Comments of the

# Ultra Wide Band (UWB) Alliance

to the

# Federal Communications Commission

Reply Comments

# In the Matter of Vivint, LLC Request for Waiver of Section 15.519(a) and 15.519(a)(2) of the Commission's Rules

ET Docket No. 26-11.

***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.*

# Reply Comments of the UWB Alliance

## Introduction and Summary

We thank the Commission for providing the opportunity to comment on the public notice on the waiver request by Vivint LLC (Vivint)[1]. The UWB Alliance favors granting the request to waive Sections 15.519(a), and 15.519(a)(2) of the Commission's rules.

## Review of Waiver Request

We note that the Vivint smart door lock is substantially similar to systems for which the FCC has previously waived Sections 15.519(a), and 15.519(a)(2) of the Commission's rules, e.g. Schlage Lock Company[2], Lumi United Technology[3], Assa Abloy[4] and X-Things Industry LLC[5].

UWB is optimal technology for this use, providing more secure authentication provided by distance bounding techniques, due to the high precision ranging capability of the UWB transceiver. The door lock paired with doorbell application is consistent in operation to the smart lock systems for which the commission has previously granted waivers.

We agree with the petition analysis that the conditions of operation of the smart door lock pose no greater risk of harmful interference than a handheld device. We note that as described the antenna is well below the 30m and 2m height considered by the NTIA interference analysis[6] protection criteria. We agree that this meets the intent of the prohibition on fixed outdoor infrastructure, 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 systems[7].

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[1] Office of Engineering and Technology Seeks Comment an Vivint, LLC's Petition for Waiver of Sections 15.519(A) and 15.519(A)(2) of the Commission's Rules, ET Docket No. 26-11

[2] In the Matter of Schlage Lock Company LLC's Request for Waiver of Section 15.519(a) and 15.519(a)(2) of the Commission's Rules, ET Docket No. 22-248.

[3] In the Matter of Lumi United Technology Request for Waiver of Section 15.519(a) and 15.519(a)(2) of the Commission's Rules, ET Docket No. 25-102.

[4] In the Matter of Assa Abloy Group For Waiver of 15.519(a), and 15.519(a)(2) of the Commission's Rules Applicable to Ultra- Wideband Devices, ET Docket No. 21-267.

[5] In the Matter of Xthings Industry LLC Request for Waiver of Section 15.519(a) and 15.519(a)(2) of the Commission's Rules, ET Docket No. 25-103.

[6] Assessment of Compatibility Between Ultrawideband Devices and Selected Federal Systems, NTIA Special Publication 01–43.

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

## Comments from NXP USA, Inc

We agree with the comments from NXP USA, Inc (NXP)[8] supporting the waiver request. We agree that UWB provides unique capabilities well suited to access control applications such as the automotive digital key and stational use such as the subject of the Vivint waiver request. We agree that the Vivent waiver request is substantially similar to the prior waivers granted by the commission as noted above. We also agree that the scale of deployment and operating conditions represent no greater risk, and due to the more limited operation locations and technical characteristics of the system, even less risk of causing interference than widely deployed handheld devices permitted under 47 CFR § 15.519.

## Comments of the FiRa™ Consortium

We agree with the comments from FiRa™ Consortium (FiRa)[9] with respect to supporting the request for waiver. We also note that the body of experience is that the extremely low power levels permitted by the commission rules have ensured decades of interference free operation of UWB and positive coexistence with federal spectrum users.

## Conclusion

We urge the Commission to grant this waiver.

Respectfully Submitted,

Tim Harrington, Chairman

Ultra Wide Band Alliance

[8] In the Matter of Vivint, LLC Request for Waiver of Section 15.519(a) and 15.519(a)(2) of the Commission's Rules, ET Docket No. 26-11. Comments of NXP USA, Inc.

[9] In the Matter of Vivint, LLC Request for Waiver of Section 15.519(a) and 15.519(a)(2) of the Commission's Rules, ET Docket No. 26-11, comments of the FiRa consortium.