TVCN sought relief from the cancellation of these and other BTA licenses. The Wireless Telecommunications Bureau denied TVCN's initial request for relief and TVCN has filed a pending application for review of that denial. *TV Communications Network, Inc.*, Order, 22 FCC Rcd 1397 (WTB 2007), *application for review pending*.

<sup>61</sup> Sprint Nextel Opposition at 13-15; Clearwire Opposition at 3-5. Sprint Nextel, Clearwire, and Polar Communications have filed transition initiation plans for 375 BTAs.

<sup>62</sup> See 47 C.F.R. § 27.55(a)(4).

<sup>63</sup> See 47 C.F.R. § 27.53(m).

<sup>64</sup> See 47 C.F.R. § 27.1221.

20. Although we decide to move forward with auctioning licenses for unassigned BRS spectrum, we believe that a broader record should be developed on how to distribute licenses for unassigned EBS spectrum. EBS is a unique service designed to meet the unique needs of educators and students.<sup>65</sup> Given the wide variety of educators and educational needs, we could foresee situations in which the ideal license size could be as small as a school district or as large as a state. Furthermore, educators may encounter a variety of unique challenges that commercial operators may not face, such as state or county imposed budgeting cycles, the need to obtain grants, or state-imposed limitations on their ability to participate in spectrum acquisition. Accordingly, as noted in further detail below, the *Second Further Notice of Proposed Rulemaking* seeks further comment on the best means of licensing unassigned EBS spectrum.

#### B. BRS Competitive Bidding Rules

21. *Background.* The *BRS/EBS FNPRM* proposed to conduct any auction of new licenses in the BRS/EBS band in conformity with the general competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's rules, for example, rules governing competitive bidding design, designated entities, application and payment procedures, collusion issues, and unjust enrichment.<sup>66</sup> We did not receive any noteworthy objection to the use of these competitive bidding rules with respect to new BRS licenses.

22. In the *BRS/EBS FNPRM*, the Commission sought comment on the appropriate geographic area size for new licenses in this band.<sup>67</sup> With limited exceptions, commenters generally assert that new geographic area licenses should be BTAs.<sup>68</sup> Commenters contend that BTAs are consistent with prior geographic area licensing in the band, *i.e.* MDS BTA overlay licenses; that BTAs are closer to the market size likely to be served by a licensee; and that areas larger than BTAs will result in inefficient license assignments, as bidders' licenses may cover some areas in which they have no interest.<sup>69</sup> A few commenters suggest geographic areas smaller than BTAs, such as counties (School Board of Miami Dade County Florida), telephone servicing areas (Gila River Telecommunications, Inc.), or MSAs/RSAs (National Telecommunications Cooperative Association -- for MBS).<sup>70</sup>

23. With respect to bidding credits, in the *BRS/EBS FNPRM*, the Commission proposed to define three categories: "small business" -- an entity with average annual gross revenues not exceeding \$40 million for the preceding three years; "very small business" -- an entity with average gross revenues not exceeding \$15 million for the same period; and "entrepreneur" -- an entity with average gross revenues not exceeding \$3 million for the same period.<sup>71</sup> The Commission also proposed to provide qualifying "small businesses" with a bidding credit of 15%, qualifying "very small businesses" with a

<sup>65</sup> See generally *BRS R&O*, 19 FCC Rcd at 14222-14227 ¶¶ 152-164.

<sup>66</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14270 ¶ 281.

<sup>67</sup> *BRS/EBS R&O FNPRM*, 19 FCC Rcd at 14268-14269 ¶ 274-278.

<sup>68</sup> WCA Comments (filed Jan. 10, 2005) at 24-25, Sprint Corporation Comments (filed Jan. 10, 2005) at 4, Comments of Nextel Corporation (filed Jan. 10, 2005) at 8-9.

<sup>69</sup> See, *e.g.*, WCA Comments at 24-25.

<sup>70</sup> Further Comments, The School Board of Miami Dade County Florida (filed Jan. 10, 2005) at 2-3, Comments of Gila River Telecommunications, Inc. (filed Jan. 10, 2005) at 2-3, Comments of the National Telecommunications Cooperative Association in Response to the Further Notice of Proposed Rulemaking and Initial Regulatory Flexibility Analysis (filed Jan. 10, 2005) at 3. NTCA also suggested BTAs could be an alternative for the MBS. *Id.*

<sup>71</sup> *BRS/EBS FNPRM*, 19 FCC Rcd at 14272 ¶ 286. See 47 C.F.R. § 1.2110(f)(2). We will coordinate the small business size standards for BRS in this proceeding with the U.S. Small Business Administration.

bidding credit of 25%; and qualifying "entrepreneurs" with a bidding credit of 35%, consistent with Section 1.2110(f)(2) of the Commission's Rules.<sup>72</sup>

24. Commenters responding to the *BRS/EBS FNPRM* focused on bidding credits for EBS licenses, rather than BRS licenses. For example, one party proposed substantial bidding credits, of at least 50%, for EBS applicants not receiving financial support from outside parties.<sup>73</sup> WCA, which opposes bidding credits with respect to EBS licenses generally, advocates that any bidding credits for EBS applicants be based on their educational objectives, rather than their revenues.<sup>74</sup>

25. With respect to other competitive bidding rules, the *BRS/EBS FNPRM* proposed to use Part 1, Subpart Q rules to auction geographic area licenses to access spectrum in the 2500-2690 MHz band.<sup>75</sup> We did not receive any comments objecting to the use of these Part 1 rules.

26. *Discussion.* With respect to the assignment of new BRS licenses, we adopt the competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's Rules, consistent with the bidding procedures that have been employed in many previous auctions.<sup>76</sup> Specifically, we will adopt the Part 1 rules governing, among other things, competitive bidding design, designated entities, application and payment procedures, collusion issues, and unjust enrichment.<sup>77</sup> We note that such rules would be subject to any modifications by the Commission in our ongoing Part 1 proceeding.<sup>78</sup> In addition, consistent with current practice, matters such as the appropriate competitive bidding design, minimum

<sup>72</sup> 47 C.F.R. § 1.2110(f)(2)(i)-(iii).

<sup>73</sup> See, e.g., Comments of SpeedNet, L.L.C. (filed Jan. 10, 2005) at 2.

<sup>74</sup> WCA Reply Comments (filed Feb. 8, 2005) at 30-32.

<sup>75</sup> *BRS/EBS NPRM*, 18 FCC Rcd at 6816 ¶ 233.

<sup>76</sup> See, e.g., Amendment of Part 1 of the Commission's Rules—Competitive Bidding Procedures, WT Docket No. 97-82, Order, Memorandum Opinion and Order and Notice of Proposed Rule Making, 12 FCC Rcd 5686 (1997); Third Report and Order and Second Further Notice of Proposed Rule Making, 13 FCC Rcd 374 (1997) (Part 1 Third Report and Order); Order on Reconsideration of the Third Report and Order, Fifth Report and Order, and Fourth Further Notice of Proposed Rule Making, 15 FCC Rcd 15293 (2000) (recon. pending) (Part 1 Recon Order/Fifth Report and Order and Fourth Further Notice of Proposed Rule Making); Seventh Report and Order, 16 FCC Rcd 17546 (2001); Eighth Report and Order, 17 FCC Rcd 2962 (2002).

<sup>77</sup> See 47 C.F.R. § 1.2101 et seq.

<sup>78</sup> See, e.g., Amendment of Part 1 of the Commission's Rules—Competitive Bidding Procedures, Second Order on Reconsideration of the Fifth Report and Order, 20 FCC Rcd 1942 (2005) ("Part 1 Competitive Bidding Second Order on Reconsideration of the Fifth Report and Order") (adopting modifications to the competitive bidding rules); Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, WT Docket No. 05-211, Report and Order, 21 FCC Rcd 891 (2006) (CSEA/Part 1 Report and Order), petitions for reconsideration pending; Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, WT Docket No. 05-211, Second Report and Order and Second Further Notice of Proposed Rulemaking, 21 FCC Rcd 4753 (2006) (Designated Entity Second Report and Order and Designated Entity Second FNPRM), petitions for reconsideration pending; Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, WT Docket No. 05-211, Order on Reconsideration of the Designated Entity Second Report and Order, 21 FCC Rcd 6703 (2006) (Designated Entity Order on Reconsideration of the Second Report and Order), petitions for reconsideration pending.

opening bids and reserve prices, will be determined by the Wireless Telecommunications Bureau pursuant to its delegated authority.<sup>79</sup>

27. We adopt rules providing that new licenses for unassigned BRS spectrum will be assigned by BTA, with each license authorizing access for all BRS spectrum not otherwise assigned either at the time of licensing or in the future.<sup>80</sup> We agree with those commenters that there are benefits to issuing new licenses on a BTA basis because this approach is consistent with the existing BRS geographic overlay licenses. Furthermore, adopting different geographic service areas for the available BRS licenses would be difficult to administer and would not appear to lead to any benefits for either potential licensees or the public.

28. We also adopt rules providing for three size-based bidding credits in competitive bidding for new BRS licenses. We have used similar credits in a range of other services and conclude that they are appropriate for BRS: Applicants with attributable average annual gross revenues not exceeding \$3 million for the preceding three years, "entrepreneurs," will be eligible for a 35% discount on their winning bids; those with attributable average annual gross revenues not exceeding \$15 million for the same period, "very small businesses," will be eligible for a 25% discount; and those with attributable average annual gross revenues not exceeding \$40 million for the same period, "small businesses," will be eligible for a 15 percent discount. Applicants claiming eligibility will do so pursuant to our established Part 1 competitive bidding rules and procedures.

### C. Transition

#### 1. Self-transitioning before January 21, 2009

29. *Background.* The primary means of transitioning BRS and EBS stations is the proponent-based transition. The proponent-based transition process is 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 occurs by BTAs and is undertaken by a proponent or multiple proponents. The transition occurs in the following five phases: (1) initiating the transition process by filing an 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.<sup>81</sup> A proponent must migrate an EBS licensee's eligible video programming tracks to the MBS<sup>82</sup> and provide an EBS licensee with downconverters at every eligible EBS receive site.<sup>83</sup> The proponent may seek reimbursement for the migration and downconverters they provide from BRS licensees and lessees, EBS lessees, and commercial EBS licensees.<sup>84</sup> BRS licensees and lessees, EBS lessees, and commercial EBS licensees must pay their own transition costs.<sup>85</sup>

<sup>79</sup> See Amendment of Part 1 of the Commission's Rules - Competitive Bidding Procedures, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374, 448-49, 454-55 ¶¶ 125, 139 (directing the Bureau to seek comment on specific mechanisms relating to auction conduct pursuant to the Balanced Budget Act of 1997) (*Part 1 Third Report and Order*).

<sup>80</sup> In the event the license for an incumbent non-BTA station cancels or is forfeited, the right to operate in that area automatically reverts to the licensee that holds the license for the corresponding BTA. 47 C.F.R. § 27.1206(b).

<sup>81</sup> 47 C.F.R. §§ 27.1230-27.1239.

<sup>82</sup> 47 C.F.R. § 27.1233(b).

<sup>83</sup> 47 C.F.R. § 27.1233(a).

<sup>84</sup> 47 C.F.R. § 27.1237(a). 47 C.F.R. § 27.1238 identifies the costs that are eligible for reimbursement.

<sup>85</sup> 47 C.F.R. § 27.1237(b).

30. In markets where no transition plan is filed by January 21, 2009, the date the proponent must file an Initiation Plan with the Commission or withdraw a filed Initiation Plan, the Commission permits BRS and EBS licensees to self-transition to their default channel locations.<sup>86</sup> Consistent with the rules applying to proponent-based transitions, the Commission also permits self-transitioning EBS licensees to seek reimbursement from commercial operators in the 2.5 GHz band for the costs of transitioning to their default channel locations.<sup>87</sup> The Commission decided to limit self-transitions to markets where no transition plan had been filed as of January 21, 2009 or where a transition plan had been withdrawn as of that date because allowing earlier self-transitions "would negatively affect the incentives for proponents to transition their BTAs."<sup>88</sup>

31. Although Broward County asks the Commission to reconsider its decision regarding early self-transitions, it expresses different positions in its petition for reconsideration and its reply. First, in its Petition for Reconsideration, Broward County asks the Commission to reconsider its decision and allow licensees to self-transition before January 21, 2009.<sup>89</sup> Broward County further asks the Commission to permit early self-transitioning licensees to transition not only to their default channel locations, but also to an MBS channel belonging to another licensee, if certain conditions are met. Specifically, that channel must be the self-transitioning licensee's MBS channel following the transition of the licensee, or the self-transitioning licensee must have an agreement with the other licensee to allow the self-transitioning licensee to maintain its post-transition programming on that MBS channel.<sup>90</sup> Broward County asks that an early self-transitioning licensee be permitted to "take its other channels dark" in anticipation of the arrival of the proponent and the completion of the transition process and to be reimbursed for its transition costs.<sup>91</sup> Broward County argues that a self-transitioning licensee would cause less interruption to school curricula and programming availability, when compared with a proponent-driven transition.<sup>92</sup> In its Reply, however, Broward County asserts that licensees can self-transition before January 21, 2009 and that the only question before the Commission is whether licensees who transition early may be reimbursed for the costs of transitioning.<sup>93</sup> WCA, Sprint Nextel, and WiMAX oppose permitting licensees to self-transition before January 21, 2009. They argue that permitting early self-transitions would complicate the transition and be more costly.<sup>94</sup>

32. *Discussion.* As a preliminary matter, we disagree with Broward County's assertion that a licensee may self-transition before January 21, 2009 and that the only question before the Commission is whether the costs incurred by the early self-transitioning licensees are reimbursable. In the *BRS/EBS 3rd MO&O*, the Commission stated that a licensee may not self-transition before January 21, 2009 because

<sup>86</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5671 ¶ 135. January 21, 2009 is the first non-holiday 30 months after July 19, 2006, the effective date of the amended rules.

<sup>87</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5685 ¶ 175.

<sup>88</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5671 ¶ 135.

<sup>89</sup> Broward County PFR at 4. Broward County's PFR does not distinguish between BRS and EBS licensees in advocating for early self-transitions.

<sup>90</sup> Broward County PFR at 4.

<sup>91</sup> Broward County PFR at 5.

<sup>92</sup> Broward County PFR at 2.

<sup>93</sup> Broward County Reply at 4.

<sup>94</sup> WiMAX Comments at 12-13, WCA Opposition at 41-42, Sprint Nextel Opposition at 16-17.

doing so would discourage proponents from transitioning the 2.5 GHz band.<sup>95</sup> Thus, we now turn to Broward County's request that we reconsider this decision.

33. We reaffirm our decision that a licensee may not self-transition before January 21, 2009 and reiterate that a proponent-driven transition is the most efficient method of transitioning a BTA.<sup>96</sup> In particular, we find that early self-transitions would complicate the transition process for the proponent -- as discussed by WCA, Sprint Nextel, and WiMAX<sup>97</sup> -- and would not provide sufficient benefits to the self-transitioning licensee to offset those additional complications.

34. We disagree with Broward County's argument that permitting a licensee to self-transition early would reduce the planning and technical burden on the proponent because the self-transitioning licensee, rather than a proponent, would make the necessary equipment changes for EBS stations.<sup>98</sup> We believe that permitting a licensee to self-transition early would thwart the proponent's ability to develop a BTA-wide transition plan in which some MBS channels are digitized, some licensees swap channels, and other licensees share digitized channels. Under our rules, the proponent is responsible for transitioning all EBS licensees in the BTA through the development of a Transition Plan (to which every BRS and EBS licensee in the BTA must agree). Moreover, if licensees are permitted to self-transition prior to January 21, 2009, a proponent planning to transition a market after these self-transitions will have difficulty determining which licensees in the market already have transitioned.

35. While we acknowledge that permitting licensees to self-transition early may result in a more rapid transition for these individual licensees, we find unpersuasive Broward County's argument that a self-transitioning licensee would cause less interruption to school curricula and programming availability, when compared with a proponent-driven transition. The Commission's Rules already require the proponent to coordinate with every EBS licensee to minimize the extent of any disruption and allow a proponent to interrupt EBS transmissions for only a short time (less than seven days) at any reception site.<sup>99</sup> Moreover, allowing early self-transitions may disrupt other EBS licensees that are participating in the proponent-driven transition process.

36. In addition, the existing proponent-driven transition process provides an opportunity for EBS licensees to make counterproposals to the proponent's Transition Plan.<sup>100</sup> In those circumstances, the proponent either must redraft the Transition Plan to account for the licensee's concerns, or seek dispute resolution. We believe that it is in the interest of the proponent to accommodate an EBS licensee because the transition for the entire BTA will be tolled pending resolution of the dispute. In contrast, if we were to permit self-transitions prior to January 21, 2009, the proponent does not have a similar incentive to reach an agreement with the EBS licensee regarding reimbursement because the transition of the BTA will not be tolled pending dispute resolution (*i.e.*, the EBS licensee has already self-transitioned, which by definition is not under the Transition Plan). In addition, since the reimbursement of costs would not have been pre-negotiated under an early self-transition scenario, we note that the EBS licensee who opts for an early self-transition may not ultimately receive reimbursement for all of its costs under dispute resolution. Furthermore, allowing early self-transitions may increase the possibility of disputes concerning cost reimbursement because EBS licensees who transition without the involvement of the

<sup>95</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rod at 5671 ¶ 135, 47 C.F.R. § 27.1236(a).

<sup>96</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rod at 5671 ¶ 135.

<sup>97</sup> WiMAX Comments at 12-13, WCA Opposition at 41-42, Sprint Nextel Opposition at 16-17.

<sup>98</sup> See Broward County Reply at 3.

<sup>99</sup> 47 C.F.R. § 27.1232(b)(2).

<sup>100</sup> 47 C.F.R. § 27.1232(c).

proponent may be more likely to incur expenses that are not reimbursable (or that the proponent may view as not reimbursable).

37. We conclude that early self-transitioning would make the transition process more complicated, more difficult to administer, and unpredictable. We therefore deny Broward County's petition.

## 2. Proponent-driven transitions

38. *Background.* On November 2, 2006, HITN filed a Request for Clarification of the *BRS/EBS 3rd MO&O*, more than three months after the July 19, 2006 deadline for filing Petitions for Reconsideration. HITN asks the Commission to clarify four alleged inconsistencies between the text of the *BRS/EBS 3rd MO&O* and the text of the adopted rules concerning proponent-driven transitions.<sup>101</sup> Specifically, HITN's Request focuses on the following issues: (1) the penalties imposed on licensees who do not timely respond to pre-transition data requests;<sup>102</sup> (2) whether a proponent may implement its original transition plan after it seeks dispute resolution;<sup>103</sup> (3) whether the rules should specify penalties imposed on the proponent for withdrawing the Initiation Plan;<sup>104</sup> and (4) self-transitions.<sup>105</sup> We discuss the first three issues below. The fourth issue is discussed in the next section, in the context of WCA's Petition for Reconsideration.

39. *Discussion.* We agree with WCA that three of the four issues for which HITN requests clarification are substantive changes and not technical corrections.<sup>106</sup> Thus, we conclude that HITN's request for clarification, which was filed after the deadline for petitions for reconsideration of the *BRS/EBS 3rd MO&O*, is an untimely filed petition for reconsideration, which under Section 405(a) of the Act we are unable to address.<sup>107</sup> Nonetheless, to the extent that there is any uncertainty about the obligations in a proponent-driven transition, we note that, in cases where the text of the rules is inconsistent with the text of an Order, the text of the rule controls. We find that HITN's fourth request is for a technical correction, rather than a substantive change, and can be addressed, notwithstanding the fact that it was raised after the deadline for petitions for reconsideration. In any event, the fourth issue raised by HITN also was raised by WCA in its timely-filed petition for reconsideration, and is discussed in the next section.<sup>108</sup>

## 3. Technical corrections

40. *Background.* In the *BRS/EBS 3rd MO&O*, the Commission stated that it is necessary to coordinate the timing of self-transitions with proponent-driven transitions.<sup>109</sup> WCA identifies an

<sup>101</sup> HITN *Ex Parte* Request for Clarification (filed Nov. 2, 2006).

<sup>102</sup> HITN *Ex Parte* Request for Clarification at 2-3.

<sup>103</sup> HITN *Ex Parte* Request for Clarification at 3-4.

<sup>104</sup> HITN *Ex Parte* Request for Clarification at 4-5.

<sup>105</sup> HITN *Ex Parte* Request for Clarification at 5-7.

<sup>106</sup> *Ex Parte* Letter from Paul J. Sinderbrand, Counsel for WCA to Marlene H. Dortch, Federal Communications Commission (dated Nov. 21, 2006).

<sup>107</sup> See *Ex Parte* Letter from Paul J. Sinderbrand, Counsel for WCA to Marlene H. Dortch, Federal Communications Commission (dated Nov. 21, 2006) at 2.

<sup>108</sup> See *infra* ¶ 40.

<sup>109</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5673 ¶ 141.

inconsistency between the text of paragraph 143 of the *BRS/EBS 3rd MO&O* and Section 27.1236(b)(6) of the Commission's Rules.<sup>110</sup> Specifically, paragraph 143 of the *BRS/EBS 3rd MO&O*, states that licensees who decide to self-transition must complete the self-transition within 51 months of the effective date of the amended rules, July 19, 2006.<sup>111</sup> Section 27.1236(b)(6), however, states that self-transitions must be completed within 57 months of July 19, 2006.<sup>112</sup> WCA asks that the Commission amend Section 27.1236(b)(6) of the Rules by deleting "57" and inserting in its place "51."<sup>113</sup> HITN asks that the Commission clarify how long self-transitioning licensees have to transition.<sup>114</sup> HITN insists that the *BRS/EBS 3rd MO&O* is ambiguous because paragraphs 141-143 of the *BRS/EBS 3rd MO&O* state that a self-transitioning licensee must file a notification within 90 days of the date the Initiation Plan has been filed and must complete the self-transition 21 months after the Initiation Plan has been filed.<sup>115</sup>

41. *Discussion.* We agree that a change is appropriate. We also will amend Sections 27.1231(f) and 27.1236(a), 27.1236(b)(1), and 27.1236(b)(6) to specify dates certain.<sup>116</sup> Thus, Sections 27.1231(f) and 27.1236(a) reference January 21, 2009, the date the Initiation Plan must be filed with the Commission; Section 27.1236(b)(1) references April 21, 2009, the date a self-transitioning licensee must notify the Commission; and Section 27.1236(b)(6) references October 20, 2011, the date self-transitions must be completed.<sup>117</sup> Because the time line for self-transitions parallels the timeline for proponent-driven transitions, we note that proponent-driven transitions must also be completed on or before October 20, 2011, unless stayed pending alternative dispute resolution.

#### D. Multichannel Video Programming Distributors (MVPD) Opt-Out

##### 1. The Waiver Standard

42. *Background.* In the *BRS/EBS 3rd MO&O*, the Commission reaffirmed the right of qualifying MVPD operators to seek a waiver to opt-out of the transition.<sup>118</sup> HITN asks the Commission to clarify the minimum requirements related to the filing of an MVPD opt-out waiver request. HITN contends that the current procedure is unfair to potentially affected parties, many of whom will be non-profit educational licensees, because they must expend large sums of money on legal and engineering counsel to defend themselves against poorly conceived opt-out waiver requests that fail to analyze properly their effect on the operations of neighboring GSA stations, or to provide sufficient discussions of mitigation techniques that might be employed to allow for the opt-out while not impairing the ability of neighbors to transition their channels to the new band plan.<sup>119</sup>

<sup>110</sup> WCA PFR at 9.

<sup>111</sup> WCA PFR at 9.

<sup>112</sup> WCA PFR at 9.

<sup>113</sup> WCA PFR at 9-10. WiMAX, CTN, and NIA also support this change. WiMAX Comments at 11, CTN/NIA Opposition at 4.

<sup>114</sup> HITN *Ex Parte* Request for Clarification at 5-7.

<sup>115</sup> HITN *Ex Parte* Request for Clarification at 5-7.

<sup>116</sup> Because these rule changes are not substantive and are non-controversial, there is good cause to adopt them without notice and comment. See 5 U.S.C. § 553(b)(B).

<sup>117</sup> See Appendix A.

<sup>118</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5645-5646 ¶¶ 72-74.

<sup>119</sup> HITN PFR at 12-13. On December 1, 2005, HITN filed a Petition to Deny WHTV Broadcasting Corporation's (d/b/a Digital TV One) Waiver Request to opt out of the transition of the 2.5 GHz band in San Juan, Puerto Rico. On January 29, 2007, the Wireless Telecommunications Bureau granted Digital TV One's waiver request. WHTV

(continued...)

43. HITN urges the Commission to clarify that any MVPD operator seeking an opt-out waiver from the mandatory band plan transition must, at a minimum: (1) serve neighboring EBS and BRS stations and other potentially affected licensees with a copy of the waiver request, including an engineering analysis of the predicted impact of the opt-out request on such stations; (2) if interference is predicted, explain why the MVPD operator cannot provide its services while meeting the interference protection requirements contained within the new rules; (3) detail specific techniques and efforts the MVPD operator will undertake at its sole expense to mitigate any interference its special operating parameters would cause to affected parties; (4) provide sufficient information about its current operations in order to allow for an objective case-specific determination of its eligibility and need for a waiver; and (5) provide signed statements from all licensees that are proposed to participate in the opt-out, thus, making clear that such licensees wish to have their stations excluded from the band transition plan.<sup>120</sup> The BRS Rural Advocacy Group opposes HITN's petition.<sup>121</sup>

44. *Discussion.* We decline to adopt the requirements that HITN requests with respect to MVPD opt-out waiver requests because, at this point, such changes are unnecessary. The last date for filing requests to opt out of the transition plan was April 30, 2007, and that date has passed.<sup>122</sup> To the extent HITN contends that a specific showing is defective, we will consider its arguments in the context of any oppositions or petitions filed against specific waiver requests.

## 2. Misaligned channels in overlapping GSAs

45. *Background.* HITN describes a set of issues that have arisen due to the overlapping application of several Commission decisions and asks the Commission to clarify how opt-out waiver requests should be handled under these circumstances. The relevant Commission decisions are as follows: first, the Commission established a station's GSA based on the station's PSA under the old rules; second, the Commission adopted a splitting the football methodology for determining a station's GSA when its PSA overlapped another station's PSA,<sup>123</sup> and third, the Commission decided to permit qualified MVPDs to opt out of transitioning to the new band plan and technical rules.<sup>124</sup> As a result of these three decisions, when one station transitions and its neighboring station (formerly overlapping PSA) does not, the channels become misaligned so that, for example, an untransitioned high-power high-site A3

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(...continued from previous page)

Broadcasting Corp. d/b/a Digital TV One, *Memorandum Opinion and Order*, 22 FCC Rcd 1314 (WTB 2007). HITN filed a petition for reconsideration of the *Memorandum Opinion and Order*, which is pending. Petition for Reconsideration of the Hispanic Information and Telecommunications Network, Inc. (filed Feb. 28, 2007).

<sup>120</sup> HITN PFR at 13. CTN and NIA state that they support these proposals. CTN and NIA Opposition at 5-6.

<sup>121</sup> BRS Rural Advocacy Group Opposition at 5-10.

<sup>122</sup> 47 C.F.R. § 27.1231(g).

<sup>123</sup> Accordingly, an A Group station's GSA was defined by its overlaps with neighboring pre-transition co-channel stations, and, similarly, a B Group station's GSA was defined by its overlaps with neighboring pre-transition co-channel stations. HITN PFR at 14.

<sup>124</sup> HITN cites the following example: If in a market in which licensees are seeking an opt-out waiver, the B Group station had a neighboring co-channel station to its east with a PSA reference point some 20 miles away, while the A Group station in the same market had no such co-channel neighbor to its east, then the GSA of the B Group would be truncated to the east to allow for the GSA of its neighbor while the A Group's GSA would extend out to the east 35 miles from its reference point. HITN states that in this common scenario, it is clear that the GSA boundaries between the opt-out market and the market to its east would differ depending upon the channel group. In the example above, HITN notes, an untransitioned high-power high-site A3 channel in the opt-out market would ultimately find itself co-channel with a post-transition B2 channel in the market to its east. HITN PFR at 14.

channel in the opt-out market would be co-channel with a post-transition B2 channel in the neighboring market.<sup>125</sup>

46. *Because the GSAs of these two stations differ, and each would have a right under the rules<sup>126</sup> to serve part of the same geographic area, HITN argues that the Commission must clarify: (1) whether an opt-out is possible; (2) whether one station's opt-out would preclude its co-channel neighbor from transitioning; and (3) if it would not, what interference protection and service rights each station would have in such a situation with respect to the overlapping area within their GSAs.<sup>127</sup> The BRS Rural Advocacy Group argues that the Commission should reject any suggestion from HITN that an opt-out is not possible in the case of overlapping GSAs.<sup>128</sup>*

47. *Discussion.* We agree with the BRS Rural Advocacy Group that foreclosing an opt-out in the case of overlapping GSAs is unnecessary. Instead, the transitioning operator and the non-transitioning operator may resolve this situation among themselves or the transitioning licensee may file comments for Commission consideration in response to the non-transitioning operator's opt-out waiver request. Because the deadline for filing opt-out waiver requests was April 30, 2007, we have received all of the opt-out waiver requests that will be filed. We conclude that action by the Commission to resolve a situation that affects few operators is inappropriate and unwarranted when the Commission has established a process to individually review opt-out waiver requests.

#### E. Technical Issues

##### 1. Antenna height benchmarking

48. *Background.* In the *BRS/EBS 2nd R&O*, the Commission adopted antenna height benchmarking criteria in Section 27.1221, based on the concept proposed by WCA, the Catholic Television Network (CTN), and the National ITFS Association (NIA). The rule affords licensees the flexibility to deploy Time Division Duplex (TDD) and Frequency Division Duplex (FDD) technologies in the 2.5 GHz band that present a risk of interference that is not present in other bands where only FDD is permitted upstream and downstream on designated channels.<sup>129</sup> The antenna height benchmarking concept is intended to mitigate that risk, by requiring interference protection in certain situations while posing no restrictions on the height of base station antennas.<sup>130</sup> Accordingly, a base station receive antenna with a height above average terrain less than or equal to the threshold showing of the rule is accorded protection from a transmitting antenna that exceeds the threshold showing required by the rule. A base station transmitting antenna with a height above average terrain equal to or less than the threshold showing of the rule is unlikely to cause interference. Finally, a base station transmitting antenna greater than the threshold showing would not need to protect a base station receive antenna that also exceeds the threshold showing.<sup>131</sup>

49. Several proposals to modify the antenna height benchmarking rule were considered by the Commission upon reconsideration of the *BRS/EBS 2nd R&O* but were not adopted in the *BRS/EBS*

<sup>125</sup> HITN PFR at 14.

<sup>126</sup> 47 C.F.R. § 27.1209(b).

<sup>127</sup> HITN PFR at 14.

<sup>128</sup> BRS Rural Advocacy Group Opposition at 9.

<sup>129</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14213 ¶123.

<sup>130</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14213 ¶123.

<sup>131</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14213 ¶123.

3rd MO&O. Thereafter, WCA convened discussions among those who had raised concerns about the benchmarking rule in the hope of reaching a consensus, and now offers a revised proposal to modify Section 27.1221 of the Rules. The proposal would modify the rule by adding deadlines by which licensees must act where documented interference from a base station operating outside its height benchmarking threshold harms a base station operating within its height benchmark.<sup>132</sup> Under WCA's proposal, where the interferer is a new or modified facility, it must bring its operation into compliance, either by modifying its antenna height within the height benchmark, or by limiting its received signal at the other party's base station to no more than -107 dBm/5.5 megahertz, within 24 hours of receiving a documented interference complaint.<sup>133</sup> If the interferer is an existing base station that is causing interference to a new base station, however, the existing licensee would have 90 days to come into compliance.<sup>134</sup> WCA states that its approach strikes a balance among the interests of all involved, particularly those consumers served by existing facilities who might be forced to suffer an extended impairment of service if remedial action was required immediately.<sup>135</sup> WCA also asks that Section 27.1221 require licensees to provide information concerning their base station to any nearby licensee upon request.<sup>136</sup>

50. WiMAX supports WCA's petition on this issue.<sup>137</sup> WiMAX contends that providing specific deadlines will enhance deployments in the 2.5 GHz band by eliminating the present regulatory uncertainty and providing system operators with the assurance that service to consumers from BRS and EBS facilities will not be unreasonably impaired.<sup>138</sup>

51. WCA has also submitted an *Ex Parte* letter seeking to clarify the proper interpretation of Section 27.1221 of our rules with regard to the following issues. First, WCA asks that Section 27.1221 specify that a base station would be within its height benchmark if its height *in meters* does not exceed the distance between the station's location and the boundary of the GSA, *in kilometers squared*, divided by 17.<sup>139</sup> Second, WCA asks that Section 27.1221 clarify that when the GSAs of two neighboring licensees do not touch, the height benchmark is calculated according to the distance between the base station and the nearest boundary of the other station's GSA along the radial between the two base stations.<sup>140</sup> Third, WCA asks that Section 27.1221 require licensees to cooperate in good faith with each other to avoid interference.<sup>141</sup>

52. *Discussion.* After considering WCA's proposal, we agree that in the event a facility operating outside of its height benchmarking threshold would cause interference to an existing licensee, specifying a timeline would expedite the coordination process between the licensees. While we have some concern that requiring a new or modified base station to take corrective action 24 hours after

<sup>132</sup> WCA PFR at 2.

<sup>133</sup> WCA PFR at 2.

<sup>134</sup> WCA PFR at 2-3.

<sup>135</sup> WCA PFR at 2-3.

<sup>136</sup> *Ex Parte* Letter from Paul Sinderbrand, Counsel for WCA, to Marlene H. Dortch, Federal Communications Commission (dated May 29, 2007) at 4 and Attachment A.

<sup>137</sup> WiMAX Comments at 3.

<sup>138</sup> WiMAX Comments at 3.

<sup>139</sup> *Ex Parte* Letter from Paul Sinderbrand, Counsel for WCA, to Marlene H. Dortch, Federal Communications Commission (dated May 29, 2007). (*WCA May 29 Ex Parte*) at 3 and Attachment A.

<sup>140</sup> *WCA May 29 Ex Parte* at 3 and Attachment A.

<sup>141</sup> *WCA May 29 Ex Parte* at 4 and Attachment A.

receiving notification could prove challenging, we note that no party opposed this change. We also believe that placing the burden on the interfering operator is appropriate to assure that noncompliant stations provide protection to existing services. We further adopt WCA's modified proposal regarding the formula used to calculate height benchmarking and clarifying how non-contiguous licensees calculate their height benchmark. We reject, however, WCA's request to mandate good faith cooperation as inappropriate. The Commission expects all licensees to cooperate in good faith at all times, and we see no purpose in establishing a special good faith rule for this situation. Thus, we amend Section 27.1221 of the Rules as discussed above.

## 2. Out-of-band emissions

### a. For user stations

53. *Background.* In the *BRS/EBS R&O*, the Commission adopted the Coalition's proposal to establish out-of-band emission requirements for mobile BRS and EBS stations.<sup>142</sup> For mobile digital stations, the Commission established that the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge and  $55 + 10 \log (P)$  dB at 5.5 megahertz from the channel edges.<sup>143</sup> WCA filed a petition for reconsideration arguing that these restrictions should apply to all user stations, not just mobile digital user stations.<sup>144</sup> In the *BRS/EBS 3rd MO&O*, the Commission found that the rules adopted in the *BRS/EBS R&O* were adequate to protect a licensee from out-of-band emissions.<sup>145</sup> The Commission explained that it will not modify the emission limits because it has not been demonstrated by any party that the emission limits adopted in the *BRS/EBS R&O* for these services are inadequate.<sup>146</sup>

54. WCA has requested that the Commission reconsider its decision on this issue and raises the same arguments it presented in its previous petition for reconsideration.<sup>147</sup> WCA states that no party to this proceeding has presented a cogent argument against requiring all user stations, not just those that are mobile, to attenuate their emissions at least  $55 + 10 \log (P)$  dB measured 5.5 megahertz from the appropriate band edge.<sup>148</sup> Thus, on reconsideration, WCA urges that the Commission adopt the modification proposed by WCA and require all stations to comply with the same spectral mask.<sup>149</sup>

55. *Discussion.* We affirm our prior decision and decline to make the change proposed by WCA. The Commission fully considered WCA's arguments and concluded that the existing rules were adequate. In the instant petition, WCA does not offer any new arguments beyond those previously considered and rejected by the Commission. Accordingly, we will maintain our earlier decision regarding out-of-band emissions for mobile stations in this service.

<sup>142</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14215 ¶127.

<sup>143</sup> 47 C.F.R. § 27.53(m)(4).

<sup>144</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5692 ¶201.

<sup>145</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5692 ¶201.

<sup>146</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5692 ¶201.

<sup>147</sup> WCA PFR at 4-5.

<sup>148</sup> WCA PFR at 4.

<sup>149</sup> WCA PFR at 4 and Appendix A.

**b. Measuring out-of-band emissions for contiguous channels**

56. *Background.* The band plan adopted in the *BRS/EBS R&O* provided for LBS and UBS segments comprised of 12 contiguous 5.5-megahertz channels.<sup>150</sup> The Commission further indicated that these blocks would enable licensees to deploy any possible combination of the most current FDD and TDD standard channel sizes, which are based on five-megahertz channels.<sup>151</sup>

57. In the Coalition White Paper, WCA, CTN, and NIA suggested that the Commission retain the provisions of then-current Section 21.908(a) of the Rules and allow all of the various out-of-band emission requirements imposed on base stations and user stations to be measured at the outermost edges of the combined channels where two or more channels (licensed to one or more entities) are used as part of the same system.<sup>152</sup> Although the *BRS/EBS R&O* did not discuss the issue of measuring across contiguous channels, the Commission adopted Section 27.53(m) which applied out-of-band emission limits at the edge of each individual channel.<sup>153</sup> In the *BRS/EBS Modification Order*, the Commission modified Section 27.53(m) to state that licensees should measure out-of-band emissions at three megahertz from their channel's edges.<sup>154</sup> WCA filed a petition for reconsideration of the *BRS/EBS R&O* asserting that the Commission should have adopted the Coalition's unopposed proposal on this issue. The *BRS/EBS 3rd MO&O* did not address this issue.

58. On reconsideration, WCA again urges the Commission to adopt the Coalition's approach.<sup>155</sup> WCA contends that imposing the out-of-band emission limits at the edge of each channel within a system provides no identifiable public benefit, yet reduces spectrum capacity and increases the price to consumers of spectrum services in this band.<sup>156</sup> WCA contends that applying the spectral masks proposed by the Coalition worked well for the *BRS/EBS* industry for years, and a similar approach is utilized with success for broadband Personal Communications Service (PCS).<sup>157</sup> Accordingly, WCA urges the Commission to revise Section 27.53(m) to clarify that where two or more contiguous channels are utilized as part of a system, the out-of-band emission limits are to be measured at the outermost edges of those contiguous channels.<sup>158</sup> WiMAX supports each of WCA's proposed changes to Section 27.53(m) of the Commission's Rules for the reasons stated by WCA.<sup>159</sup>

59. *Discussion.* We agree with WCA that it is appropriate to clarify that when two or more contiguous channels are combined to form a single channel, out-of-band emissions are to be measured at three megahertz from the outermost edges of the combined channel. We believe that measuring out-of-band emissions at the outer limit of each individual channel, when these channels have been combined into one contiguous channel, unnecessarily restrains spectral efficiency without any countervailing

<sup>150</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14184 ¶ 38.

<sup>151</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14185 ¶ 41.

<sup>152</sup> WCA PFR at 6.

<sup>153</sup> 47 C.F.R. § 27.53(m).

<sup>154</sup> See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Order*, WT Docket No. 03-66, 19 FCC Rcd 22284, 22290 (2004) (*BRS/EBS Modification Order*).

<sup>155</sup> WCA PFR at 6.

<sup>156</sup> WCA PFR at 6-7.

<sup>157</sup> WCA PFR at 7.

<sup>158</sup> WCA PFR at 7.

<sup>159</sup> WiMAX Comments at 2-5.

benefit. Therefore, we will modify this rule to allow licensees to measure out-of-band emissions from the outermost edges of the combined channels.

**c. Interference complaint process**

**(i) Deadlines for compliance**

60. *Background.* As discussed above, Section 27.53(m) of the Commission's Rules sets forth the out-of-band emission limits imposed on BRS and EBS licensees.<sup>160</sup> The rule requires that for fixed and temporary fixed digital stations, the attenuation shall not be less than  $43 + 10 \log(P)$  dB, unless a documented interference complaint is received from an adjacent channel licensee.<sup>161</sup> In the event that the complaint cannot be mutually resolved between the parties, both licensees of existing and new systems shall reduce their out-of-band emissions by at least  $67 + 10 \log(P)$  dB measured 3 megahertz from their channel's edges for distances between stations exceeding 1.5 kilometers (km).<sup>162</sup> In the *BRS/EBS 3rd MO&O*, the Commission required that the interfering licensee either resolve the interference situation or employ the more rigorous emission mask within 60 days after receiving a documented interference complaint.<sup>163</sup>

61. In its petition for reconsideration, WCA asserts that a new or modified base station causing out-of-band emission interference should meet the more restrictive spectral mask requirement within 24 hours of receipt of a documented interference complaint from the first adjacent channel licensee.<sup>164</sup> However, an existing base station that causes out-of-band emission interference to a new base station would, consistent with the current rule, have 60 days to comply with the more restrictive spectral mask requirement.<sup>165</sup>

62. In addition, WCA states that Section 27.53(m) should include special provisions for fixed user stations that utilize a transmission antenna that is affixed to an outside structure.<sup>166</sup> WCA asserts that those user stations will employ higher gain antennas and tend to be higher above ground level, thus posing a risk of interference that is not present with other user stations.<sup>167</sup> Therefore, WCA proposes that Section 27.53(m) be revised to require a cure within 24 hours where an existing base station suffers interference from a new or modified outdoor antenna user station, and within 14 days where a new or modified base station suffers such interference from an existing outdoor antenna user station.<sup>168</sup>

63. WCA further proposes that Section 27.53(m) be amended to state that, in other cases of documented interference from a user station to a base station, both licensees have an obligation to cooperate in good faith to reasonably mitigate the interference.<sup>169</sup> WCA states that adoption of its proposed revisions will provide licensees with greater certainty, reduce the length of time that service to

<sup>160</sup> *BRS/EBS Modification Order*, 19 FCC Rcd at 22290-22291.

<sup>161</sup> 47 C.F.R. § 27.53(m)(2).

<sup>162</sup> 47 C.F.R. § 27.53(m)(2).

<sup>163</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5691 ¶197.

<sup>164</sup> WCA PFR at 3.

<sup>165</sup> WCA PFR at 4.

<sup>166</sup> WCA PFR at 5.

<sup>167</sup> WCA PFR at 5.

<sup>168</sup> WCA PFR at 5.

<sup>169</sup> WCA PFR at 5.