

Filed via ECFS

October 19, 2005

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: *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*

NOTICE OF ORAL EX PARTE COMMUNICATION

Dear Ms. Dortch:

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, we are writing to advise that yesterday, the Wireless Communications Association International, Inc. ("WCA") met with Fred Campbell, acting Legal Advisor to Chairman Martin to discuss the Broadband Radio Service ("BRS") industry's proposal on reconsideration in IB Docket No. 02-364 for reducing the interference that relocating BRS channel 1 licensees will suffer upon migration to 2496-2502 MHz. WCA was represented by its president, Andrew Kreig, Karen Possner of BellSouth Corp., Trey Hanbury of Sprint Nextel Corp. and the undersigned. The three components of the proposal discussed were:

1. Adopting the Society of Broadcast Engineers' proposal under which Broadcast Auxiliary Service channels A8, A9 and A10 would be digitized and repacked so BAS would vacate the spectrum above 2483.5 MHz and thereby avoid interference with BRS and Mobile Satellite Service ("MSS") ancillary terrestrial component operations.
2. Eliminating 2496-2500 MHz from the MSS downlink allocation in the US to eliminate the interference BRS will otherwise suffer from MSS; and
3. Addressing the lack of any in-band limit on ISM emissions (other than those imposed by the Food and Drug Administration) by requiring ISM equipment to meet within

Marlene H. Dortch
October 19, 2005
Page 2

the 2496-2500 MHz band the same emission limits applicable above 2500 MHz. This proposal would only apply to ISM equipment that either is authorized under the certification, verification or declaration of conformity procedures on or after two years from adoption of new rules or is manufactured or imported on or after three years from adoption of new rules.

The attached presentation, a copy of which was provided to Mr. Campbell, outlines more specifically the points made by WCA during the meeting.

Should there be any questions concerning this submission, please contact the undersigned.

Respectfully submitted,

/s/ Paul J. Sinderbrand

Paul J. Sinderbrand
Robert D. Primosch

Counsel for the Wireless Communications
Association International, Inc.

Attachment



Making 2496-2500 MHz Usable For BRS Channel 1 Relocation

Presentation to Fred Campbell
and Emily Willeford
October 18, 2005

The Problem

- In the *R&O* in IB Docket No. 02-364, FCC reallocated 2496-2500 MHz for relocating BRS channel 1 as part of effort to clear spectrum for AWS auction.
- 2496-2500 MHz is already used for BAS, for MSS downlinks, and for ISM.
- Absent additional rule changes, BRS channel 1 at 2496-2500 MHz will suffer BAS, MSS and ISM interference.
- BAS, MSS and BRS all seek reconsideration.



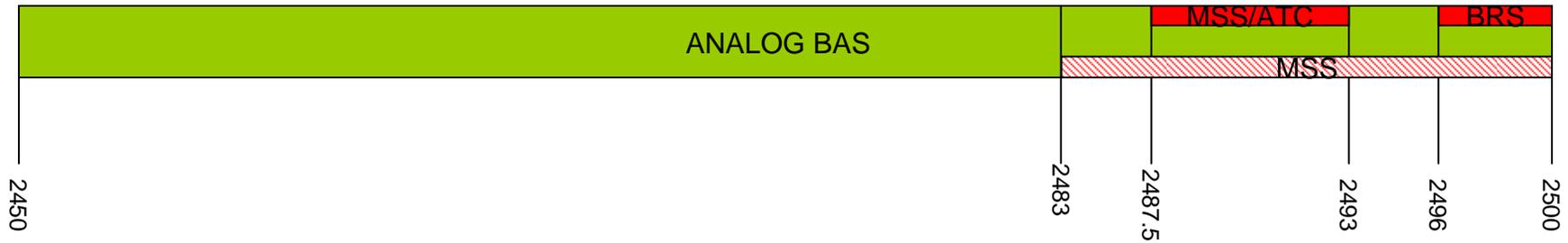
The Commission Should Adopt
SBE's Proposal For Repacking
BAS Channels A8, A9, A10
to 2450-2486 MHz
Through Digitization

BAS Cannot Coexist With BRS Or ATC

- BAS Channel A10 (2483.5-2500 MHz) is generally used for itinerant news gathering purposes, often from elevated platforms (blimps, helicopters) that are mobile and would have unobstructed views of BRS receivers.
- BRS and BAS (represented by SBE) agree that services cannot share the same spectrum because of mutually-destructive interference.
- SBE also establishes that BAS cannot share 2487.5-2493 MHz with MSS ATC.
- SBE has proposed elegant solution that should be adopted.

The SBE Proposal

Current 2450-2500 MHz Bandplan



Proposed 2450-2500 MHz Bandplan



The SBE Proposal

- BAS today operates channels A8, A9 and A10 from 2450-2500 MHz using analog technology.
- SBE proposes to reduce BAS allocation to 2450-2486 MHz and digitize BAS operations.
- Result is to remove BAS from 2487.5-2493 MHz band used for MSS/ATC and from 2496-2500 MHz band to be used for BRS.
- Costs of implementing SBE proposal should be shared by MSS and AWS F Block auction winner, who are the beneficiaries of the digitization.



The Commission Should
Eliminate The Big LEO MSS
Allocation at 2496-2500 MHz

BRS Cannot Coexist With MSS Downlink

- *R&O* requires BRS to accept interference suffered from MSS satellite downlinks and requires MSS to accept interference suffered from BRS operations.
 - Report and Order incorrectly assumed that because downlink use of 2496-2500 MHz is subject to PFD limits established by Appendix 2.1.2.3.1 of ITU Resolution 46, BRS operations would be protected.
 - Appendix 2.1.2.3.1 was designed to provide protection for analogue radio relay systems, and as Note 7 makes clear, the coordination values were not designed to assure protection to the ubiquitous fixed, portable and mobile cellularized digital offerings that will be the predominate offerings on BRS channel 1.

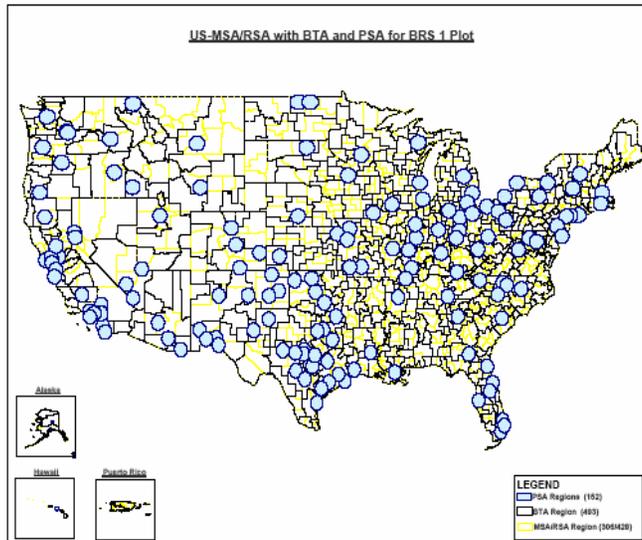
BRS and MSS Cannot Coexist (cont'd)

- BRS has demonstrated that BRS will suffer harmful interference from MSS satellite downlink.
- BRS showing is consistent with FCC findings.
 - FCC concluded that it “was not feasible” for MSS to share 2.5 GHz MHz and eliminated the MSS allocation there 3 years ago.
 - In the MSS/ATC proceeding, the FCC concluded that separately owned and operated terrestrial mobile services, such as BRS, cannot coexist with MSS.
 - Report ITU-R M.2041 “Sharing and adjacent band compatibility in the 2.5 GHz band between the terrestrial and satellite components of IMT-2000” concludes that sharing of 2.5 GHz band between MSS and IMT-2000 services is not feasible.
- Globalstar agrees here that BRS and MSS cannot share.

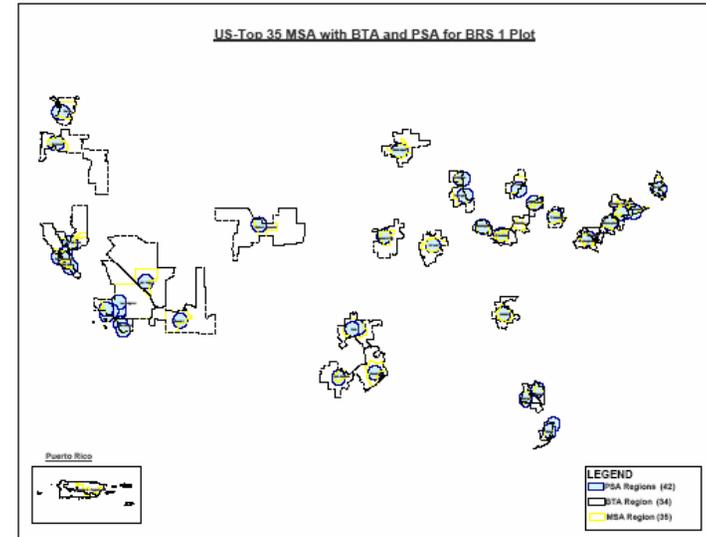
Globalstar “solution” is unworkable

- Restricting BRS relocation to top 35 MSAs would deny most BRS channel 1 licensees (who, unlike Globalstar, purchased spectrum at auction or in secondary market) relocation spectrum.

Current BRS 1 Licenses



Globalstar Proposal



Globalstar “solution” is unworkable

- Within top 35 MSAs, proposal to limit cumulative emissions to -209 dBW/Hz (5 dB below the thermal noise floor) would preclude effective coverage of even the MSA.
 - A single base station operating with an EIRP of 600 watts (the limit proposed by Globalstar) produces a -207.9 dBW/Hz receive signal level at a distance of 20 kilometers. And, since Globalstar is proposing to apply its -209 dBW/Hz standard to the accumulated signal levels from multiple base stations, the minimum required separation between the MSA border and the nearest base station will be even greater
- Globalstar has failed to establish that it has sufficient control over its downlink beams to avoid interference within the top 35 MSAs. Its control is not so finite that it can serve outside areas outside those MSAs without causing interference to BRS

Solution Is To Eliminate MSS Allocation

- The 2483.5-2500 MHz Big LEO allocation originally supported 4 licensees. Globalstar has been on notice that if it were the only CDMA MSS Big LEO licensee to survive, the Commission would explore recovering part of the 2.4 GHz band allocation even if Globalstar had satellites in orbit.
- There is ample MSS spectrum allocated within the US to meet public safety needs without regard to whether the Commission reallocates this spectrum for exclusive use by BRS.



The Commission Should
Impose Reasonable
Restrictions On ISM Emissions
At 2496-2500 MHz

Some Limit On ISM Power Is Essential

- Lack of any limit on ISM power at 2496-2500 MHz whatsoever makes cochannel sharing extremely challenging.
 - The Part 18 OOB limit above 2500 MHz provides little protection at 2496-2500 MHz, since sharp filters exist and such filters become less expensive every day.
- Sprint has provided analysis establishing that microwave ovens (MWOs) will interfere with BRS at distances well beyond one's own home.
- AHAM has conveniently ignores that in 1999 it represented to the Commission that ***“[t]he widespread use of ISM devices makes the [2400-2500 MHz band] a very difficult band in which to operate and may be particularly difficult for relatively low-power mobile services covering large areas.”***
- Other ISM devices operate at much higher power and present greater threats of interference.
- Future ISM devices may be even more problematic.

Only BRS Has Sought Solution

- BRS interests have put forth good faith proposals designed to accommodate legitimate concerns of ISM community, while providing BRS with a degree of protection going forward.
- ISM device vendors have not advanced any proposal, and have refused to provide FCC with any hard data regarding their emissions at 2496-2500 MHz. The record is barren, save for the NTIA study of MWOs.
 - AHAM has mischaracterized BRS positions regarding NTIA study of MWOs and distorted the facts. Although AHAM criticizes NTIA study, it has yet to provide the Commission its assessment of MWO emissions at 2496-2500 MHz.
 - CISPR 11 measurement procedures can be applied between 2496-2500 MHz and FDA studies can be extrapolated
 - BRS is not opposed to special treatment of devices that are heavily shielded, but Fusion UV has refused to meet to discuss specifics.

BRS Proposal Should Be Adopted

- As a compromise, BRS has proposed use at 2496-2500 MHz of Part 18 limits that current apply above 2500 MHz, although those limits will not fully protect BRS from all interference.
- BRS proposal only applies to ISM equipment that either is authorized under the certification, verification or declaration of conformity procedures on or after two years from adoption of new rules or is manufactured or imported on or after three years from adoption of new rules .

BRS Proposal Should Be Adopted

- AHAM claim that adoption would wreck havoc on MWO vendors is belied by NTIA showing that for most MWOs, emissions within 2496-2500 MHz are lower than above 2500 MHz.

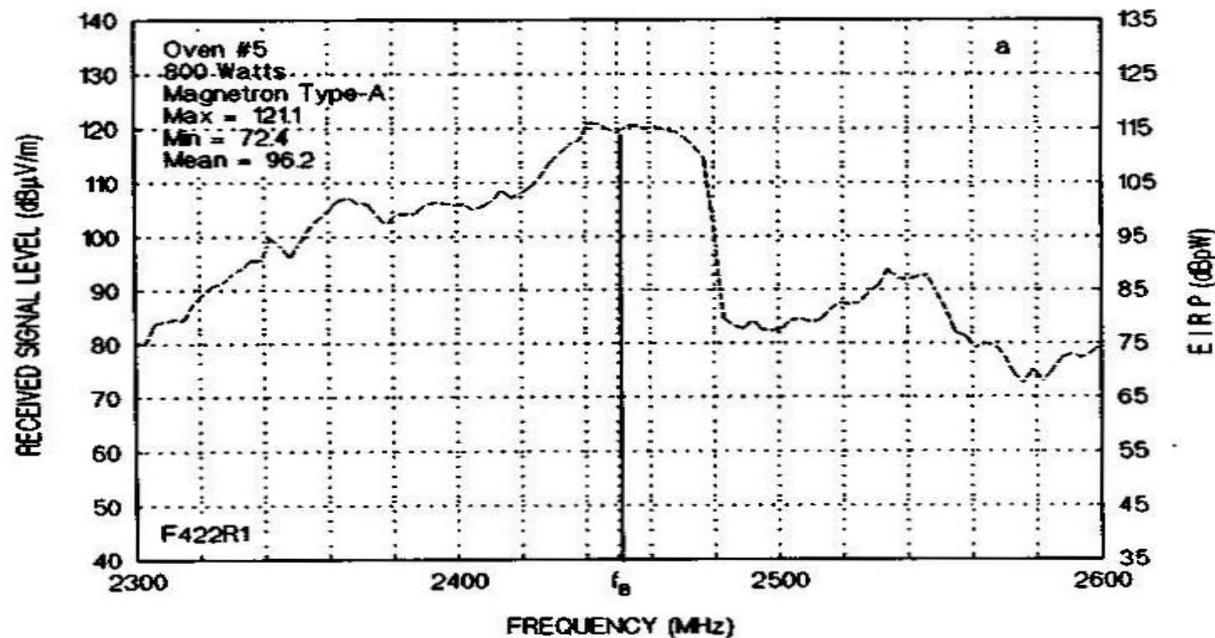


Figure 5-6a. Oven #5, Frequency vs. Amplitude.

BRS Proposal Should Be Adopted

- Microwave oven vendors have failed to refute evidence that they readily meet proposed limits, and instead have mischaracterized BRS position and played “hide the ball” with facts within their possession.
- Claim that treaty obligations bar US from imposing emission limits at 2496-2500 MHz is incorrect.
 - FDA imposes limits, and FCC is also free to where the public interest is served.