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November 20, 2001

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Ms. Maglie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: ET Docket No. 98-153 - Ultra-Wideband
Ex Parte Notice

Dear Ms. Salas

On November 19, 2001, Jeffrey Ross and Paul Withington of Time Domain Corporation, Richard E. Wiley of this firm and I met with Julius Knapp, Michael Marcus, Lisa Gaisford, Bruce Romano, and John Reed of the Office of Engineering and Technology. We discussed the status of the Commission's rulemaking on Ultra Wideband. The extensive record in this proceeding, including several testing efforts, demonstrates that UWB can operate as set forth in the Commission's Notice of Proposed Rulemaking (NPRM) without causing harmful interference to existing radio services. We noted that Time Domain recognizes as a practical matter that the Commission may find it necessary to proceed with a first report and order adopting rules for UWB that are more constraining than the proposal set forth in the NPRM.

We discussed potential areas of compromise for a UWB rulemaking that might include:

- **Indoor Operation.** Permit indoor operation of UWB according to the emissions mask set forth by the FCC in its NPRM. Limiting UWB to indoor operation would provide an additional 9 to 12 db attenuation of UWB signals below the level set forth in the NPRM. Government and commercial systems that claim there is a potential for harmful interference from UWB generally operate outdoors.
- **Peer-to-Peer Communications.** In order to address concerns raised by the aviation and GPS industries with regard to proliferation of mobile communications devices outdoors, the FCC has raised the possibility of a prohibition on the operation of peer-to-peer communications devices. If the Commission adopts such a prohibition, it should permit two-way communications only where at least one device that is communicating is AC powered.

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- **Outdoor, Fixed, On-Premises Operation.** Permit outdoor tracking and radar below 6 GHz for eligible industrial and commercial entities only at the power levels proposed by the FCC in its NPRM. The eligibility limit is designed to reduce the number of potential users. The constraint on applications is designed to reduce the interference potential. Outdoor radar is primarily for fixed, safety devices such as radar and security fences and domes. Outdoor tracking for is low-duty cycle, fixed, non-mobile, on-premises use, such as employee safety tracking. Permit operation of UWB above 6 GHz at power levels set forth in the NPRM. Government and commercial systems claiming harmful interference are located below 6GHz. Even government and commercial critics of UWB have not raised concerns about operation of UWB above 6 GHz.
- **Public Safety/ Law Enforcement/ Homeland Security Applications.** Permit operation of UWB devices by eligible individuals at full Part 15 class B power for indoor and outdoor use. Eligibility would be limited to entities eligible for assignment of frequencies from the Part 90 public safety pool of frequencies. The types of applications that would be covered by public safety/law enforcement rules:
 - Through-wall motion detection devices
 - Active location tags worn by public safety or law enforcement personnel.

These applications save lives. There would only be a limited number of devices deployed for short periods of time for use in emergency situations and training. Only trained public safety personnel would operate the devices. Full Part 15 Class B power is the same power level as the FCC waiver granted in 1999 for public safety applications. UWB radar applications devices place energy into the ground or walls.

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Pursuant to Section 1.1206 of the Commission's Rules, 47 C.F.R. §1.1206, an original and a copy of this letter have been submitted for inclusion in the public record. Please contact me at the phone number listed above if you have any questions concerning this letter.

Respectfully,

/s/ David E. Hilliard

David E. Hilliard

Counsel for Time Domain Corporation

Cc: Julius Knapp, Deputy Chief, OET
Dr. Michael Marcus, Associate Chief, OET
Bruce Romano, Associate Chief (Legal), OET
Lisa Gaisford, Chief of Staff, OET
John Reed, Senior Engineer, Technical Rules Branch, OET