

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Services and Operational Fixed Microwave Licensees)	WT Docket 10-153
)	
Request for Interpretation of Section 101.141(a)(3) of the Commission's Rules Filed by Alcatel- Lucent, Inc., et al)	WT Docket 09-106
)	
Petition for Declaratory Ruling Filed by Wireless Strategies, Inc.)	WT Docket 07-121
)	
Request for Temporary Waiver of Section 101.141(a)(3) of the Commission's Rules Filed by Fixed Wireless Communications Coalition)	RM-11417
)	

To: The Commission

**EIBASS *Ex Parte* Response To the November 4 GSO and
November 9 WSI *Ex Parte* Filings**

1. Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS) hereby respectfully submits its response to the November 4, 2011, *ex parte* filing of Global Spectrum Advisors (GSO) and the November 9, 2011, *ex parte* filing of Wireless Strategies Incorporated (WSI).

I. WSI *Ex Parte* Filing

2. EIBASS is pleased to learn that WSI, Comsearch and EIBASS can agree on one point: It is a microwave's antenna electrical performance, and not its physical size, that counts in determining whether the antenna meets FCC Category A or Category B requirements. Size does *not* matter; size is irrelevant.

3. However, EIBASS cannot agree with WSI's proposal that licenses should be allowed to install sub-Category B transmitting antennas, or sub-Category A transmitting antennas in

EIBASS *Ex Parte* Response to WSI and GSO *Ex Parte* Filings to WT Docket 10-153

“frequency congested areas,” and then be required to either reduce transmitter power, or install an upgraded transmitting antenna, if a newcomer can show that the use of a sub-Category B antenna, or a sub-Category A antenna in a frequency congested area, is precluding a new proposed path.

4. There is a problem with the WSI approach, that gives as an example an 8 dB reduction in the transmitter power output (TPO) of a path installed with a sub-Category B transmitting antenna in order to eliminate a preclusion to a newcomer path using fully compliant microwave antennas. WSI suggests that an 8 dB attenuator pad could be used to reduce the TPO. The flaw is that there is no reliable means for an outside party to confirm whether the power reduction has in fact occurred, or, if made, that the TPO has not later been restored to its original value (perhaps because of resulting path reliability problems). Whereas at least an antenna upgrade is capable of being physically verified, although even that would require a site visit. EIBASS submits that all of the burden should be placed on the hypothetical shortcut-taking licensee that is willing to take the risk of installing a sub-standard microwave antenna. Thus, a sub-standard antenna should only be allowed at the *receive* end, never at the *transmit* end. This will place the interference risk on the path with the sub-standard receiving antenna, and will avoid the precluding effect of a sub-standard transmitting antenna.

5. A second problem with an only-if-triggered transmitting antenna dish upgrade is that it would require the newcomer to wait until the path with its sub-Category B (or A, as appropriate) antenna to first be upgraded. Such an upgrade might be delayed for months if a hypothetical cutting-corners licensee with a non-compliant transmitting antenna wants to engage in time-delay filings, disputing whether an upgrade to an FCC-compliant antenna is really necessary. This approach would also unnecessarily increase the engineering and legal costs to the newcomer.

6. Therefore EIBASS opposes in all cases allowing sub-Category B *transmitting* antennas in non-frequency congested areas, or allowing sub-Category A *transmitting* antennas in frequency congested areas. Since WSI has made claims that its physically-small, distributed radiating element microwave antenna meets not just FCC Category B criteria but Category A performance (albeit with no credible documentation), EIBASS fails to see why there is any need to allow sub-Category B (or A, as appropriate) transmitting antennas: Just install one of the miraculous mysterious antennas. Of course, this should not be permitted until after WSI has provided credible evidence of the performance of its antennas, by an independent third party, and submitted that information to the Commission, with an acknowledgement of both Section 1.17 of

the FCC rules (“Truthful and Accurate Statements to the Commission”) and Title 18, Section 1001, of the United States Code (statements to federal officials).

7. However, EIBASS would have no objection to allowing the routine use of sub-Category B, or sub-Category A, as appropriate, *receiving* antennas, so long as a newcomer station would only be required to show protection that would result if the existing link had installed a Category B (or Category A, as appropriate) receiving antenna. This approach would then place the risk of a sub-Category B (or A) receiving antenna where it belongs: On a hypothetical corner-cutting licensee. It would also avoid the potential time-delay issues of waiting until the corner-cutting licensee had first upgraded its transmitting antenna.

II. GSO *Ex Parte* Filing

8. The GSO *ex parte* filing states that it supports WSI-requested “minor revisions” to Section 101.115(f) of the FCC rules, because use of “non-compliant antennas will not cause harmful interference or block new applicant paths.” GSO is only half right. EIBASS agrees that use of a non-compliant transmitting antenna will not cause interference. This is also the case for a new path with a compliant transmitting antenna. This is because any new path must demonstrate protection of existing paths; it is just that such a showing is more difficult with a non-compliant transmitting antenna.

9. However, EIBASS believes that GSO is wrong when it also claims no blockage of new applicant paths. As already noted, a new applicant claiming path preclusion as a result of a non-compliant transmitting antenna for an existing path will first have to contact the existing licensee and request a power reduction or an upgrade in the existing path’s transmitting antenna. The existing licensee could drag out that process for months, or even years. Thus, a sub-Category B (or A, as appropriate) transmitting antenna is inherently preclusive and spectrum inefficient.

III. Summary

10. EIBASS is pleased that there is agreement that it is only the electrical performance, and not the physical size, of a microwave antenna that matters. So long as the electrical performance is credible, EIBASS applauds the use of new technologies that can achieve Category A or Category B performance requirements with a physically smaller antenna. However, the issues of interference and preclusion are separate, and should not be confused. EIBASS and many of our colleagues in the broadcast engineering community eagerly await documented and credible proof of the performance of WSI's miraculous, mysterious antenna.

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