DOCKET FILE COPY ORIGINAL

PUBLIC SAFETY PSWN PROGRAM WIRELESS NETWORK

Public Safety Wireless Network

Saving Lives and Property Through Improved Interoperability

November 21, 2002

RECEIVED

NOV 22 2002

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
12th St. Lobby, TW–A325
Washington, DC 20554

Re: Comments to the Federal Communications Commission Report, *Measured Emissions Data For Use In Evaluating The Ultra-Wideband (UWB) Emissions Limits In The Frequency Bands Used By The Global Positioning System (GPS)*, DA No. 02-2786, In the Matter of Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems, ET Docket No. 98-153.

Dear Ms. Dortch:

On behalf of the Public Safety Wireless Network (PSWN) Program and pursuant to Section 1.51 of the Commission's Rules, 47 C.F.R. § 1.51 (2000), enclosed herewith for filing are an original and four (4) copies of the PSWN Program's Comments in the above-referenced proceeding.

Kindly date-stamp and return the additional, marked copy of this cover letter and filing.

Should you require any additional information, please contact the undersigned.

Respectfully submitted,

Steven Proctor

Steven Proctor
Executive Director
Utah Communications Agency Network
Executive Vice-Chair,
PSWN Executive Committee

014

RECEIVED

NOV 22 2002

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems	)	DA No. 02-2786
	)	ET Docket No. 98-153
	)	
	)	

November 21, 2002

COMMENTS OF THE PUBLIC SAFETY WIRELESS NETWORK PROGRAM

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems	)	DA No. 02-2786
	)	ET Docket No. 98-153
	)	
	)	

To: The Commission

COMMENTS OF THE PUBLIC SAFETY WIRELESS NETWORK PROGRAM

1. The Public Safety Wireless Network (PSWN) Program[1] respectfully submits the following Comments to the above-referenced docket.[2] For the reasons discussed below, the PSWN Program supports stringent testing to verify that new technologies will not interfere with existing public safety wireless communications pursuant to 47 CFR Sections 1.415 and 1.419 of the Commission's Rules.

I. STATEMENT OF INTEREST

2. As an entity dedicated to fostering public safety wireless communications interoperability throughout the Nation, the PSWN Program recognizes the need to provide public safety agencies with new devices to fulfill their responsibilities. However, the PSWN Program is concerned

[1] The PSWN Program is a federally funded initiative operating on behalf of all local, state, federal, and tribal public safety agencies. The Department of Justice and the Department of the Treasury are jointly leading the PSWN Program's efforts to plan and foster interoperability among public safety wireless networks.

[2] *See* Public Notice DA 02-2786, Measured Emissions Data For Use In Evaluating The Ultra-Wideband (UWB) Emissions Limits In The Frequency Bands Used By The Global Positioning System (ET Docket No. 98-153), October 22, 2002.

about the need for standards and regulations to monitor the emission level of new ultra-wideband (UWB) technologies to ensure the prevention of harmful interference.

II. BACKGROUND

3. In support of the public safety community at large, the PSWN Program has a significant concern regarding the development of any new technology that could potentially interfere with the operation of public safety wireless communications. The PSWN Program is enthusiastic about the potential of new and emerging technologies to substantially enhance the roles of public safety users, but remains cautious regarding the introduction of these applications for unlicensed use. As other commenters, such as the Federal Law Enforcement Wireless Users Group (FLEWUG) have previously stated,[3] the Commission should enlist the aid and expertise of the National Telecommunications and Information Administration (NTIA) in conducting the appropriate testing for any new Part 15 technology.

III. DISCUSSION

4. The PSWN Program reiterates its support of conservative emission limits to ensure that any devices approved for unlicensed use will not interfere with any existing public safety wireless communications. Until manufacturers can conclusively demonstrate that these new UWB applications will not create interference with existing public safety, global positioning system, and other necessary and sensitive applications, the Commission must maintain emission levels that are certain not to conflict with other uses that employ the affected bands. The PSWN Program also recommends that any new devices considered for deployment would be subject to thorough field and laboratory testing. Public safety users are concerned that the cumulative

[3] *See* FLEWUG Comments in Response to the NTIA Assessment of Compatibility Between Ultrawideband Devices and Selected Federal Systems, In the Matter of Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems, ET Docket No. 98-153, at pps. 2–3.

effect of additive noise from the operation of multiple UWB devices in one geographic area will raise the noise floor and could reduce the receiver sensitivity of other wireless devices, potentially making it more difficult to intelligibly decode the signal because of this increased interference. The NTIA has indicated previously that additional protection, such as the use of effective isotropically radiated power limits, rather than required distance separation, may have to be established to assure compatibility between UWB devices and federal telecommunications systems.[4] Rigorous testing of new devices will make certain that those products will not cause harmful interference to existing public safety voice and data services.

5. The PSWN Program requests that appropriate emission limits remain in place to eliminate potential sources of interference because many of the UWB applications under development and consideration for deployment have not been studied at this time. The PSWN Program recommends that the Commission err on the side of caution and continue to work with the NTIA in setting emission limits that do not adversely affect public safety users.

6. The PSWN Program considers the proliferation of new technology under Part 15 of the Commission's Rules[5] to be potentially disruptive to public safety operations and urges the Commission to thoroughly review interference issues with existing wireless applications. The PSWN Program notes regulatory and procedural parallels between the current UWB rulemaking and prior decisions by the Commission with respect to setting emission limits for the 800 megahertz (MHz) band. In that rulemaking, the established emissions limits reflected insufficient experience with the effects of widespread commercial mobile radio service (CMRS)

---

[4] *See* NTIA Special Publication 01-43, U.S. Department of Commerce, January 2001, Section 6.2, para. 1.
[5] *See* 47 CFR § 1.419.

on public safety operations, resulting in many well-documented incidents of interference in that band. This interference has created situations in which the failure of public safety systems has unnecessarily risked life and property, even while CMRS operators continue to comply with the emission limits set in that rulemaking. Public safety users cannot afford the time and cost necessary to resolve interference on an incident-by-incident basis. Because UWB devices transmit from below 960 MHz to 29 gigahertz (GHz), the technology may also have adverse effects on equipment being developed for deployment in the 4.9 GHz band, where the Commission recently allocated 50 MHz of spectrum for public safety use.[6] The benefits of these new technologies could easily be overshadowed by the damage that could be caused if appropriate limitations on emissions are not established.

7. For that reason, the PSWN Program supports the United Telecom Council's (UTC) recommendations that would amend the Commission's Rules to require that the party creating interference shall resolve any reported interference, even if "the interferor is operating within published specifications while causing that interference."[7] The UTC drafted these recommendations as part of the WT 02-55 proceeding,[8] and the program asks that the Commission apply the same principle in this rulemaking. In addition, the PSWN Program recommends that the Commission consider amending its Rules in this proceeding to add the

---

[6] *See* In the Matter of The 4.9 GHz Band Transferred from Federal Government Use Second Report and Order and Further Notice of Proposed Rulemaking, WT Docket 00-32, Rel. February 27, 2002.

[7] *See* Reply Comments of the United Telecom Council, In the Matter of Improving Public Safety Communications in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, August 7, 2002, p. 20.

[8] *See* In the Matter of Improving Public Safety Communications in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, Notice of Proposed Rulemaking, WT Docket 02-55, Rel. March 15, 2002.

caveat that in those situations, any costs incurred to eliminate interference shall not be borne by public safety entities.

8. Furthermore, the PSWN Program cautions the Commission that reliable safeguards must be in place to ensure that personnel not specifically permitted to operate UWB technology cannot gain access to those devices. The Commission's Rules clearly describe the kind of users eligible to operate this technology; for UWB imaging systems this is typically limited to law enforcement, fire, and emergency rescue organizations. In some limited cases, licensed medical practitioners, public utilities, scientific research, commercial mining, and construction companies are also permitted to use UWB imaging devices.[9] The Commission must take precautionary steps in enacting its regulations to prevent unauthorized uses from occurring. Without appropriate guidance and limitations, grave damage can be caused through inadvertent or intentional misuse of UWB devices, which must be curtailed through precise controls and severe penalties for violations of these mandated restrictions.

IV. CONCLUSION

9. The PSWN Program acknowledges all those parties submitting responses to this docket, and thanks the Commission for the opportunity to comment. The PSWN Program would like to reiterate that the Commission should work in cooperation with the NTIA to ensure that any devices approved for usage under Part 15 of the Commission's Rules will not interfere with any existing public safety wireless communications. Furthermore, the PSWN Program urges the Commission to continue with thorough testing of emerging UWB applications to verify that they will not conflict with existing wireless services, and that the aggregate effects of multiple UWB

[9] *See* In the Matter of Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems, First Report and Order, ET Docket No. 98-153, rel. April 22, 2002, at para. 21.

devices will not raise the noise floor to a level that will create harm to sensitive public safety uses. The PSWN Program is confident that the Commission will examine the lessons learned in the 800 MHz rulemaking process and take the necessary steps to prevent interference from UWB devices by establishing appropriate emissions limits prior to authorization of this new technology.

Respectfully submitted,

Steven Proctor
Executive Director
Utah Communications Agency Network
Executive Vice-Chair,
PSWN Executive Committee

Before the
Federal Communications Commission
Washington, DC 20554

Certificate of Service

In the Matter of	)	
	)	
Revision of Part 15 of the Commission's Rules	)	DA No. 02-2786
Regarding Ultra-Wideband Transmission	)	ET Docket No. 98-153
Systems	)	
	)	

I, Richard N. Allen, Senior Associate, Booz Allen Hamilton, 8283 Greensboro Drive, McLean, Virginia, 22102–3838, hereby certify that on this date I caused to be served, by first-class mail, postage prepaid (or by hand where noted) copies of the Public Safety Wireless Network Program's Comments to the Federal Communications Commission Report, *Measured Emissions Data For Use In Evaluating The Ultra-Wideband (UWB) Emissions Limits In The Frequency Bands Used By The Global Positing System (GPS)*, DA No. 02-2786, In the Matter of Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems, ET Docket No. 98-153, the original of which is filed herewith and upon the parties identified on the attached service list.

DATED at Fair Oaks, Virginia this 21st day of November 2002.

Richard N. Allen

SERVICE LIST

*The Honorable Michael Powell, Chairman
Federal Communications Commission
445 12th St., SW, Rm. 8–B201
Washington, DC 20554

*The Honorable Kathleen Q. Abernathy, Commissioner
Federal Communications Commission
445 12th St., SW, Rm. 8–B115
Washington, DC 20554

*The Honorable Michael J. Copps, Commissioner
Federal Communications Commission
445 12th St., SW, Rm. 8–A302
Washington, DC 20554

*The Honorable Kevin J. Martin, Commissioner
Federal Communications Commission
445 12th St., SW, Rm. 8–A204
Washington, DC 20554

*The Honorable Jonathan Adelstein
Federal Communications Commission
445 12th St., SW, 8th Floor
Washington, DC 20554

*Marsha J. MacBride, Chief of Staff
Office of Chairman Powell
Federal Communications Commission
445 12th St., SW, Rm. 8–B201
Washington, DC 20554

* Bryan Tramont, Senior Legal Advisor
Office of Chairman Powell
Federal Communications Commission
445 12th St., SW, Rm. 8–B201
Washington, DC 20554

*Matthew Brill, Senior Legal Advisor
Office of Commissioner Abernathy
Federal Communications Commission
445 12th St., SW, Rm. 8–B115
Washington, DC 20554

*Jordan Goldstein, Senior Legal Advisor
Office of Commissioner Copps
Federal Communications Commission
445 12th St., SW, Rm. 8–A302
Washington, DC 20554

*Paul Margie, Spectrum and International Legal Advisor
Office of Commissioner Copps
Federal Communications Commission
445 12th St., SW, Rm. 8–A302
Washington, DC 20554

*Daniel Gonzalez, Senior Legal Advisor
Office of Commissioner Martin
Federal Communications Commission
445 12th St., SW. Rm. 8–C302
Washington, DC 20554

*Samuel Feder, Legal Advisor on Spectrum Issues
Office of Commissioner Martin
Federal Communications Commission
445 12th St., SW. Rm. 8–C302
Washington, DC 20554

*Thomas J. Sugrue, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th St., SW, Rm. 3–C252
Washington, DC 20554

*Kathleen O'Brien–Ham, Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th St., SW, Rm. 3–C255
Washington, DC 20554

*James D. Schlichting, Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th St., SW, Rm. 3–C254
Washington, DC 20554

*Gerald P. Vaughan, Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th St., SW, Rm. 3–C250
Washington, DC 20554

*David Furth, Senior Legal Advisor
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th St., SW, Rm. 3–C217
Washington, DC 20554

*D'wana R. Terry, Chief
Public Safety & Private Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–C321
Washington, DC 20554

*Ramona Melson, Deputy Chief (Legal)
Public Safety & Private Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–C321
Washington, DC 20554

*Herbert W. Zeiler, Deputy Chief (Technical)
Public Safety & Private Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–C321
Washington, DC 20554

*Jeanne Kowalski, Deputy Chief (Public Safety)
Public Safety & Private Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–C324
Washington, DC 20554

*John Borkowski, Assistant Division Chief
Public Safety & Private Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–C237
Washington, DC 20554

*Michael J. Wilhelm, Legal Advisor
Public Safety and Private Wireless Division
Federal Communications Commission
445 12th Street, SW, Room 4–C305
Washington, DC 20554

*Barry J. Ohlson, Chief
Policy Division
Federal Communications Commission
445 12th St., SW, Rm. 3–C124
Washington, DC 20554

*Blaise Scinto, Senior Deputy Chief
Policy Division
Federal Communications Commission
445 12th St., SW, Rm. 3–C133
Washington, DC 20554

*Tom Stanley, Chief Engineer
Policy Division
Federal Communications Commission
445 12th St., SW, Rm. 3–C204
Washington, DC 20554

*Walter D. Strack, Chief Economist
Policy Division
Federal Communications Commission
445 12th St., SW, Rm. 3–C460
Washington, DC 20554

*John Schauble, Chief
Policy and Rules Branch
of the Public Safety and Private Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–C336
Washington, DC 20554

*Scot Stone, Deputy Chief
Policy and Rules Branch
of the Public Safety and Private Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–B337
Washington, DC 20554

*Peter Daronco, Deputy Chief
Policy and Rules Branch
of the Public Safety and Private Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–C431
Washington, DC 20554

*Ed Thomas, Director
Office of Engineering and Technology
Federal Communications Commission
445 12th St., SW, Rm. 7–C155
Washington, DC 20554

*Paul Kolodzy, Ph.D., Director
Spectrum Policy Task Force
Federal Communications Commission
445 12th St., SW, Rm. 7–C144
Washington, DC 20554

* Peter A. Tenhula, Co-Director
Spectrum Policy Task Force
Federal Communications Commission
445 12th St., SW, Rm. 2–C343
Washington, DC 20554

*Lauren Van Wazer, Deputy Director
Spectrum Policy Task Force
Office of Engineering and Technology
Federal Communications Commission
445 12th St., SW, Rm. 7–C144
Washington, DC 20554

*William Kunze, Chief
Commercial Wireless Division
Federal Communications Commission
445 12th St., SW, Rm. 4–C224
Washington, DC 20554

*Qualex, Inc.
445 12th St., SW
Washington, DC 20554

***PROVIDED BY U. S. MAIL IN LIEU OF HAND DELIVERY DUE TO NEW FCC SECURITY PROCEDURES**