

February 14, 2008

Ms. Marlene H. Dortch
Secretary
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

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 - WT Docket No. 02-68

NOTICE OF ORAL EX PARTE COMMUNICATIONS

Dear Ms. Dortch:

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, I am writing to advise the Commission that yesterday, Terri Natoli on behalf of Clearwire Corporation, Trey Hanbury on behalf of Sprint Nextel Corporation and the undersigned on behalf of the Wireless Communications Association International, Inc. ("WCA") met with Aaron Goldberger, Legal Advisor to Chairman Martin, and Fred Campbell, Chief of the Wireless Telecommunications Bureau, to discuss the severe problems that the phenomenon of "ducting" presents for the licensing of Broadband Radio Service facilities in the Gulf of Mexico and the interference threat that Gulf operations will pose to the provision of broadband wireless services to the 20+ million Americans who reside along the Gulf.

The issues discussed are more specifically summarized in the attached PowerPoint presentation. Following the meetings, the undersigned provided to Messrs. Goldberger and Campbell copies of WCA's August 18, 2006 Opposition to Petitions for Reconsideration and its

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January 10, 2005 Comments in response to the *Further Notice of Proposed Rulemaking* in these proceedings.

Pursuant to Section 1.1206(b) of the Commission's Rules, an electronic copy of this letter is being filed with the office of the Secretary. Should you have any questions regarding this presentation, please contact the undersigned.

Respectfully submitted,

/s/ Paul J. Sinderbrand

Paul J. Sinderbrand

Counsel for the Wireless Communications
Association International, Inc.

Attachment

cc: Aaron Goldberger
Fred Campbell



**FACILITATING WIRELESS
BROADBAND IN THE 2.5 GHz
BAND NEAR THE GULF OF
MEXICO**

February 2008



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- Over 20 million people reside in BTAs bordering on the Gulf of Mexico.
 - Rules governing 2.5 GHz in and around the Gulf of Mexico must achieve two objectives.
 - Not pose a risk of interference from Gulf-based to land-based systems; and
 - Not so hamstringing land-based network designs that service to these 20+ million people is unreasonably hampered.

“Ducting” over the Gulf cannot be ignored



- “Ducting of signals, including MDS/ITFS microwave signals, enables these signals to travel relatively unattenuated for distances far greater than would occur without the presence of the duct” 17 FCC Rcd 8446, 8463-64 (2002).
- Prior to 2004 rewrite of 2.5 GHz rules, Section 21.902(c)(1)(ii) imposed special interference protection obligations on MDS stations that would propagate over large bodies of water.

The 2002 *BRS Gulf NPRM*



- “Given the much greater population density of the land-based relative to Gulf systems, the steps taken to modify one land-based main or booster station so that it can fully protect a very few Gulf stations might mean the loss of service to hundreds or thousands of households in the urban or suburban area the main or booster station was designed to serve. We believe this tradeoff would be unacceptable and we are therefore proposing that land-based stations be allowed to provide a lesser degree of protection to Gulf stations than Gulf stations must provide to land stations.” 17 FCC Rcd 8446, 8467 (2002).
- Proposals in *Gulf NPRM* were superseded by adoption of new BRS/EBS rules

The Current Rules Will Not Work



- Given unpredictability of ducting, land-based licensees will have to severely limit their signal strengths near the Gulf to assure compliance with the 47 dBuV/m signal strength limit at their GSA boundary.
- It will be virtually impossible for Gulf-based licensees to assure compliance with 47 dBuV/m limit and still provide service.
- Height benchmarking rule, which provides protection against co-channel interference, assumes standard propagation and will not provide protection against interference to land-based systems when ducting occurs.

WCA Proposal



- Gulf Service Area must exclude the 35 mile radius GSA of any incumbent BRS or EBS licensee.
- As with PCS, BRS licenses for BTAs bordering on the Gulf coast should extend at least to the boundaries of the counties comprising the BTA.
- Consistent with all Part 27 services, the Gulf Service Area should have an innermost boundary 12 nautical miles from the Gulf coastline.

WCA Proposal



- Borrowing approach adopted in Cellular Radio Service, establish a “Gulf Coastal Zone” between BRS GSA and Gulf Service Area. Either licensee should be permitted to service Gulf Coastal Zone, subject to compliance with technical rules.
- Per the *BRS Gulf NPRM*, a land-based system should be deemed to be in compliance with the technical rules if it can demonstrate using the Epstein/Peterson propagation model that it is predicted to comply with the signal strength limit in the absence of ducting. Gulf-based systems would be required to comply with technical rules, even if ducting occurs.