



Comments of the

Ultra Wide Band (UWB) Alliance

Before the

Federal Communications Commission

on

OFFICE OF ENGINEERING AND TECHNOLOGY SEEKS COMMENT ON TESLA'S REQUEST FOR WAIVER OF SECTIONS 15.519(a) & 15.519(a)(2) OF THE COMMISSION'S RULES FOR HANDHELD UWB SYSTEMS

ET Docket No. 25-101

March 21, 2025

About the UWB Alliance

The Ultra Wide Band (UWB) Alliance is a global not-for-profit organization that works to collectively establish ultra-wideband (UWB) technology as an open-standards industry. A coalition made up of vendors that either design, manufacture, or sell products that use ultra-wideband technology, the UWB Alliance aims to promote and protect the current allocation of bandwidth as well as promote the continuing globalization of the technology. As part of our mission, we advocate UWB technology and use cases to promote verticals showing the value of UWB for IoT and Industry 4.0 and to build a global ecosystem across the complete UWB value chain, from the silicon to the service. In addition, the Alliance is promoting and assuring interoperability through its work with Standards Development Organizations such as the IEEE and ETSI and then working with members to define upper layers and testing to assure compliance. For more information, please visit us at www.UWBAlliance.org.

Introduction and Summary

We thank the Commission for providing the opportunity to comment on the public notice on the waiver request by Tesla, Inc¹. The Ultra Wide Band Alliance favors granting the waiver request by Tesla, Inc. to waive Sections 15.519(a) and 15.519(a)(2) of the Commission's rules.

Review of Waiver Request

The Tesla Inc. (Tesla) use of UWB for peer-to-peer communication and ranging leverages the unique capabilities of UWB to precisely position the vehicle. UWB provides the necessary precision, in a non-disruptive manner. The extremely low power limits for UWB ensure that there is no risk of interference to other radio systems.

UWB is optimal technology for this use, with superior performance, at a very small fraction of the transmit power and thus potential for disruptive interference, compared to other available technologies.

We agree in general with Tesla's analysis that in this use, there is no increased potential for harmful interference to other services compared to a handheld device. The location of the fixed antenna in the system described by Tesla, on a ground-level pad, satisfies the intent of the FCC as stated in the Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems, First Report and Order, to protect non-GPS government systems such as radio navigation and radar systems². The elevation of the fixed antenna is well below the 30m and 2m height considered by the NTIA interference analysis. The emissions level from ground level antenna will be at or below any emissions from a handheld device. The signal level will be further attenuated by the proximity of the Electric Vehicle. The trigger-before-transmit using the Bluetooth radio described by Tesla assures that the vehicle is in the proximity of the ground level pad prior to UWB transmission.

We urge the Commission to grant this waiver.

Respectfully Submitted,

Tim Harrington, Chairman
Ultra Wide Band Alliance

¹ <https://www.fcc.gov/document/oet-seeks-comment-tesla-incs-request-waiver>

² Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems FIRST REPORT AND ORDER, ET Docket 98-153.