

Before the
FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

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| In the Matter of |) | |
| |) | |
| Petition for Rulemaking Amendment of |) | CG RM-11844 |
| Rules Governing Ultra-Wideband Devices |) | |
| And Systems |) | |
| |) | |

To: The Commission

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WISER SYSTEMS, INC.
STATEMENT OF SUPPORT FOR THE
ROBERT BOSCH LLC PETITION
FOR
AMENDMENT OF RULES GOVERNING
ULTRA-WIDEBAND DEVICES AND SYSTEMS

COMMENTS OF WISER SYSTEMS, INC.

WISER Systems, Inc. respectfully submits this response to the above-captioned petition. WISER does so in strong support for a comprehensive review of Part 15, Subpart F, regulations governing Ultra-Wideband (UWB) devices and systems.

WISER Systems is a woman-owned, Small Business Innovation Research (SBIR) supported company headquartered in Raleigh, North Carolina. WISER uses UWB technology for real-time micro-location and asset tracking. WISER employs this technology in many critical applications, including for the United States Military. WISER's commercial applications include inventory control, manufacturing, logistics, safety, and security. WISER's customers include U.S. Government civilian agencies, as well as 10% of the Fortune 100 companies and many other national and multinational organizations.

The Commission's Report and Order in 2002 establishes that the Commission hoped to review conditions and restrictions initially placed on UWB [once more industry experience could support that review](#). As other commenters have noted, UWB devices and systems have since grown into a large, healthy industry. This industry validates the assumption that UWB technologies do not cause harmful interference with other radio services already in place. It also shows significant value, given the many thriving UWB applications in high precision location, secure access, and other areas.

Many applications accomplished with UWB positioning technologies cannot yet be accomplished with other wireless technologies. Among positioning technologies like WiFi, RFID, and Bluetooth, UWB offers better performance in every key metric ([Minne et al 2019](#); [Ridolfi et al 2018](#); [Alarifi et al, 2016](#)).

Furthermore, UWB systems and devices often work well when paired with other wireless technologies because of UWB's non-interference with these systems. Innovation in UWB technologies like these is especially important now, as higher radiators like Cellular and 5G devices are raising concerns for human health. As other commenters have noted, UWB is also being used as a higher-security alternative to many other wireless transmissions, which is equally important as industry leaders consider cybersecurity issues across wireless technologies. WISER's experience here supports other commenters' claims that UWB technologies enable higher security, especially since UWB transmissions are difficult to detect and intercept.

It is WISER's hope that the adoption of the proposed modifications—such as those outlined in the Robert Bosch LLC petition—will facilitate ongoing innovation in UWB products and services and will continue to support the use of UWB systems and devices already active in the United States.

CONCLUSION

For these reasons, WISER humbly requests that the Commission begin rulemaking to revise regulations governing UWB devices and systems.

Respectfully submitted,

WISER Systems, Inc.

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Date: August 30, 2019