RECEIVED
DEC 7 1998
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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

In the Matter of	)	
	)	
Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems	)))	Docket No. 98-153

To: The Commission

COMMENTS OF
THE CONSUMER ELECTRONICS MANUFACTURERS ASSOCIATION
AND
THE NATIONAL ASSOCIATION OF BROADCASTERS

The Consumer Electronics Manufacturers Association ("CEMA") and the National Association of Broadcasters ("NAB"), pursuant to Section 1.415 of the Commission's Rules,[1] hereby respectfully submit its comments in response to the Notice of Inquiry ("*Notice*") in the above-captioned proceeding.[2] The Commission, on its own motion, initiated an inquiry to assess the appropriateness of permitting the operation of ultra-wideband (UWB) radio systems on an unlicensed basis under Part 15 of its rules. According to the Commission, UWB operation could provide an improved method for providing radar applications where precise distance resolution is required and for providing covert voice or data communications that overcome multipath problems.[3] Through its *Notice*, the Commission is seeking comments on the standards

1 47 C.F.R. § 1.415.

2 *In the Matter of Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems*, Docket No. 98-153, Notice of Inquiry, FCC 98-208 (rel. Sept. 1, 1998) ("*Notice*"); 63 Fed. Reg. 50,184 (Sept. 21, 1998).

3 *Id.* at ¶ 1.

No. of Copies rec'd 0+9
List ABCDE

and operating requirements that should be applied to UWB systems to prevent interference to other radio services.[4]

CEMA and NAB are concerned that the operation of UWB radio systems on an unlicensed basis under Part 15 will cause interference within restricted bands and the TV broadcast bands. While CEMA and NAB appreciate the beneficial effects imagined by UWB technology, the Commission must ensure that it strikes an equitable balance between the needs of the public for the services provided by non-licensed devices and the need to ensure that these devices do not cause harmful interference to licensed radio services. Part 15 of the Commission's rules permits the operation of low power radio frequency devices without a license from the Commission or the need for frequency coordination. The technical standards for Part 15 are designed to ensure that there is a low probability that these devices will cause harmful interference to other users of the spectrum. The primary operating conditions under Part 15 are that the operator must accept whatever interference is received and must correct whatever interference is caused. Therefore, should harmful interference occur, the operator is required to immediately correct the interference problem, even if correction of the problem requires ceasing operation of the system causing the interference.[5]

Clearly, it would be inconsistent with the fundamental tenets of the Commission's foregoing policies regarding Part 15 devices if the Commission were to amend its rules to accommodate the provision of unlicensed UWB radio systems, knowing that such systems can cause harmful interference within restricted bands and the TV broadcast bands.[6] In the *Notice*,

---

4 *Id.*

5 47 C.F.R. § 15.5.

6 *See Amendment of Part 15 of the Commission's Rules to Permit Operation of Biomedical Telemetry Devices on VHF TV Channels 7-13 and on UHG TV Channels 14-46*, ET Docket No. 95-177, Report and Order, 12 FCC Rcd 17828, 17833-34 & n.35 (1997) ("The general emission limits contained in 47 C.F.R. §

the Commission observed: "it is difficult, if not impossible, for UWB systems to avoid placing fundamental emissions within the restricted bands or the TV broadcast bands."[7] Further, the Commission must also consider that this problem would appear to be exacerbated by the cumulative impact of emissions if there is a large proliferation of UWB devices.

Before the Commission proposes any Part 15 rule changes, it must fully explore whether the restricted bands and the televisions bands would not serve as a poor environment into which to launch UWB service. Fundamentally, the Commission must not permit operation of UWB radio on an unlicensed basis under Part 15 until it is absolutely certain that the wide bandwidth of UWB systems emissions do not result in fundamental emissions being transmitted into the TV broadcast and other restricted frequency bands which is prohibited under Part 15 rules. Protection of the TV broadcast band is especially critical in light of the broadcasters' recent launch of DTV service. Any interference which impairs DTV reception could significantly delay and hamper the transition to DTV.

For the foregoing reasons, CEMA and NAB urge the Commission to refrain from amending its Part 15 rules until technical standards and operating requirements can be

---

15.209 are applied to the unwanted emissions produced by most other Part 15 devices. They were developed with the specific intent of preventing interference to television reception and have proved to be effective in this regard. . . . The Commission also continues to believe that unwanted emissions should be reduced to the greatest extent that is economically feasible in order to minimize background noise levels within the radio spectrum.").

7 *Notice* at ¶ 11.

established that will ensure that UWB technology will not result in harmful interference within restricted bands and television broadcast bands.

Respectfully submitted,

CONSUMER ELECTONICS MANUFACTURERS ASSOCIATION
2500 Wilson Boulevard
Arlington, VA 22201
(703) 907-7600

By:

Gary Klein / BEB

Gary Klein
Vice President
Government and Legal Affairs

Michael Petricone
Staff Director
Government and Legal Affairs

Of Counsel:

David A. Nall
Benigno E. Bartolome
Squire, Sanders & Dempsey L.L.P.
1201 Pennsylvania Avenue, N.W.
P.O. Box
Washington, D.C. 20044-0407
(202) 626-6600

NATIONAL ASSOCIATION OF BROADCASTERS
1771 N Street, N.W.
Washington, D.C. 20036
(202) 429-5430

By:

Henry L. Baumann / BEB

Henry L. Baumann
Executive Vice President for Legal and Regulatory Affairs

Jack Goodman / BEB

Jack Goodman
Senior Vice President for Legal and Regulatory Affairs

Barry D. Umansky / BEB

Barry D. Umansky
Deputy General Counsel

Kelly Williams
Director of Engineering
NAB Science and Technology

Dave Wilson
Manager, Technical
Regulatory Affairs
NAB Science and Technology

December 7, 1998