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

In the matter of	)
ANTILLES WIRELESS, L.L.C. d/b/a USA DIGITAL	) )
Request for Permanent Waiver of Commission Rules Regarding Transition of Broadband Radio Service and Educational Broadband Service to Revised Band Plan	) ) ) )

### MEMORANDUM OPINION AND ORDER

Adopted: May 23, 2007

Released: May 24, 2007

By the Associate Chief, Wireless Telecommunications Bureau:

### I. INTRODUCTION

1. The Wireless Telecommunications Bureau (Bureau) has before it a request by Antilles Wireless, L.L.C. d/b/a USA Digital (USA Digital), seeking a waiver of Sections 27.1230-27.1239 of the Commission's Rules<sup>1</sup> for itself and all of its Broadband Radio Service (BRS) and Educational Broadband Service (EBS) licensees/lessors.<sup>2</sup> Sprint Nextel Corporation (Sprint Nextel),<sup>3</sup> Clearwire Corporation (Clearwire),<sup>4</sup> Montana State University (MSU),<sup>5</sup> and the Hispanic Information and Telecommunications

<sup>&</sup>lt;sup>1</sup> Request for Waiver (filed Nov. 16, 2006) (Waiver Request). Sections 27.1230-27.1239 of the Commission's rules concern the transition of Broadband Radio Service (BRS) and Educational Broadband Service (EBS) to the band plan adopted by the Commission in the *BRS/EBS Report and Order*. 47 C.F.R. §§ 27.1230-27.1239. *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, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 03-66, 19 FCC Rcd 14165 (2004) (*BRS/EBS R&O* and *FNPRM* as appropriate).

<sup>&</sup>lt;sup>2</sup> USA Digital's six licensees/lessors are as follows: Station WHR682 (Channels A1-A4/St. Vincent Hospital); Station WNC588 (Channels B1-B4/Excellence in Education); Station WNC233 (Channels C1-C4/Foreign Language Foundation); Station WNC229 (Channels D1-D4/American Foundation for Instructional TV); WNTA626 (Channel H1/Touch Tel Corporation); and WNTA580 (Channel H3/Libmot Communications Partnership). Antilles Wireless is the licensee for Stations WFY603 (Channels E1-E4); WLW837 (Channels F1-F4); WNTA982 (Channel H2); and WFY748 (Channel 1).

<sup>&</sup>lt;sup>3</sup> Opposition of Sprint Nextel Corporation (filed Jan. 9, 2007) (Sprint Nextel Opposition).

<sup>&</sup>lt;sup>4</sup> Opposition to and Comments on Request for Waiver (filed Jan. 9, 2007) (Clearwire Opposition).

<sup>&</sup>lt;sup>5</sup> Comments of Montana State University (filed Jan. 9, 2007) (MSU Opposition).

Network, Inc. (HITN),<sup>6</sup> filed oppositions to the waiver request. For the reasons discussed below, the Bureau grants USA Digital's Waiver Request.<sup>7</sup>

### II. BACKGROUND

2. On July 29, 2004, the Commission released a *Report and Order and Further Notice of Proposed Rulemaking (BRS/EBS R&O)* that transformed the rules and policies governing the licensing of services in the 2500-2690 MHz band.<sup>8</sup> Prior to the *BRS/EBS R&O*, the technical rules and band plan for the 2500-2690 MHz band were designed primarily to promote wireless cable and educational television services, which resulted in licensees receiving interleaved channel groups instead of contiguous channel blocks.<sup>9</sup> In most areas of the country, however, the deployment of wireless cable was not successful.

3. Consequently, in the *BRS/EBS R&O*, the Commission developed a new band plan and technical rules that permit a range of new and innovative wireless services in the 2500-2690 MHz band and gives licensees contiguous channel blocks.<sup>10</sup> The new band plan consists of two low-power segments, the Lower Band Segment (LBS) and the Upper Band Segment (UBS), and a high-power segment, the Middle Band Segment (MBS).<sup>11</sup> The channel configuration and the technical rules for the LBS and UBS are designed to permit a range of wireless services.<sup>12</sup> The MBS, in contrast, consists of seven high-power

<sup>8</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, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 03-66, 19 FCC Rcd 14165 (2004) (*BRS/EBS R&O* and *FNPRM* as appropriate).

<sup>9</sup> In the EBS and BRS services, channels are usually licensed in groups of four. When EBS was created, EBS reception equipment could not receive adjacent channels without interference. Thus, the Commission interleaved the A block channels with the B block channels, the C block channels with the D block channels, the E block channels with the F block channels and the G block channels with the H block channels. *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, *Notice of Proposed Rulemaking and Memorandum Opinion and Order*, WT Docket No. 03-66, 18 FCC Rcd 6722, 6744 ¶ 47 (2003) (*NPRM*).

<sup>10</sup> See BRS/EBS R&O, 19 FCC Rcd at 14168 ¶ 4.

<sup>11</sup> *Id.* at 14169  $\P$  6.

<sup>12</sup> *Id.* at 14168  $\P$  4.

<sup>&</sup>lt;sup>6</sup> Opposition to and Reply Comments on Request for Waiver (filed Jan. 26, 2007) (HITN Opposition).

<sup>&</sup>lt;sup>7</sup> On December 15, 2006, the Broadband Division/WTB released a Public Notice seeking comment on the waiver request. Comments were due on January 2, 2007 and replies were due on January 12, 2007. Wireless Telecommunications Bureau Seek Comment on Request by Antilles Wireless, L.L.C. d/b/a USA Digital for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 21 FCC Rcd 14499 (WTB BD 2006). On December 18, 2006, Clearwire filed a Motion for Extension of Time to submit comments. This motion was unopposed. On December 28, 2006, the Broadband Division released a second Public Notice establishing a revised comment and reply comment schedule with comments due on January 9, 2007 and the reply due on January 19, 2007. Wireless Telecommunications Bureau Seeks Comments on Request by Antilles Wireless, L.L.C. d/b/a USA Digital for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 21 FCC Rcd 15042 (WTB BD 2006). On January 9, 2007, USA Digital filed a Motion for Extension of Time to file reply comments, requesting a one-week extension to January 26, 2007. On January 19, 2007, Sprint Nextel filed an Opposition of Sprint Nextel Corporation opposing the one-week extension. On January 23, 2007, USA Digital filed a Reply to Sprint Nextel's Opposition to the extension request. On January 23, 2007, in a telephone conference call with the parties, the Broadband Division orally granted USA Digital's Motion for Extension of Time. USA Digital filed a reply on January 26, 2007. Consolidated Reply Comments (filed Jan. 26, 2007) (Reply).

channels and is designed for the transmission of video programming, for those licensees that still wish to provide such programming.<sup>13</sup> The *BRS/EBS R&O* further established a plan to transition EBS and BRS licensees from their interleaved channel locations to their new channel locations in the LBS, UBS, or MBS.<sup>14</sup> Not all licensees, however, are required to transition to the new band plan and technical rules. The *BRS/EBS R&O* permitted certain Multichannel Video Programming Distributors (MVPD) to seek a waiver from the Commission to "opt-out" of the transition, thus permitting them to continue high-power, high-site operations throughout the entire 2500-2690 MHz band.<sup>15</sup> On April 27, 2006, the Commission released the *Third Memorandum Opinion and Order and Second Report and Order (3rd MO&O)*, in which it affirmed its decision to consider these waivers on a case-by-case basis.<sup>16</sup>

4. USA Digital asks on behalf of itself and its licensees/lessors to "opt-out" of the transition of the 2500-2690 MHz band in Billings, Montana and seeks a waiver of Section 27.1230-27.1239 of the Commission's rules for itself and all of its licensees/lessors.<sup>17</sup> In addition, USA Digital requests that the waiver state that:

- USA Digital and its 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);
- USA Digital and its 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, USA Digital and its 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 *de minimis* reduction in USA Digital's ability to serve its then-existing subscribers;
- Every main, booster, and base station currently used in conjunction with USA Digital'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);
- Any channel used for the transmission of digital video programming on USA Digital'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(l)(3). In addition, per Section 27.53(l)(5), USA Digital and its 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 Section 21.908 and 74.936;
- Consistent with Section 27.55(a)(4)(i), all of the BRS and EBS channels in USA Digital's system will be permitted to operate at any point along their respective GSA boundaries at the greater

<sup>&</sup>lt;sup>13</sup> *Id.* at 14185-14186 ¶ 4.

<sup>&</sup>lt;sup>14</sup> *Id.* at 14197-14198 ¶ 72.

<sup>&</sup>lt;sup>15</sup> *Id.* at 14199-14200 ¶ 77.

<sup>&</sup>lt;sup>16</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, 5645 ¶ 72 (2006) (*BRS/EBS 3rd MO&O*). In the *3rd MO&O*, the Commission also granted WATCH TV's request to opt-out of the transition of the 2.5 GHz band in Lima, Ohio. *Id.* at ¶ 84.

<sup>&</sup>lt;sup>17</sup> Waiver Request at 1.

signal strength of 47 dBu or the strength authorized in their underlying licenses as of January 10, 2005;

- Section 27.1220 (regarding the 5.5 MHz wide channels in the LBS and UBS) and 27.1222 (regarding the establishment of guardbands around the MBS) shall not be applicable to USA Digital and its channel lessors; and
- USA Digital and its channel lessors shall not be subject to the height benchmarking obligations set forth in Section 27.1221.

5. Sprint Nextel,<sup>18</sup> Clearwire,<sup>19</sup> MSU,<sup>20</sup> and HITN<sup>21</sup> filed comments opposing USA Digital's waiver request. They argue that USA Digital does not meet the Commission's waiver standard and has not presented technical evidence to show that its continued operation under the old band plan and technical rules will not cause harmful interference to other 2.5 GHz licensees.<sup>22</sup> Sprint Nextel and MSU express concern about the impact a waiver would have on their contemplated operations in Sheridan, Wyoming (Sprint Nextel) and Bozeman, Montana (MSU).<sup>23</sup> In addition, Sprint Nextel argues that USA Digital does not demonstrate that its MVPD operations will remain commercially viable in the future.<sup>24</sup> Clearwire argues that permitting USA Digital to opt-out of the transition will prevent Clearwire, the Billings, Montana BTA holder, from deploying service not only in Billings but also in the entire BTA, thus hurting competition.<sup>25</sup>

# III. DISCUSSION

6. In the *BRS/EBS R&O*, the Commission found that it is in the public interest to consider waivers of the rules requiring licensees to transition to the new band plan and to comply with the new technical rules.<sup>26</sup> Specifically, 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 meet the definition of a multichannel video programming distributor in Section 522 of the Communications Act of 1934, as amended, and that provide

<sup>&</sup>lt;sup>18</sup> Sprint Nextel Opposition. Sprint Nextel holds the following geographic service area BRS licenses in the Sheridan, Wyoming area: Station WLW824 (Channels E1-E4); Station WLW820 (Channels F1-F4); and Station WNTF638 (Channels H1-H3). Sprint Nextel Opposition at 2 n.4.

<sup>&</sup>lt;sup>19</sup> Clearwire Opposition. Clearwire is the licensee of BRS Station BTA 041 (Billings, Montana). The GSA of Clearwire's BTA authorization allows it to operate on all BRS channels throughout the Billings BTA, except where incumbent authorizations (such as those held by USA Digital and its lessors) exist. *See* 47 C.F.R. 27.1206(a)(2). In the immediate Billings area, the only channel which is part of the GSA of Clearwire's BTA authorization is BRS Channel No. 2A (2156-2160 MHz).

<sup>&</sup>lt;sup>20</sup> MSU Opposition. MSU is the licensee of WNC740 (A-group) and WNC743 (D-group) in Bozeman, Montana. MSU Opposition at 2.

<sup>&</sup>lt;sup>21</sup> HITN Opposition. HITN filed an application for the G-group EBS channels in Billings, Montana, which the Commission dismissed as mutually exclusive. *See BRS/EBS R&O* and *FNPRM*, 19 FCC Rcd 14165, 14377 at Appendix E. HITN has filed a Petition for Reconsideration of this dismissal, which is pending. HITN Petition for Reconsideration (filed Jul. 19, 2006).

<sup>&</sup>lt;sup>22</sup> Sprint Nextel Opposition at 5, Clearwire Opposition at 6, MSU Opposition at 2, HITN Opposition at 4.

<sup>&</sup>lt;sup>23</sup> Sprint Nextel Opposition at 2, MSU Opposition at 2.

<sup>&</sup>lt;sup>24</sup> Sprint Nextel Opposition at 6.

<sup>&</sup>lt;sup>25</sup> Clearwire Opposition at 1-2.

<sup>&</sup>lt;sup>26</sup> BRS/EBS R&O, 19 FCC Rcd at 14199 ¶ 77.

MVPD service to five percent or more of the households within their respective geographic service areas (GSAs) (this calculation is made in accordance with the requirements of Section 76.905(c)<sup>27</sup> of the Commission's Rules).<sup>28</sup> The Commission further found that it is in the public interest to consider waivers for any BRS or EBS licensee that is co-located with any qualified MVPD licensee that elects to opt-out.<sup>29</sup> In addition, the Commission 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.<sup>30</sup>

7. The Commission stated that, in reviewing requests to waive the rules, it would 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 adopted by the Commission.<sup>31</sup> 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.<sup>32</sup>

8. Initially, we conclude that HITN lacks standing to file an opposition to the Waiver Request. HITN claims standing because it has pending a petition for reconsideration of the Commission's decision to dismiss its application for a new EBS station on the G-group EBS channels in Billings.<sup>33</sup> Under Commission precedent, a potential assignee of a television station that would compete with another station in the market lacks standing to file petitions to deny against other stations in that market.<sup>34</sup> HITN's status as a dismissed applicant with a pending petition for reconsideration is even more tenuous than a potential assignee of a licensed station because the Commission has already dismissed its application and affirmed that dismissal. Furthermore, we believe that HITN's arguments are largely made by other commenters and thus are considered in this proceeding. Accordingly, we will give no further consideration to HITN's pleading.

9. USA Digital has shown that, in view of its unusual circumstances, requiring it to transition to the new band plan and technical rules would be inequitable, unduly burdensome, and contrary to the public interest. First, USA Digital has shown that it cannot transition to the new band plan because its BRS/EBS system uses more than seven digitized channels to deliver digitally compressed multichannel video service programming.<sup>35</sup> USA Digital is the licensee or lessee of all the BRS and EBS spectrum in Billings,

<sup>29</sup> Id.

<sup>30</sup> Id.

<sup>31</sup> *Id*.

<sup>32</sup> *Id.*, 19 FCC Rcd at 14199-14200 ¶ 77, 47 C.F.R. § 1.925(b)(3).

<sup>33</sup> HITN Opposition at 2-3. The Commission originally dismissed HITN's application in the *BRS/EBS R&O*. *BRS/EBS R&O*, 19 FCC Rcd at 14264-14265 ¶ 263. It then affirmed that dismissal in the *BRS/EBS 3<sup>rd</sup> MO&O*. *BRS 3<sup>rd</sup> MO&O*, 21 FCC Rcd at 5703-5704 ¶¶ 236-238.

<sup>34</sup> See Syracuse Channel 62, Inc., Memorandum Opinion and Order, 60 Rad. Reg. 2d 1161, 1164 ¶ 10 (1986).

<sup>&</sup>lt;sup>27</sup> 47 C.F.R. § 76.905(c).

<sup>&</sup>lt;sup>28</sup> *BRS/EBS R&O*, 19 FCC Rcd at 14199 ¶ 77.

<sup>&</sup>lt;sup>35</sup> Waiver Request at 3, Reply at Attachment A.

Montana, except for the G-group EBS channels and BRS Channel No. 2A.<sup>36</sup> USA Digital provides 116 channels of digitized video programming.<sup>37</sup> As stated above, under the *BRS/EBS R&O*, USA Digital is not required to show that it provides service to at least five percent of the households within its geographic service area if it can show that it needs more than seven digitized channels and has a viable business for high-powered operations. The Bureau therefore rejects the arguments made by Clearwire and Sprint Nextel that USA Digital's waiver request is defective because USA Digital did not show that it provides service to at least five percent of the households within its geographic service area.<sup>38</sup> In light of USA Digital's showing that it needs more than seven digitized channels, we reject Clearwire's argument that USA Digital can provide its legacy service on the MBS.<sup>39</sup>

10. Second, USA Digital has shown that it has developed a viable business. USA Digital has provided a Declaration from Christian M. Hilliard, its President and principal owner.<sup>40</sup> Mr. Hilliard describes USA Digital's operations as follows. In 1999, USA Digital invested \$5 million to expand its service offerings and currently offers digital cable programming, broadband, and telephony service, including 116 channels of digitized video programming, 37 channels of digital audio, high-speed broadband service, and VoIP telephone service.<sup>41</sup> USA Digital provides digital video service to approximately 2700 subscribers, broadband data services to over 200 subscribers, and recently introduced telephony services to approximately 300 subscribers.<sup>42</sup> In light of the detailed information presented by Mr. Hilliard, the Bureau finds that USA Digital must demonstrate that its MVPD operations are likely to remain commercially viable in the future.<sup>43</sup> We note that the agency did not require such a showing when it granted WATCH TV's or Digital TV One's respective waiver requests.<sup>44</sup> Nor did the agency require WATCH TV or Digital TV One to provide information from investors, qualified financial institutions, auditors, accountants, or owners indicating that their businesses remained viable for the foreseeable future, as Sprint Nextel argues that we should require here.<sup>45</sup>

<sup>42</sup> Waiver Request at 2-3. Mr. Hilliard states that USA Digital's MVPD service is fully competitive with that of larger cable and DBS operators. According to Mr. Hilliard, USA Digital serves rural areas that are not served by the incumbent wireline cable provider and that do not receive over-the-air television. Neither DBS provider carries all of the local television stations to the Billings market, while USA Digital retransmits all local broadcast signals, including to rural areas. Mr. Hilliard states that not only is USA Digital's video and data service priced below its competitors' services, but also its presence in the marketplace has kept the price of broadband services down and has caused two incumbent providers to introduce packages of video, broadband, and phone service that are just below the national average of \$100 per month. Mr. Hilliard states that its newly-launched VoIP offering is "enjoying tremendous early acceptance" with USA Digital's subscribers. Consolidated Reply at Attachment A.

<sup>43</sup> Sprint Nextel Opposition at 6.

<sup>44</sup> See BRS/EBS 3rd MO&O, 21 FCC Rcd at 5646-5650 ¶¶ 75-84; WHTV Broadcasting Corp. d/b/a Digital TV One and Caribbean University Memorandum Opinion and Order, 22 FCC Rcd 1314 (WTB 2007) (Digital TV One).

<sup>45</sup> BRS/EBS 3rd MO&O, 21 FCC Rcd at 5646-5650 ¶¶ 75-84; Digital TV One. See Sprint Nextel Opposition at 6.

<sup>&</sup>lt;sup>36</sup> Waiver Request at 5-6. The G-group EBS channels are unlicensed and BRS Channel No. 2A is licensed to Clearwire as part of its BTA authorization.

<sup>&</sup>lt;sup>37</sup> Waiver Request at 2, Reply at Attachment A.

<sup>&</sup>lt;sup>38</sup> Clearwire Opposition at 6, Sprint Nextel Opposition at 4-6.

<sup>&</sup>lt;sup>39</sup> Clearwire Opposition at 7.

<sup>&</sup>lt;sup>40</sup> Reply at Attachment A.

<sup>&</sup>lt;sup>41</sup> *Id*.

11. Third, we find that USA Digital, by providing two engineering analyses by T. Lauriston Hardin, P.E., has shown that the interference concerns raised by Sprint Nextel are without merit and the interference concerns raised by MSU are easily managed.<sup>46</sup> While Sprint Nextel has submitted engineering maps, it failed to provide the underlying data necessary to demonstrate that there would be an interference problem. In contrast, the engineering analyses submitted by USA Digital show that its system will not cause interference to Sprint Nextel's proposed operations in Sheridan, Wyoming, and will cause only minimal interference into the Bozeman, Montana GSA where MSU is contemplating operations. Mr. Hardin analyzed both sites according to the requirements of Section 27.55(a) of the Commission's rules. Section 27.55(a) permits a licensee in the LBS/UBS to transmit signals with a strength up to 47 dB[mµ]V/m measured at 1.5 meters above ground.<sup>47</sup> Section 27.55(a) also permits a licensee in the MBS to transmit a signal at the GSA boundary up to  $-73 + 10 \log(X/6) dBW/M^2$  where X is the bandwidth in MHz of the channel.<sup>48</sup> Mr. Hardin's engineering analysis of the potential for interference between USA Digital and Sprint Nextel's Sheridan, Wyoming site, which are 70 miles apart, states that "the Billings transmit site is blocked by terrain shielding from reaching the Sheridan GSA."<sup>49</sup> Mr. Hardin concludes that "[t]he Billings system will not cause interference . . . to the Sheridan system."<sup>50</sup>

12. The engineering analysis shows that the Billings system, which is 80 miles from the Bozeman BTA, will cause minor interference in an unpopulated area of the Bozeman BTA.<sup>51</sup> We agree with USA Digital that such interference is *de minimis*, not only because the area where the signal intrudes is unpopulated, but also because MSU's system is non-operational. Thus, we also agree with USA Digital that MSU can mitigate any potential interference from USA Digital's current operations by appropriately designing its future cellularized BRS/EBS system. We emphasize, as correctly stated by USA Digital, that no licensee has any assurance that signals from co-channel operations will not intrude into its GSA under the Commission's post-transition rules.<sup>52</sup>

13. Fourth, we find that USA Digital adequately addresses concerns about interference to the remainder of the Billings BTA. According to USA Digital, "the Billings BTA is massive – comprising the entire half of Montana (25 counties) and northwestern Wyoming (3 counties)."<sup>53</sup> Yet, despite this vast area, USA Digital states that it is aware of no other operating BRS/EBS system in the Billings BTA.<sup>54</sup> USA Digital further states that because Billings is largely surrounded by mountains, it is highly unlikely that any system deployed in the future outside of Billings will suffer material interference from signals

<sup>48</sup> Id.

<sup>49</sup> Reply at Attachment B.

<sup>50</sup> *Id*.

<sup>51</sup> The engineering analysis states that "the Billings system meets the -73 dBW/m<sup>2</sup> requirements in the direction of the Bozeman GSA" and will not cause interference to the Bozeman system. The engineering analysis further shows that the Billings system "does not exceed the 47 dbµ at all but a few points within the Bozeman GSA." According the engineering analysis the areas where "the Billings signal exceeds 47 dbµV/m requirement area contained a population of 2 and a household count of 0." Reply at Attachment C.

<sup>52</sup> After the transition takes place, in the LBS and UBS, a licensee must limit its signal strength at the border of its GSA to 47 dB $\mu$ V/m. *See* 47 C.F.R. § 27.55(a)(4)(ii). Signal strengths below this level are permissible and may bleed into adjacent GSAs.

<sup>53</sup> Waiver Request at 8.

<sup>54</sup> Waiver Request at 8, Reply at i.

<sup>&</sup>lt;sup>46</sup> Reply at Attachments B and C.

<sup>&</sup>lt;sup>47</sup> 47 C.F.R. § 27.55(a).

emanating from USA Digital's operations.<sup>55</sup> Moreover, USA Digital explains, because the area outside Billings, Montana is extremely rural, it is unlikely that any operations will be deployed in the immediate vicinity of Billings.<sup>56</sup> We note that Clearwire, the Billings BTA holder, is in agreement on this point; Clearwire states that "[w]ithout Billings proper, it is unlikely that a business case could support deployment in the remainder of the BTA...<sup>57</sup> Thus, we reject as speculative Clearwire's argument that USA Digital's operations would prevent Clearwire from deploying service outside of Billings even if a business case could be made to deploy such service. Clearwire has not submitted engineering studies to show that it may be precluded from providing service if USA Digital does not transition to the new band plan.<sup>58</sup>

14. Clearwire argues that if Billings is transitioned, it could operate a system in Billings; then, according to Clearwire, the business case would support service in the remainder of the BTA outside of Billings.<sup>59</sup> We find this speculative because we agree with USA Digital that even if Billings is transitioned to the new band plan, Clearwire does not control enough spectrum to operate a system using its current technology. USA Digital owns or leases all of the channels except the G-group, which is unlicensed, and BRS channel No. 2A, which is licensed to Clearwire. Clearwire has reported to the Securities and Exchange Commission that it does not launch service in a market using its current technology unless it controls a minimum of six channels containing a minimum of 5 megahertz of spectrum each.<sup>60</sup> Thus, to operate a system in Billings, Clearwire would have to obtain or lease at least an additional 26 megahertz of spectrum.<sup>61</sup> Even if Clearwire could lease the G-group channels from a future EBS licensee, Clearwire would still be short of that goal. Based on the record before us, it appears that the only way Clearwire could commence service in Billings is if USA Digital ceased providing service, either voluntarily or involuntarily.

15. We reject Clearwire's argument that its BRS Channel No. 2A would be orphaned if Billings were not transitioned. Clearwire argues that the pre-transitioned channel F2 at 2618-2620 MHz and channel E3 at 2620-2624 MHz would occupy its channel location in the new band plan.<sup>62</sup> The Commission provided for this situation by assigning BRS Channel No. 2/2A in untransitioned markets the frequencies at 2686-2690 MHz; thus, Clearwire's BRS Channel No. 2A has a channel on which it can be located.<sup>63</sup> We also reject Clearwire's argument that we should deny USA Digital's waiver request because Clearwire, as the Billings BTA holder and the most logical proponent, would probably not transition the remainder of the BTA if it cannot transition Billings.<sup>64</sup> The Commission has provided a self-transitioning

<sup>59</sup> Id.

<sup>62</sup> See Clearwire Opposition at 7-8.

<sup>63</sup> 47 C.F.R.§ 27.5(i)(1).

<sup>&</sup>lt;sup>55</sup> Waiver Request at 8-9.

<sup>&</sup>lt;sup>56</sup> Waiver Request at 8, Consolidated Reply at 15.

<sup>&</sup>lt;sup>57</sup> Clearwire Opposition at 7, 9.

<sup>&</sup>lt;sup>58</sup> See id.

 $<sup>^{60}</sup>$  Reply at 16, citing Clearwire Corporation, Securities and Exchange Commission Form S-1 (filed Dec. 19, 2006) at 56

<sup>&</sup>lt;sup>61</sup> In the immediate Billings area, Clearwire's BTA authorization allows it to access 4 MHz of spectrum on BRS Channel No. 2A. If Clearwire could use the 4 MHz channel, it would need at least 26 MHz of additional spectrum. If Clearwire needs access to 5 MHz channels, they cannot use Channel 2A and would need 30 MHz of spectrum.

<sup>&</sup>lt;sup>64</sup> See Clearwire Opposition at 10.

option for those licensees in the remainder of the BTA that wish to transition to the new band plan.<sup>65</sup> Licensees that do not self-transition may be transitioned by another mechanism adopted by the Commission at a later time.<sup>66</sup>

# IV. CONCLUSION AND ORDERING CLAUSES

16. The Bureau concludes that USA Digital has justified a waiver by demonstrating that it has a viable business for high-powered operations and that it needs more than seven digitized high-powered MBS channels to deliver its service to its customers. The Bureau also concludes that requiring USA Digital to transition to the new band plan would be inequitable, unduly burdensome and contrary to the public interest because it would be required to discontinue its existing service to customers

17. ACCORDINGLY, IT IS ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, 47 U.S.C. § 154(i), and Sections 1.925 and 27.1231(g) of the Commission's Rules, 47 C.F.R. §§ 1.925, 27.1231(g), that the Request for Waiver filed by Antilles Wireless, L.L.C. d/b/a/ USA Digital on November 16, 2006 IS GRANTED.

18. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

#### FEDERAL COMMUNICATIONS COMMISSION

Jane E. Jackson Associate Chief, Wireless Telecommunications Bureau

<sup>&</sup>lt;sup>65</sup> *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5671 ¶ 135.

<sup>&</sup>lt;sup>66</sup> *Id.*, 21 FCC Rcd at 5737 ¶ 313.