

December 10, 2007

Hon. Kevin J. Martin  
Chairman  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554

*Re: 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 – WT Docket No. 03-66*

*Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands – IB Docket No. 02-364*

*WRITTEN EX PARTE COMMUNICATION*

Dear Chairman Martin:

I am writing on behalf of the Wireless Communications Association International, Inc. (“WCA”) to ensure that the Commission gives due consideration to the recent outcome of the 2007 World Radiocommunication Conference (“WRC-2007”) as it addresses pending petitions for reconsideration of the 2006 *Order on Reconsideration and Fifth Memorandum Opinion and Order* in IB Docket No. 02-364.<sup>1</sup>

In considering Agenda Item 1.9 at WRC-2007, the international community agreed with the United States that protection of terrestrial wireless broadband service providers from cochannel Mobile Satellite Service (“MSS”) interference requires MSS to observe materially more restrictive power flux density (“PFD”) limits than had previously been applied. Although the agenda item at WRC-2007 was limited to the 2500-2690 MHz band, that finding is equally applicable to the unique situation in the United States, where the terrestrial Broadband Radio Service (“BRS”) has been extended to 2496 MHz, resulting in a sharing of

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<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*, 21 FCC Rcd 5606 (2006) [“2006 MSS/BRS Sharing Order”].

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the 2496-2500 MHz band with MSS. Accordingly, on reconsideration the Commission should amend Section 25.208(v) of its Rules to require MSS licensees operating in the 2496-2500 MHz band to comply with the more stringent PFD levels adopted at WRC-2007 for the 2.5 GHz band.<sup>2</sup>

In its *2006 MSS/BRS Sharing Order*, the Commission suggested that BRS operations at 2496-2500 MHz would be protected from MSS interference because MSS licensees were required to restrict their satellite PFD levels to those levels set forth in the International Telecommunication Union (“ITU”) Radio Regulations.<sup>3</sup> Those limits range from -144dBW/m<sup>2</sup>/4 kHz to -131dBW/m<sup>2</sup>/4 kHz and from -126 dBW/m<sup>2</sup>/MHz to -113 dBW/m<sup>2</sup>/MHz, depending on the angle of arrival.<sup>4</sup> It was evident to the BRS community that those limits would not sufficiently protect their terrestrial operations from MSS interference, and more restrictive limits on MSS PFD levels are being sought on reconsideration.<sup>5</sup>

That BRS require greater protection subsequently was confirmed when the U.S. Government submitted a Draft Proposal to the Inter-American Telecommunications Union (“CITEL”) in preparation for WRC-2007 that advocated the very same PFD limits WCA and others were asking the Commission to impose on MSS operations in the 2496-2500 MHz band. The United States’ submission ultimately became the basis for the CITEL proposal to WRC-2007. At WRC-2007, the international community confirmed the wisdom of the United States’ position by amending Table 21-4 of Article 2 of the ITU Radio Regulations to include more stringent MSS PFD limits (from -136 dBW/m<sup>2</sup>/MHz to -125 dBW/m<sup>2</sup>/MHz, depending on the angle of arrival) based on proposals by CITEL and the European Conference of Postal and Telecommunications Administrations.<sup>6</sup> A copy of the amended Table 21-4 approved at WRC-2007 is annexed to this letter.

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<sup>2</sup> See 47 C.F.R. § 25.208(v).

<sup>3</sup> See *2006 MSS/BRS Sharing Order*, 21 FCC Rcd at 5624-25.

<sup>4</sup> See 47 C.F.R. § 25.208.

<sup>5</sup> Modification of Section 25.208(v) was originally proposed by BellSouth Corporation in its Petition for Partial Reconsideration of the *2006 MSS/BRS Sharing Order*, with the support of WCA and others who have a substantial interest in using the 2496-2500 MHz band to provide new wireless broadband services under the Commission’s revised bandplan and rules for the 2.5 GHz band. See Petition of BellSouth Corp. *et al.*, for Partial Reconsideration, WT Docket No. 03-66, at 6-10 (filed July 19, 2006); Wireless Communications Ass’n Int’l Consolidated Opposition and Comments, WT Docket No. 03-66, at 7-12 (filed Aug. 18, 2006); Comments and Consolidated Opposition of Clearwire Corporation on Petitions for Reconsideration, WT Docket No. 03-66, at 7 (filed Aug. 16, 2006); Comments of WiMAX Forum on Petitions for Reconsideration, WT Docket No. 03-66, at 8 (filed Aug. 16, 2006); Wireless Communications Ass’n Int’l Consolidated Reply, WT Docket No. 03-66, at 10-13 (filed Aug. 31, 2006).

<sup>6</sup> See Table 21-4, International Telecommunications Union, World Radiocommunication Conference, Provisional Final Acts, Geneva, October 22-November 16, 2007.

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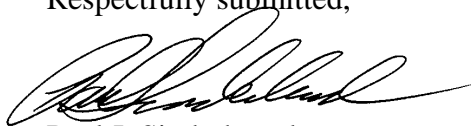
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The Commission can and should impose the same restrictions on MSS use of the 2496-2500 MHz band here – there simply is no sensible technical or legal argument for disregarding the successful United States effort at WRC-2007 and affording BRS operations at 2496-2500 MHz less protection from MSS interference than what the ITU has declared they should have in the 2500-2690 MHz band. To find otherwise will jeopardize the ability of BRS operators to deliver new wireless broadband services using their spectrum at 2496-2500 MHz, as well as undermine the credibility of the United States in future international fora.

Pursuant to Sections 1.49 and 1.1206(b)(1) of the Commission's Rules, a copy of this letter is being filed electronically with the Commission via the Electronic Comment Filing System for inclusion in the public record of the above-referenced proceedings. Should you have any questions regarding this presentation, please contact the undersigned.

Respectfully submitted,



Paul J. Sinderbrand

Counsel for the Wireless Communications  
Association International, Inc.

Attachment

cc: Hon. Michael J. Copps  
Hon. Jonathan S. Adelstein  
Hon. Deborah Taylor Tate  
Hon. Robert M. McDowell  
Fred Campbell  
Helen Domenici

## **Amended Table 21-4**

I n t e r n a t i o n a l   T e l e c o m m u n i c a t i o n   U n i o n

**WORLD  
RADIOCOMMUNICATION  
CONFERENCE  
PROVISIONAL FINAL ACTS**

**Geneva, 22 October-16 November 2007**



**WRC** Radiocommunication Bureau



**International  
Telecommunication  
Union**

TABLE 21-2 (end) (WRC-07)

Frequency band	Service	Limit as specified in Nos.
10.7-11.7 GHz <sup>5</sup> (Region 1) 12.5-12.75 GHz <sup>5</sup> (Nos. 5.494 and 5.496) 12.7-12.75 GHz <sup>5</sup> (Region 2) 12.75-13.25 GHz 13.75-14 GHz (Nos. 5.499 and 5.500) 14.0-14.25 GHz (No. 5.505) 14.25-14.3 GHz (Nos. 5.505, 5.508 and 5.509) 14.3-14.4 GHz <sup>5</sup> (Regions 1 and 3) 14.4-14.5 GHz 14.5-14.8 GHz	Fixed-satellite	21.2, 21.3 and 21.5
17.7-18.4 GHz 18.6-18.8 GHz 19.3-19.7 GHz 22.55-23.55 GHz 24.45-24.75 GHz (Regions 1 and 3) 24.75-25.25 GHz (Region 3) 25.25-29.5 GHz	Fixed-satellite Earth exploration-satellite Space research Inter-satellite	21.2, 21.3, 21.5 and 21.5A

**Section V – Limits of power flux-density from space stations**

MOD COM4/392/15 (B19/413/21)

TABLE 21-4 (WRC-07)

Frequency band	Service*	Limit in dB(W/m <sup>2</sup> ) for angles of arrival (δ) above the horizontal plane			Reference bandwidth
		0°-5°	5°-25°	25°-90°	
...					
2 500-2 690 MHz 2 520-2 670 MHz 2 500-2 516.5 MHz (No. 5.404) 2 500-2 520 MHz 2 520-2 535 MHz (No. 5.403)	Fixed-satellite Broadcasting-satellite Radiodetermination-satellite Mobile-satellite Mobile-satellite (except aeronautical mobile-satellite)	-136 <sup>21</sup>	-136 + 11/20(δ - 5) <sup>21</sup>	-125 <sup>21</sup>	1 MHz
...					

<sup>21</sup> 21.16.19 Resolution [COM4/12] (WRC-07) shall apply. (WRC-07)

<sup>5</sup> 21.6.1 The equality of right to operate when a band of frequencies is allocated in different Regions to different services of the same category is established in No. 4.8. Therefore any limits concerning inter-Regional interference which may appear in ITU-R Recommendations should, as far as practicable, be observed by administrations.