

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of)
)
Revision of Part 15 of the Commission's Rules) ET Docket 98-153
Regarding Ultra-Wideband Transmission)
Systems)

XTREMESPECTRUM, INC.
REPLY TO OPPOSITIONS TO
PETITIONS FOR RECONSIDERATION

August 13, 2002

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Pursuant to Section 1.429(g) of the Commission's Rules, XtremeSpectrum, Inc. hereby replies to the Comments of AT&T Wireless Services, Inc. on Petitions for Reconsideration (filed July 31, 2002) (AT&T); Comments in Support of Petition for Reconsideration of The Wireless Communications Association International, Inc. (filed July 31, 2002) (WCA); and Consolidated Opposition to, and Comments in Support of, Petitions for Reconsideration of U.S. GPS Industry Council; (filed July 31, 2002) (GPSIC).¹

A. The AT&T and WCA Pleadings Must Be Dismissed Without Consideration.

AT&T and WCA have filed untimely requests for reconsideration, despite their captions as "Comments" on others' petitions. The WCA pleading seeks amendment of the UWB rules at MMDS/ITFS frequencies, and both WCA and AT&T request reconsideration of the UWB rules at PCS frequencies. Neither of these parties filed a timely Petition for Reconsideration.

¹ XtremeSpectrum manufactures ultra-wideband communications systems as its sole business, and takes no position on ultra-wideband radar applications. In particular, XtremeSpectrum takes no position on Opposition of Time Domain Corporation (filed July 31, 2002); and Opposition of the Short Range Automotive Radar Frequency Allocation Group (filed July 31, 2002).

The First Report and Order explained why the Commission believes its Rules adequately protect MMDS/ITFS receivers.² WCA disagrees with that rationale.³ WCA had ample time to raise its objection on reconsideration, but that time has now passed. Similarly, AT&T and WCA could have raised timely objections to UWB rules in the PCS band (as three other parties did), but did not do so.

The Commission's Rules plainly state that requests for reconsideration must be filed no later than 30 days from the date of public notice of the action for which reconsideration is sought.⁴ That period expired eight weeks ago, on June 17, 2002.⁵

The 30-day filing period was established by Congress.⁶ The Commission, supported by the courts, has repeatedly held it lacks authority to accept reconsideration requests after that period.⁷ And the Commission has consistently refused to allow parties to evade the deadline by mis-titling their pleadings.⁸

² *Ultra-Wideband Transmission Systems*, 17 FCC Rcd 7435 at para. 66 (2002) (First Report and Order).

³ WCA at 3-5.

⁴ 47 C.F.R. Sec. 1.429(d).

⁵ Public notice of the First Report and Order appeared in *Ultra-Wideband Transmission Systems*, 67 Fed. Reg. 34852 (May 16, 2002).

⁶ 47 U.S.C. Sec. 405.

⁷ *E.g.*, *Virgin Islands Telephone Corporation v. FCC*, 989 F.2d 1231, 1237 (D.C. Cir. 1993); *Customer Proprietary Network Information*, 14 FCC Rcd 15550 at para. 132 n.318 (1999); *Federal-State Joint Board on Universal Service*, 14 FCC Rcd 1945 at para. 28 (1998); *American Health Systems*, 9 FCC Rcd 3303 at para. 7 (1994).

⁸ *E.g.*, *Federal, State and Local Public Safety Agency Communication Requirements*, 15 FCC Rcd 16844 at para. 37 n.113 (2000) (rejecting contention in opposition pleading as untimely presented, rather than being timely raised in petition for reconsideration).

However it is styled, the WCA filing in fact is a late-filed reconsideration petition; and the issues raised by AT&T likewise belong in a reconsideration request. The Commission lacks statutory authority to consider these after June 17. They must be summarily dismissed.

B. XtremeSpectrum Has Previously Responded to the PCS-Band Issues Raised by AT&T and WCA.

AT&T devotes all of its pleading, and WCA several paragraphs, to rearguing points made earlier in the proceeding by three other parties, relating to the PCS band.⁹

XtremeSpectrum has responded to all of these points in detail.¹⁰ We refer the Commission to our prior pleading, and will not address the issues further here.

C. WCA Does Not Support Its Concerns About Interference to MMDS/ITFS

Even if WCA had raised its concerns about interference into MMDS/ITFS frequencies on a timely basis, no change to the UWB rules would be warranted.

First, WCA has provided no technical support for its disagreement with the Commission's analysis. WCA's own technical analysis in opposition is not merely inadequate, but nonexistent. WCA does not even state -- much less defend -- the UWB levels it thinks would be appropriate for the MMDS/ITFS bands.

See also Thomas Gutierrez, Esq. Request for a Remedial Bidding Credit, 2002 FCC LEXIS 3299, DA 02-1574 (released July 8, 2002) (dismissing "informal request" as untimely petition for reconsideration); *Frequency Coordination in the Private Land Mobile Radio Services*, 14 FCC Rcd 12752 at para. 11 (1999) (denying application as untimely petition for reconsideration).

⁹ See the Petitions for Reconsideration filed by Cingular Wireless LLC; Qualcomm Inc.; and Sprint Corp.

¹⁰ See *Opposition to Petitions for Reconsideration of XtremeSpectrum, Inc.* at 10-22, 27-29 (filed July 31, 2002), and the attached Technical Statement at I-iv and ix.

Second, WCA ties its request for MMDS/ITFS to Sprint PCS's petition for lower UWB limits in the PCS band.¹¹ As its sole justification for linking the two, WCA refers to a "long-standing legal principle" that like services should be accorded like regulatory treatment.¹² But WCA neither shows why PCS and MMDS/ITFS are "like services" (other than both being used indoors), nor offers legal support for like treatment of the two.¹³ Taken a small step further, WCA's argument would require that MMDS/ITFS services become subject to a presumption of mandatory Title II regulation, as PCS services are -- an outcome that WCA would likely disfavor.

Third, WCA makes no response to the Commission's observation that millions of RF products are allowed to place out-of-band emissions into the MMDS/ITFS frequencies at the same level that was proposed in the Notice.¹⁴ Yet the UWB levels ultimately adopted are 10 and 20 dB *lower* for indoor and handheld devices, respectively, making UWB much less of a threat than other devices.

¹¹ WCA at 7.

¹² *Id.*

¹³ WCA cites only *Melody Music, Inc. v. FCC*, 345 F.2d 730 (D.C. Cir. 1965). There, the Commission had held the producers of a rigged quiz show unfit to hold a broadcast license, even though it had granted licenses to the network that had carried the show. The court remanded for explanation of the disparate treatment. *Id.*, 345 F.2d at 732-33. WCA has not explained how this case supports identical technical treatment of technically different wireless services that serve very different purposes.

¹⁴ First Report and Order at para. 167.

Fourth, WCA implies that indoor, desktop MMDS/ITFS equipment will operate at the same 35-mile range as outdoor-mounted video antennas.¹⁵ In fact the desktop range will have to be much shorter, typically using a 1-3 mile cell architecture.

Finally, WCA overlooks the fact that the greatest source of interference to MMDS/ITFS is other MMDS/ITFS systems. Out-of-band power levels from adjacent channel response stations can be as high as 8 dBW at the edge of a 6 MHz channel, and as high as 3 dBm in the center of a channel.¹⁶ Lower power stations can put -1 dBm at the band edge and -13 dBm at the center of the adjacent 6 MHz channel.¹⁷ These levels overwhelm anything from UWB. Even at the boundary of a protected service area, the aggregate power flux density can reach -73 dBW/m² -- approximately 12 dB more signal than can be expected from an indoor-level UWB emitter 1 meter from an MMDS/ITFS receiver.¹⁸ MMDS/ITFS is its own worst enemy, a far more likely source of interference than UWB.

In short, even if WCA had filed its comments by the reconsideration deadline, it still would not have made its case that UWB levels are too high in the MMDS/ITFS bands.

¹⁵ WCA at 4.

¹⁶ 47 C.F.R. Secs. 21.908, 21.904 (MMDS); 47 C.F.R. Secs. 74.938, 74.935 (ITFS).

¹⁷ *Id.*

¹⁸ 47 C.F.R. Secs. 21.902 (MMDS), 74.903 (ITFS).

D. The Issues Raised by U.S. GPS Industry Council Have Been Fully Briefed.

GPSIC raises two issues relevant to XtremeSpectrum: first, it seeks to ensure reliable operation of E911 service; and second, it seeks protection for DARS and other service providers, especially from UWB aggregate emissions.

XtremeSpectrum has responded to both issues at length. With respect to E911, we note that GPSIC does not challenge UWB levels in the GPS band, but rather appears to question whether UWB emissions levels adequately protect the PCS link. XtremeSpectrum has already addressed this specific point.¹⁹

We also addressed GPSIC's concerns about DARS and aggregate emissions, in opposing the DARS licensees' Petition for Reconsideration.²⁰ We specifically explained how the DARS analysis relied on incorrect technical assumptions. On the aggregation issue, we explained that UWB emissions do add in principle, but in practice they fall off so quickly with distance there is little signal to add. For example, the combined effect of ten UWB emitters, at 10 meters from a victim receiver, is less than 1% the effect of a single emitter 3 meters away.²¹

¹⁹ See XtremeSpectrum Opposition at 23-24, and text referenced therein.

²⁰ XtremeSpectrum Opposition at 22-23 and the attached Technical Statement at iv-vii.

²¹ XtremeSpectrum Opposition at 27-29. The calculation appropriately assumes same-room propagation losses at $1/R^2$ for the emitter 3 meters away, and $1/R^4$ for emitters 10 meters away.

CONCLUSION

The requests of AT&T and WCA, pertaining to protection of the PCS and MMDS/ITFS bands, are untimely and must be dismissed. XtremeSpectrum has responded previously to the PCS issues, and we explain here why the MMDS/ITFS issues also lack merit. Finally, we note that the issues raised by GPSIC have been fully briefed, and that GPSIC adds nothing new to the debate.

With the pleading cycle now complete, it is plain that none of the reconsideration petitions bearing on UWB communications devices has justified rethinking the rules. The Commission should deny these petitions and leave the rules for communications devices unchanged.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Deborah N. Lunt, a secretary for the law firm of Fletcher, Heald & Hildreth, P.L.C., hereby certify that a true copy of the foregoing “Reply to Oppositions to Petitions for Reconsideration” was sent this 13st day of August, 2002 via first class, United States mail, postage prepaid to the attached Service List, except by hand delivery and e-mail as indicated.

Deborah N. Lunt

***Denotes Hand Delivery and E-mail**

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