

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

In the Matter of	)	
	)	
Amendment of Parts 1, 21, 73, 74 and 101 of the	)	WT Docket No. 03-66
Commission's Rules to Facilitate the Provision of	)	RM-10586
Fixed and Mobile Broadband Access, Educational	)	
and Other Advanced Services in the 2150-2162	)	
and 2500-2690 MHz Bands	)	
	)	
Review of the Spectrum Sharing Plan Among	)	IB Docket No. 02-364
Non-Geostationary Satellite Orbit Mobile Satellite	)	
Service Systems in the 1.6/2.4 GHz Bands	)	

To: The Commission

**PETITION FOR PARTIAL RECONSIDERATION OF  
BELLSOUTH CORPORATION, BELLSOUTH WIRELESS CABLE, INC. and  
SOUTH FLORIDA TELEVISION, INC.**

BellSouth Corporation and its wholly-owned subsidiaries BellSouth Wireless Cable, Inc. and South Florida Television, Inc. (collectively, "BellSouth"), by counsel and pursuant to Section 1.429 of the Commission's Rules, hereby request reconsideration of two Commission actions taken in this proceeding.<sup>1</sup>

First, the Commission without explanation departed from its prior decision permitting BRS and EBS licensees to cease operations without jeopardizing license renewal, and instead determined that past service should be only "a factor" in determining whether licensees satisfied "substantial service." To remedy this shortcoming, the Commission should adopt a rule stating that BRS and EBS licensees

---

<sup>1</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 on Reconsideration and Fifth Memorandum Opinion and Order and Third Memorandum Opinion and Order and Second Report and Order*, FCC 06-46 (2006) ("BRS/EBS Second Order").

may demonstrate “substantial service” by showing that they met a “safe harbor” at any time during the license term.

Second, to minimize the potential for interference between BRS-1 licensees and Mobile Satellite Service (“MSS”) licensees, the Commission should, at a minimum, re-examine the power flux density (“PFD”) limits applicable to MSS licensees in the 2496-2500 MHz band to determine whether Section 25.208(v) should be conformed to the more stringent limits proposed by the U.S. Government in order to afford BRS-1 licensees improved interference protection.

### **Discussion**

#### **I. WHERE A LICENSEE LEGALLY CEASES PROVIDING SERVICE, IT MAY DEMONSTRATE “SUBSTANTIAL SERVICE” BY SHOWING THAT IT SATISFIED A “SAFE HARBOR” AT ANY TIME DURING THE LICENSE TERM.**

BellSouth entered the BRS/EBS business in 1996 and has invested hundreds of millions of dollars to acquire and design systems, install equipment, upgrade analog plant to digital and provide “wireless cable” video entertainment and educational services to more than 100,000 customers in the southeast United States. BellSouth has established a strong record of working with educational institutions that hold EBS licenses to provide educational services to students in its markets. Over time, however, the wireless video business proved to be unsuccessful primarily as a result of line-of-sight restrictions and the growth of DBS services as a formidable alternative. Despite these problems, BellSouth recognized that its 2.5 GHz spectrum had significant value and application as a platform for broadband and advanced wireless services. To this end, BellSouth continued to provide educational and other video services on its licensed BRS and leased BRS and EBS spectrum.

In its initial *BRS/EBS Order* adopted in 2004,<sup>2</sup> the Commission acknowledged that licensees should not be forced to maintain “legacy” or “obsolete” operations in the face of sweeping rule changes designed to facilitate the nationwide transition of the BRS/EBS spectrum to enable advanced wireless services. The Commission stated that:

As part of the fundamental changes to the BRS and EBS band, we seek to encourage BRS and EBS licensees to respond to market demands for next generation ubiquitous broadband wireless services and make investments in the future of such services. *We believe this goal cannot be readily accomplished if BRS and EBS licensees have to focus their resources on preserving legacy services solely because renewal approaches and licensees fear losing their authorizations if the discontinuance of service and forfeiture rules are not eliminated.* Furthermore, the move to next generation services for BRS and EBS providers also entails a transition period where licensees will be forced to go dark and discontinue service during the actual transition. *Accordingly, we conclude that it would be inappropriate to penalize BRS and EBS licensees while they migrate to the new band plan.*

\* \* \*

In sum, we conclude that our decision to eliminate our forfeiture, cancellation and discontinuance of service rules for certain classes of BRS and EBS licensees is supported by comments in the record, as well by consideration for the fact that BRS and EBS licensees will be transitioning to new innovative next-generation technologies, and may be forced to go dark during transition. *Our market-driven service goals will not be reached if licensees are forced to continue providing obsolete services solely to preserve their authorizations. We see no public interest benefit to preserving non-viable services solely because renewal approaches.* We believe that eliminating these rules allows for innovative, flexible use of the spectrum.<sup>3</sup>

As this language makes clear, the “fundamental changes” in the anticipated uses of the 2.5 GHz band the Commission envisioned warranted a finding that licensees should not have to “throw good money after bad” just to meet a license renewal requirement.

---

<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, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004) (“*BRS/EBS Order*”).

<sup>3</sup> *Id.* at 90, 92 (footnote omitted) (emphases added).

In reliance on this well-reasoned decision, following the effective date of the rules adopted in the *BRS/EBS Order*, BellSouth took steps to curtail the legacy “wireless cable” video services it had provided, uninterrupted, in its markets. In so doing, BellSouth substantially reduced its operational expenses as the Commission intended. At the same time, BellSouth increased its investment in pioneering technology testing and market trials in the 2.5 GHz band to gain valuable information on advanced wireless services that it may wish to deploy in the band post-transition. In short, BellSouth has done exactly what the Commission has encouraged it to do, with the explicit understanding that its licenses would not be placed in jeopardy.

In the *BRS/EBS Second Order*, however, the Commission retreated from this clear and cogent decision, stating without any evidence in the record that past discontinued service would thereafter be considered only “a factor” in determining whether “substantial service” had been met.<sup>4</sup> The Commission stated that a licensee’s “current service” is the most significant consideration, but that “[i]f the current service does not support a finding of substantial service, we will look at the licensee’s overall record during the prior license term.”<sup>5</sup> This statement is of little solace to BellSouth and others that made a substantial investment, provided service to the public and relied on the Commission’s ruling that discontinuing service would not negatively affect their ability to obtain license renewal.<sup>6</sup>

---

<sup>4</sup> *BRS/EBS Second Order* at 130.

<sup>5</sup> *Id.*

<sup>6</sup> See Reply Comments of BellSouth, WT Docket No. 03-66, submitted February 8, 2005 (“BellSouth Reply Comments”), at 12 (“It would deny licensees like BellSouth of the credit they rightfully earned for investing millions of dollars to provide multichannel video service to customers, for actually providing that service for several years through a long period of regulatory certainty, and continuing to provide that service even after the Commission permitted it to discontinue service and then only ceasing service to transition its systems”).

It is also unclear how the Commission can reconcile its decision with Section 27.1234 without engaging in arbitrary line-drawing. That rule, which was adopted in the *BRS/EBS Order* and was unchanged in the *BRS/EBS Second Order*, states simply that “[l]icensees may discontinue operations during the transition.”<sup>7</sup> A rational reading of the phrase “during the transition” would permit licensees to discontinue operations throughout the transition process, especially when coupled with the above-quoted language recognizing the benefits of allowing service to be discontinued “while [licensees] migrate to the new band plan.”

The Commission’s shift is even more difficult to understand given the record evidence in this proceeding. As the Commission correctly observed,<sup>8</sup> BellSouth<sup>9</sup> and a large number of other parties<sup>10</sup> argued in favor of a rule that would acknowledge past discontinued service as “substantial service,” rather than a rule that looked only at a “snapshot” taken at a particular point in time.<sup>11</sup> Even Clearwire Corporation, the sole party opposing this consensus position, proposed specific criteria under which past discontinued service would be considered.<sup>12</sup> But in rejecting Clearwire’s approach and “agree[ing] with the majority of commenters” proposing a specific requirement that would require compliance with a “safe harbor,”<sup>13</sup> the Commission established the more subjective “a factor” language – an open-ended standard that appeared for the first time in the *BRS/EBS Second Order*.

---

<sup>7</sup> Section 27.1234.

<sup>8</sup> *BRS/EBS Second Order* at 128-130.

<sup>9</sup> See Comments of BellSouth, WT Docket No. 03-66, submitted January 10, 2005, at 10-12; BellSouth Reply Comments at 9-12.

<sup>10</sup> The Commission itself lists these parties in the *BRS/EBS Second Order* at note 768.

<sup>11</sup> Comments of The Wireless Communications Association International, Inc., WT Docket No. 03-66, submitted January 10, 2005 (“WCA Comments”), at 10.

<sup>12</sup> See Comments of Clearwire Corporation, WT Docket No. 03-66, submitted January 10, 2005, at 18.

<sup>13</sup> *BRS/EBS Second Order* at 130.

Without any discussion in the record, the Commission contravened its own decision in the *BRS/EBS Order* and Section 27.1234 in favor of vague language that would consider past, permissible discontinued service to be merely “a factor” in determining whether a licensee has provided “substantial service.” This re-introduces an element of regulatory uncertainty that threatens to penalize licensees that relied on the Commission’s decision clearly stating “that it would be inappropriate to penalize BRS and EBS licensees while they migrate to the new band plan.”

**II. THE COMMISSION SHOULD AMEND SECTION 25.208(v) TO REFLECT THE U.S. GOVERNMENT’S RECENT DETERMINATION THAT MSS SHOULD BE SUBJECT TO HIGHER POWER FLUX DENSITY LIMITS.**

In the *BRS/EBS Second Order*, the Commission affirmed its conclusion that BRS and MSS licensees can operate in the 2496-2500 MHz band on a co-primary basis.<sup>14</sup> Moreover, despite ample record evidence to the contrary from both BRS and MSS interests,<sup>15</sup> the Commission concluded that “[w]hen BRS and MSS are both operating in the same geographic area, sharing spectrum, through engineering solutions, should be feasible.”<sup>16</sup> The Commission also adopted Section 25.208(v), which established PFD limits for MSS operating in the 2496-2500 MHz band.

BellSouth is the holder of four licenses for incumbent BRS-1 stations and six authorizations for BTA rights where it has the exclusive right to deploy new BRS-1

---

<sup>14</sup> *Id.* at 18.

<sup>15</sup> *See, e.g.*, Opposition of BellSouth, *et al.*, to Petition for Reconsideration Globalstar LLC, IB Docket No. 02-364, submitted October 27, 2004, at 4; Petition for Reconsideration of The Wireless Communications Association International, Inc., IB Docket No. 02-364, submitted September 8, 2004, at 5 and Technical Appendix; Petition for Reconsideration of Globalstar LLC, IB Docket No. 02-364, submitted September 8, 2004, at 14 and Technical Appendix.

<sup>16</sup> *BRS/EBS Second Order* at 19.

stations.<sup>17</sup> BellSouth continues to believe that BRS-1 should not be relegated to co-primary status and that the threat of harmful interference persists, but is encouraged that the Commission adopted some measure of protection by establishing PFD limits for MSS licensees operating in the 2496-2500 MHz band. Unfortunately, those limits do not harmonize with more recent data submitted by the U.S. Government to the international community. On reconsideration, the Commission should, at a minimum, re-examine whether the PFD limits set out in Section 25.208(v) should be conformed to the more stringent limits advanced by the U.S. Government. While it may be true that those PFD limits do not go far enough to ensure that BRS-1 licensees obtain “comparable facilities” resulting from the relocation of their spectrum,<sup>18</sup> it is clear that maintaining the existing rule would unfairly, unjustifiably and inexplicably result in one standard for domestic licensees and another standard for the international community.

As adopted in the *BRS/EBS Second Order*, Section 25.208(v) states that:

(v) In the band 2496-2500 MHz, the power flux-density at the Earth’s surface produced by emissions from non-geostationary space stations for all conditions and all methods of modulation shall not exceed the following values:

- (1) -144 dB (W/m<sup>2</sup>) in 4 kHz for all angles of arrival between 0 and 5 degrees above the horizontal plane;
- 144 dB (W/m<sup>2</sup>) + 0.65(δ - 5) in 4 kHz for all angles of arrival between 5 and 25 degrees above the horizontal plane; and

---

<sup>17</sup> Call Signs for BellSouth’s incumbent BRS-1 stations are WQR43 (Atlanta, Georgia); WLK243 (Daytona Beach, Florida); WLJ79 (Miami, Florida) and KOA86 (Louisville, Kentucky). The BTA authorizations are B024 (Atlanta, Georgia); B107 (Daytona Beach, Florida); B151 (Fort Myers, Florida); B212 (Jacksonville, Florida); B239 (Lakeland, Florida); and B336 (Orlando, Florida).

<sup>18</sup> As noted by the Wireless Communications Association International, Inc. in its May 26, 2006 comments in IB Docket No. 04-286, “the proposed PFD limits do not fully protect operations within the United States. Studies conducted by WCA members establish that, in fact, MSS systems operating at the PFD limits specified in Document WAC/101(27.4.06) can cause interference to terrestrial 2.5 GHz band operations in the United States.” Letter from Paul J. Sinderbrand to Marlene H. Dortch, IB Docket No. 04-286, at 4 (submitted May 26, 2006).

-131 dB (W/m<sup>2</sup>) in 4 kHz and for all angles of arrival between 25 and 90 degrees above the horizontal plane.

(2) -126 dB (W/m<sup>2</sup>) in 1 MHz for all angles of arrival between 0 and 5 degrees above the horizontal plane;

-126 dB (W/m<sup>2</sup>) + 0.65( $\delta$  - 5) in 1 MHz for all angles of arrival between 5 and 25 degrees above the horizontal plane; and

-113 dB (W/m<sup>2</sup>) in 1 MHz and for all angles of arrival between 25 and 90 degrees above the horizontal plane.

These values are obtained under assumed free-space propagation conditions.

These values are drawn from ITU-RR App. 5, Annex 1, which establishes the threshold signal levels for MSS coordination.<sup>19</sup> On June 7, 2006 – just six weeks after the *BRS/EBS Second Order* was released – the U.S. Government submitted its “Draft Proposal for the Work of the Conference” for Agenda Item 1.9 (“Proposal”) to CITELE in preparation for WRC-2007.<sup>20</sup> In contrast to the Commission’s conclusions in the *BRS/EBS Second Order*, the Proposal stated that “[i]n general, co-frequency sharing between MSS and terrestrial services has been found to be difficult by the ITU-R studies. The SG-8, for example, studied the feasibility of sharing between MSS and MS for IMT-2000 and concluded that *co-frequency/co-coverage sharing is not feasible.*”<sup>21</sup> This simply confirms what BRS and MSS interests have demonstrated all along, and is fully consistent with prior Commission pronouncements.<sup>22</sup>

---

<sup>19</sup> See *BRS/EBS Second Order* at note 76.

<sup>20</sup> A copy of the Proposal is attached as Exhibit 1 hereto.

<sup>21</sup> *Id.* at 2 (emphasis added).

<sup>22</sup> For example, the Commission has specifically rejected efforts by satellite interests to secure an allocation of the 2500-2520/2670-2690 MHz bands for MSS, concluding “that sharing between terrestrial and satellite systems in the 2500-2520 MHz worldwide MSS downlink (space-to-Earth) band and in the 2670-2690 MHz worldwide MSS uplink (Earth-to-space) band . . . was not feasible.” *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*, First Report and Order and Memorandum Opinion and Order, 16 FCC Rcd 17222, 17227-28 (2001), cited in

The Proposal contains a technical standard that is more stringent than Section 25.208(v) and will provide a higher level of interference protection to relocated BRS-1 licensees. Citing the efforts of the Joint Task Group 6-8-9 (“JTG 6-8-9”), the Proposal stated for the 2500-2690 MHz band that:

The JTG 6-8-9 has developed a methodology for estimating the satellite pfd values required to protect terrestrial services. Based on this methodology, the USA has determined that pfd values at the surface of the Earth produced by the emissions of MSS, BSS and FSS satellites of -136 dBW/m<sup>2</sup>/MHz for angles of arrival below 5° and -122 dBW/m<sup>2</sup>/MHz for angles of arrival greater than 25° would yield tolerable levels of interference to the Fixed and non IMT-2000 mobile services.<sup>23</sup>

Implicit in this statement is that higher levels of interference would not be tolerable – indeed, even these limits may be problematic.<sup>24</sup> Yet, the PFD limits in Section 25.208(v)(2) are 10 dB (W/m<sup>2</sup>/MHz) *higher* for angles of arrival below 5° and 9 dB (W/m<sup>2</sup>/MHz) *higher* for angles of arrival greater than 25°.<sup>25</sup>

Recognizing the inadequacy of the MSS coordination threshold values in ITU-RR App.5, Annex 1 to protect terrestrial deployments in the United States, the less stringent PFD limits contained in Section 25.208(v) Commission cannot be reconciled with the

---

*Amendment of Parts 2, 25, and 87 of the Commission's Rules to Implement Decisions from World Radiocommunication Conferences Concerning Frequency Bands Between 28 MHz and 36 GHz and to Otherwise Update the Rules in this Frequency Range*, Report and Order, 18 FCC Rcd 23426, 23443-44 (2003); *Amendment of Parts 2, 25, and 87 of the Commission's Rules to Implement Decisions from the World Radiocommunication Conferences Concerning Frequency Bands Between 28 MHz and 36 GHz and to Otherwise Update the Rules in this Frequency Range*, Notice of Proposed Rulemaking, 17 FCC Rcd 19756, 19773 (2002). See also *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, Notice of Proposed Rule Making and Order, 16 FCC Rcd 596, 624-25 (2001) (“[s]haring between terrestrial and satellite systems would present substantial technical challenges in that band”).

<sup>23</sup> Proposal at 2.

<sup>24</sup> See note 18, *supra*.

<sup>25</sup> The Proposal and Section 25.208(v)(2) both use a 1 MHz reference bandwidth. Table 21-4, which appears at page 3 of the Proposal, proposes a sliding scale of  $-136 + 0.7(\delta - 5)$  for angles of arrival between 5°-25°.

U.S. Government's official position in the Proposal, adopted only six weeks after the *BRS/EBS Second Order* was released. To remedy this obvious inconsistency, the Commission should, at a minimum, re-examine Section 25.208(v) to determine whether the more stringent PFD limits set out in the Proposal will provide adequate protection to BRS-1 licensees in light of new government-sponsored data showing that co-frequency, co-coverage sharing between BRS and MSS is not feasible.

**Conclusion**

In light of the foregoing, BellSouth Corporation, BellSouth Wireless Cable, Inc. and South Florida Television, Inc. urge the Commission to amend the rules as discussed above.

Respectfully submitted,

**BELLSOUTH CORPORATION,  
BELLSOUTH WIRELESS CABLE, INC. and  
SOUTH FLORIDA TELEVISION, INC.**

July 19, 2006

By: /s/ Stephen E. Coran

Stephen E. Coran  
Rini Coran, PC  
1615 L Street, N.W., Suite 1325  
Washington, D.C. 20036  
(202) 463-4310

Bennett L. Ross  
BellSouth Corporation  
1133 21<sup>st</sup> Street, N.W., Suite 900  
Washington, D.C. 20036  
(202) 463-4113

Their Attorneys

**Exhibit 1**



**ORGANIZACION DE LOS ESTADOS AMERICANOS  
ORGANIZATION OF AMERICAN STATES**

**Comisión Interamericana de Telecomunicaciones  
Inter-American Telecommunication Commission**

---

**VII MEETING OF PERMANENT  
CONSULTATIVE COMMITTEE II:  
RADIOCOMMUNICATIONS  
INCLUDING BROADCASTING  
June 20 to 23, 2006  
Lima, Peru**

**OEA/Ser.L/XVII.4.2  
CCP.II-RADIO/doc. 1009/06  
7 June 2006  
Original: English**

**DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE  
AGENDA ITEM 1.9  
(WSG-2)  
(Item on the Agenda: 4.1)  
(Document submitted by the delegation of United States of America)**

**Agenda Item 1.9:** *to review the technical, operational and regulatory provisions applicable to the use of the band 2 500-2 690 MHz by space services in order to facilitate sharing with current and future terrestrial services without placing undue constraint on the services to which the band is allocated;*

**Background:**

**Issue A: Necessary Power Flux Density Limits**

There are three space services allocated in portions of the 2 500-2 690 MHz band. In addition to MSS there are allocations to BSS and FSS. At WRC-03 the issue of sharing between terrestrial services and BSS (Sound) was resolved as reflected in RR Nos. **5.417A** and/or **5.418**. The sharing between BSS and terrestrial services not included in these two provisions was not addressed at WRC-03 and need to be considered. WRC-03 recognized the need review the technical, operational and regulatory provisions applicable to the use of the band 2 500-2 690 MHz by space services in order to facilitate sharing with current and future terrestrial services (see Res. **802 (WRC-03)**, Agenda Item 1.9). To that end, CPM06-1 established the Joint Task Group 6-8-9 (JTG 6-8-9) with the purpose to conduct studies on this issue.

The JTG 6-8-9 has developed a methodology for estimating the satellite pfd values required to protect terrestrial services. Based on this methodology, the USA has determined that pfd values at the surface of the Earth produced by the emissions of MSS, BSS and FSS satellites of -136 dBW/m<sup>2</sup>/MHz for angles of arrival below 5° and -122 dBW/m<sup>2</sup>/MHz for angles of arrival greater than 25° would yield tolerable levels of interference to the Fixed and non IMT-2000 mobile services.

There are definite advantages to having a uniform regulatory regime for all space services in the 2 500-2 690 MHz band, based on the specification of a power flux density limits in RR **Article 21**. First it would ensure long term safeguard of terrestrial systems in the band 2 500-2 690 MHz from satellite interference and could also be beneficial to the long-term development of space services as a defined set of pfd limits would be established and finalized. Additionally, a hard limit regulatory regime would alleviate coordination burden and provide regulatory certainty to all services in the band.

In short, the proposed regulatory approach would ensure that existing and planned satellite networks are not overly constrained while existing and future terrestrial services are adequately protected.

**Issue B: Mobile Satellite Service (MSS)**

The band 2 500-2 520 MHz is allocated to MSS (space-to-Earth) paired with MSS (Earth-to-space) allocation in the band 2 670-2 690 MHz.<sup>1</sup> The terrestrial services in these bands include the Mobile and the Fixed Services (including IMT-2000). Both the terrestrial Mobile and Fixed Services have been rapidly evolving to encompass high-speed mobile Internet services requiring sensitive receiving equipment, which may be highly susceptible to interference.

In general, co-frequency sharing between MSS and terrestrial services has been found to be difficult by the ITU-R studies. The SG-8, for example, studied the feasibility of sharing between MSS and MS for IMT-2000 and concluded that co-frequency/co-coverage sharing is not feasible. A new regulatory provision is proposed that would limit MSS downlinks in the 2 500-2 520 MHz band to national and regional systems only. Under the proposed regulatory provision, administrations seeking to implement

---

<sup>1</sup> In accordance with RR **5.403**, the band 2 520-2 535 MHz may also be used for MSS (space-to-Earth) for operation limited to within national boundaries.

MSS will be allowed to do so while other administrations will be able to implement terrestrial services, all without the undue regulatory constraints. In case of a national system, the service area of the MSS system would be limited to the territory under the jurisdiction of the notifying administration. In case of a regional system, the following Radio Regulations Board's decisions would apply<sup>2</sup>:

- (1) No. 5.2.1 applies to the interpretation of the word "regional" without a capital "R".
- (2) When an administration submits a coordination request for a service area that covers its national territory and extends beyond it, the responsible administration, before it notifies the relevant assignments under Article 11, will have to obtain agreements from those administrations whose territories are included in the service area. When the responsible administration notifies these assignments under Article 11, it shall submit the list of administrations that agreed to form the regional system and shall adjust the service area accordingly. If no agreement is obtained, the service area shall be limited to its national territory.

It is also important to note that this rule of procedure clearly stipulates that the service area of a national or regional satellite system does not extend beyond the territory of administration(s) that agreed to be included in that service area.

**Proposals associated with Issue A:**

**USA/ /1 MOD**

ARTICLE 21

**TABLE 21-4 (WRC-03)**

Frequency band	Service*	Limit in dB(W/m <sup>2</sup> ) for angles of arrival ( $\delta$ ) above the horizontal plane			Reference bandwidth
		0°-5°	5°-25°	25°-90°	
2 500-2 690 MHz	Fixed-satellite	-152	<del><math>-152 + 0.75(\delta - 5)</math></del>	-137	4 kHz
2 520-2 670 MHz	Broadcasting-satellite	<u>-136</u>	<u><math>-136 + 0.7(\delta - 5)</math></u>	<u>-122</u>	<u>1 MHz</u>
2 500-2 516.5 MHz (No. 5.404)	Radiodetermination-satellite				
<u>2500-2535</u>	<u>Mobile Satellite (Space to Earth)</u>				
3 400-4 200 MHz	Fixed-satellite (space-to-Earth) (geostationary-satellite orbit)	-152	$-152 + 0.5(\delta - 5)$	-142	4 kHz

**Reasons:** Studies have shown that a satellite pfd value of -136 dBW/m<sup>2</sup>/MHz at angles below 5°, and -122 dBW/m<sup>2</sup>/MHz at angles greater than 25° yielded acceptable levels of interference to terrestrial services in the 2500-2690 MHz band. The proposed power flux density limits would facilitate FSS, BSS

<sup>2</sup> See comments under the Rules of Procedure concerning No. 5.415 and 5.416

and MSS sharing with current and future terrestrial services in the band 2500-2690 MHz and provide necessary safeguard for the terrestrial (FS and MS) systems in the band. The proposed modification would also provide regulatory certainty to satellite services as a defined set of pfd limits would be known and extensive coordination with uncertain outcome would not be required.

**APPENDIX 5 (Rev. WRC-03)  
ANNEX 1**

TABLE 5-2 (WRC-03)

Frequency band (MHz)	Terrestrial service to be protected	Coordination threshold values				
		GSO space stations		Non-GSO space stations		
		pfd (per space station) calculation factors (NOTE 2)		pfd (per space station) calculation factors (NOTE 2)		% FDP (in 1 MHz) (NOTE 1)
		<i>P</i>	<i>r</i> dB/degrees	<i>P</i>	<i>r</i> dB/degrees	
2 500-2 520	Analogue FS telephony (NOTE 5)	-146 dB(W/m <sup>2</sup> ) in 4 kHz and -128 dB(W/m <sup>2</sup> ) in 1 MHz	0.5	-146 dB(W/m <sup>2</sup> ) in 4 kHz and -128 dB(W/m <sup>2</sup> ) in 1 MHz	0.5	
	All other cases	-128 dB(W/m <sup>2</sup> ) in 1 MHz	0.5	-128 dB (W/m <sup>2</sup> ) in 1 MHz	0.5	25
2 520-2 535	Analogue FS telephony (NOTE 5)	-154 dB(W/m <sup>2</sup> ) in 4 kHz and -136 dB(W/m <sup>2</sup> ) in 1 MHz	75	-146 dB(W/m <sup>2</sup> ) in 4 kHz and -128 dB(W/m <sup>2</sup> ) in 1 MHz	0.5	
	All other cases	-136 dB(W/m <sup>2</sup> ) in 1 MHz	0.75	-128 dB(W/m <sup>2</sup> ) in 1 MHz	0.5	25

**Reasons:** Consequential to adding pfd limit for MSS to Article 21, Table 21-4 per USA/ /1. Limits in Article 21 eliminate the requirement for coordination with terrestrial systems in the band 2 500-2 535 MHz.

**Proposals associated with Issue B:**

USA/ /3 MOD

ARTICLE 5

**Frequency allocations**

Section IV – Table of Frequency Allocations

**2 500-2 520 MHz**

Allocation to services		
<b>2 500-2 520</b> FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (space-to-Earth) 5.351A 5.403  5.405 5.407 5.412 5.414	<b>2 500-2 520</b> FIXED 5.409 5.411 FIXED-SATELLITE (space- to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (space-to-Earth) 5.351A 5.403 <u>ADD 5.AAA</u> 5.404 5.407 5.414 5.415A	<b>2 500-2 520</b> FIXED 5.409 5.411 FIXED-SATELLITE (space- to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (space-to-Earth) 5.351A 5.403 5.404 5.407 5.414 5.415A

USA/ /4 ADD

**5.AAA** The use of the band 2 500-2 520 MHz by the mobile-satellite service is limited to national and regional systems, subject to agreement obtained under No. **9.21**.

**Reasons:** Restricting MSS to national and regional systems would further facilitate sharing between MSS and terrestrial services. This restriction would not constrain MSS, as there are no global coverage systems planned for this band, but would ensure that MSS systems service areas are limited to territories of the administrations seeking to implement MSS. This restriction, however, would not fully address the issue of MSS interference to terrestrial systems and must be implemented in conjunction with the appropriate PFD limits for MSS (see proposed modifications to Article **21**).