

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of	)	
	)	
Vivint, LLC	)	ET Docket No. 26-11
	)	
Request for Waiver of Sections 15.519(a) and	)	
15.519(a)(2) of the Commission's Rules	)	

ORDER

Adopted: July 29, 2026

Released: July 29, 2026

By the Chief, Office of Engineering and Technology:

I. INTRODUCTION

1. By this Order, we grant a request by Vivint, LLC (Vivint) to waive sections 15.519(a) and 15.519(a)(2) of the Commission's rules to permit Vivint to certify and market a doorbell product that contains an ultra-wideband (UWB) transmitter operating in the 6-10 GHz band.¹ For the reasons discussed below, we find that there is good cause to grant Vivint's waiver request.

II. BACKGROUND

2. Vivint's doorbell product, which includes a camera and paired smart lock, will be professionally installed on entryways to residential properties.² The product uses UWB ranging to provide "proof of presence" prior to unlocking a paired smart lock, which Vivint states is similar to other devices for which the Commission has previously granted waivers.³ The doorbell contains a 2.4 GHz Bluetooth Low Energy (BLE) transmitter that can communicate with a mobile device carried by a person.⁴ If it connects with and authenticates a mobile device as one previously paired with the system, it then uses a camera and facial recognition software to confirm the identity of the person approaching before unlocking the door.⁵ A UWB ranging session to determine a person's movement toward or away from the door begins when authentication of a device and identification of a person is successful and ends after the door is unlocked or a session timeout occurs.⁶ A ranging session would not occur more than once every 100 milliseconds.⁷

3. Section 15.519(a) of the Commission's rules contains provisions for UWB devices that are relatively small and are primarily handheld while being operated and do not employ a fixed infrastructure, and Section 15.519(a)(2) prohibits the use of antennas mounted on fixed outdoor

¹ Request for Waiver of Vivint, LLC, ET Docket No. 26-11 (filed Nov. 19, 2025), (Vivint Waiver Request).

² Vivint Waiver Request at 3, 7-8; Letter from Matthew S. DelNero and Travis F. Cabbell, Covington & Burling LLP, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 26-11, at 1-2 (filed May 27, 2026) (Vivint *Ex Parte*).

³ Vivint Waiver Request at 1.

⁴ *Id.* at Exhibit 1.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.* at 4.

infrastructure, such as the outside of a building.⁸ The Vivint device is not handheld and is mounted on the outside of a building and thus would not comply with these requirements. Vivint argues that its device complies with the intent of the handheld rule because the operator can exercise control over the device or the object to which the device is affixed.⁹ It also states that because the device transmits only under specific limited conditions and does not communicate with other UWB devices, it is not capable of creating large communications systems, e.g., fixed outdoor infrastructure.¹⁰ Vivint states that it is not aware of any cases where similar devices authorized by the Commission under waiver have resulted in harmful interference.¹¹

4. On February 16, 2026, OET issued a Public Notice seeking comments on the Vivint Waiver Request.¹² Two parties filed comments in support of the request - NXP USA, Inc. (NXP) and the FiRa Consortium (FiRa) - and Vivint filed reply comments.¹³

III. DISCUSSION

5. We are authorized to grant a waiver under Section 1.3 of the Commission's rules if the petitioner demonstrates good cause for such action.¹⁴ Good cause, in turn, may be found and a waiver granted "where particular facts would make strict compliance inconsistent with the public interest."¹⁵ To make this public interest determination, the waiver cannot undermine the purpose of the rule, and there must be a stronger public interest benefit in granting the waiver than in applying the rule.¹⁶

6. The technical and operational standards for UWB devices in part 15 were adopted to ensure that these devices do not cause harmful interference to authorized radio services.¹⁷ As discussed below, we find nothing in the record to indicate that Vivint's device would differ from other UWB devices in a manner that would pose an increased harmful interference risk to authorized radio services. As an initial matter, we note that just like all UWB devices, Vivint's lock system will emit signals at very low power, consistent with the UWB handheld rules.¹⁸ The current rules allow a power level of up to

⁸ 47 CFR § 15.519(a); (a)(2).

⁹ Vivint Waiver Request at 8-9.

¹⁰ *Id.* at 8.

¹¹ *Id.* at 7.

¹² *Office of Engineering and Technology Seeks Comment on 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, Public Notice, DA 26-55 (OET Feb. 16, 2026).

¹³ See NXP Comments; FiRa Comments; Vivint Reply Comments. See also Letter from Tim Harrington, Chairman, Ultra Wide Band Alliance, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 26-11 (filed Apr. 8, 2026) (supporting the use of UWB for Vivint's proposed application and agreeing with Vivint's analysis).

¹⁴ 47 CFR § 1.3. See also *ICO Global Communications (Holdings) Limited v. FCC*, 428 F.3d 264 (D.C. Cir. 2005); *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990); *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

¹⁵ *Northeast Cellular*, 897 F.2d at 1166; see also *ICO Global Communications*, 428 F.3d at 269 (quoting *Northeast Cellular*); *WAIT Radio*, 418 F.2d at 1157-59.

¹⁶ See, e.g., *WAIT Radio*, 418 F.2d at 1157 (stating that even though the overall objectives of a general rule have been adjudged to be in the public interest, it is possible that application of the rule to a specific case may not serve the public interest if an applicant's proposal does not undermine the public interest policy served by the rule); *Northeast Cellular*, 897 F.2d at 1166 (stating that in granting a waiver, an agency must explain why deviation from the general rule better serves the public interest than would strict adherence to the rule).

¹⁷ See generally, *Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems*, First Report and Order, ET Docket 98-153, 17 FCC Rcd 7435 (2002) (*UWB First R&O*); see also 47 CFR. §§ 15.501-15.525.

¹⁸ Vivint Waiver Request at 4.

-41.3 dBm in the 6 to 10 GHz range in which this device is designed to operate, and Vivint is not seeking a waiver of that requirement.¹⁹

7. When adopting the UWB rules and designating devices to be handheld and not permitting antennas to be mounted on outdoor infrastructure, the Commission was concerned about the development of a large communications system and its adverse impact on authorized services.²⁰ In response to those concerns, Vivint states that its device operates similarly to other devices already approved by the Commission under similar part 15 rule waivers, will not create a prohibited large-scale communication network, will not cause harmful interference to the licensed users of the band, and will be in public interest.²¹

8. We agree that based on its operational and technical characteristics, it is unlikely that Vivint's device will be capable of creating a large communication system that could impact authorized devices, as the purpose of the rule dictates.²² First, UWB communications only occur after a multistep verification process in which credential authentication takes place via Bluetooth Low Energy to determine whether a legitimate credential is detected near the access control device, followed by the use of a video camera and facial recognition software to verify whether a person is permitted access.²³ Second, once initiated, UWB ranging communication is brief, lasting only until either the door is unlocked based on the distance and direction of the user, the paired authenticated device moves out of BLE range, or there is no longer a person in front of the door.²⁴ Third, the Vivint device does not communicate with other devices using UWB.²⁵ To the extent Vivint's doorbells do communicate with other devices besides a smart lock system, it would not be over UWB, but only via Wi-Fi.²⁶

9. We also do not believe that the Vivint device will increase the risk of harmful interference to authorized services. The Vivint device emits UWB signals for extremely brief moments, as explained above, and operates at very low power levels in compliance with the Commission's UWB rules and only when performing a specific door unlocking function.²⁷ In sum, the device would emit UWB signals for very short time intervals and only when a valid credential is nearby and a video camera with facial recognition capability identifies an authorized person.²⁸

10. Similarly, the device's antenna design, installation height, and operation being similar to previously approved devices give us further confidence that it will not increase the risk of harmful interference. The device's readers use directional type antennas with beam patterns primarily in the azimuthal plane, which will minimize the potential for interference to satellite services.²⁹ Additionally, Vivint's device will be deployed in the entranceways of residential units, closer to the ground, and nearby

¹⁹ *Id.*; 47 CFR § 15.519(c).

²⁰ *UWB First R&O*, 17 FCC Red at 7503. The Commission stated that, without protections, the creation of such networks, such as wide area networks of UWB devices, might negatively impact existing authorized services, including cellular, PCS, and GPS systems employed in E-911 applications.

²¹ Vivint Waiver Request at 7-9.

²² *Id.* at 8.

²³ *See id.*, Exhibit 1. The lock uses UWB communication to perform secure ranging, allowing it to obtain precise distance measurements to evaluate users' intent to either lock or unlock the door based on their movement pattern. If the intent to unlock is detected, the lock is unlocked, and the UWB session is terminated immediately thereafter.

²⁴ *Id.* at 4. The ranging cycle will occur no more frequently than once every 100 milliseconds.

²⁵ *Id.* at 3, 8.

²⁶ *Id.*

²⁷ 47 CFR § 15.519(c).

²⁸ Vivint Waiver Request, Exhibit 1.

²⁹ *Id.* at 4; Vivint *Ex Parte* at 4.

physical objects such as neighboring buildings will reduce transmitting signals radiating into larger areas.³⁰

11. We therefore do not believe that deploying these devices – operating infrequently, at already low power levels, with antennas pointing in the azimuthal plane, and operating low to the ground – will increase the risk of harmful interference. The Commission also has experience with similar door locks operating under a similar waiver process, and we are not aware of any instances of harmful interference caused by those devices.³¹ Based on these factors, we do not believe that Vivint’s lock system will be any different. We also find support in the record, which shows that all interested parties supported granting the waiver.³² These parties noted that similar UWB door locks are already operating pursuant to previous waivers without any reports of harmful interference.³³ Similar technologies, such as digital vehicular keys, are already widely used today, and extending the same entry mechanism design to building entry applications will extend the same safety, security, and convenience benefits to consumers.³⁴

12. Consistent with other recent waivers for UWB wireless doorbell systems, we are placing conditions on the grant of this waiver similar to those on previous waivers to further limit the likelihood of harmful interference to authorized radio services.³⁵ We require the Vivint device to be certified by the Commission via an accredited Telecommunication Certification Body and list the conditions under which the UWB transmitter may operate. We also require Vivint to submit annual reports of any known interference complaints for the first three years after the date of grant of this waiver and state that Vivint must be prepared to halt the sale and marketing of devices subject to this waiver if OET so directs.³⁶ Based on Vivint’s description of its device, we are also conditioning this waiver on professional installation, limiting installation to ground-floor entryways of residential homes, and not permitting installation in multi-dwelling units.³⁷ We find that focusing on the quality of installation and the types of locations at which the device may be installed is a more effective check against potential harmful interference than Vivint’s suggested limitation on the quantity of devices that may be sold.³⁸

13. Finally, considering the importance of security and the low risk of harmful interference, we find a stronger public interest benefit in granting the waiver than in applying the rule. The Vivint doorbell will benefit individual homeowners and their families by giving them stronger home security options.³⁹ Vivint indicates that UWB-enabled security systems are resistant to spoofing or other attacks, thus reducing the risk of break-ins.⁴⁰ Their device will offer a seamless, hand-free entry experience for consumers.⁴¹ For example, an elderly or other person who relies on a cane or other mobility aid would

³⁰ Vivint Waiver Request at 7.

³¹ See, e.g., *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 21-267, Order, 37 FCC Rcd 12311 (OET 2022); *Schlage Lock Company LLC's Request For Waiver of 15.519(a), and 15.519(a)(2) of the Commission's Rules*, ET Docket 22-248, Order, 38 FCC Rcd 4890 (OET 2023).

³² See generally NXP Semiconductors Comments and FiRa Consortium Comments.

³³ *Id.*

³⁴ *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, Order, DA 25-828, at 12 (OET Sept. 9, 2025) (Xthings Waiver Order).

³⁵ See e.g. Xthings Waiver Order at 5.

³⁶ *Id.*

³⁷ Vivint Waiver Request at 7-8; Vivint *Ex Parte* at 1-2.

³⁸ Vivint Waiver Request at 5.

³⁹ *Id.* at 10.

⁴⁰ *Id.*

⁴¹ *Id.* at 9.

benefit from UWB-technology, as it makes entry to their home not only secure but also easier, safer, and more accessible to their needs.⁴² Vivint's proposed device benefits homeowners, providing both security and a sense of independence.⁴³

14. For these reasons, we conclude that there is good cause to waive Sections 15.519(a) and 15.519(a)(2) of the Commission's rules to permit the certification, marketing, and operation of Vivint's UWB door lock devices. This waiver is subject to the following conditions:

- 1) Vivint's device shall be certified by the Commission via an accredited Telecommunication Certification Body, and the certification application shall include a copy of this waiver order;
- 2) UWB sessions shall only be initiated following the discovery process and successful realization of qualifying credentials via 2.4 GHz Bluetooth operation;
- 3) UWB sessions shall only proceed until either the system identifies the user's intent to open the door or the user leaves the area by exiting the perimeter;
- 4) The UWB session shall not activate until a Bluetooth Low Energy connection has been made, the user's access credential has been identified, and a camera identifies a person outside the door;
- 5) The ranging cycle occurs no more frequently than once every 100 milliseconds;
- 6) A ranging session will immediately terminate upon the earliest of the following: (1) the door is unlocked based on the distance and direction of the user; (2) the paired, authenticated device moves out of BLE range; or (3) there is no longer a person in front of the smart locked door;
- 7) The UWB system shall only transmit when sending information to an associated receiver;
- 8) UWB operations shall be confined to the 6-10 GHz frequency range with an antenna that has its main beam in the azimuthal plane;
- 9) Vivint shall submit, annually for the first three years after the date of grant of this waiver, a report that identifies any known interference complaints and their resolution;
- 10) Vivint's devices must be professionally installed, with installation limited to ground-floor entryways of residential homes and not permitted in multi-dwelling units.
- 11) Vivint shall be prepared to halt the sale and marketing of devices subject to this waiver if OET so directs.

15. Accordingly, pursuant to authority in Sections 0.31, 0.241, and 1.3 of the Commission's rules, 47 C.F.R. §§ 0.21, 0.241, and 1.3, and Sections 4(i), 302, 303(e), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 302, 303(e), and 303(r), IT IS ORDERED that the Request for Waiver filed by Vivint, LLC on November 19, 2025 IS GRANTED consistent with the terms of this Order. This action is effective upon release of this Order.

⁴² *Id.* at 9-10.

⁴³ *Id.* at 10.

16. IT IS FURTHER ORDERED that if no petitions for reconsideration or applications for review are timely filed, this proceeding SHALL BE TERMINATED and ET Docket No. 26-11 CLOSED.

FEDERAL COMMUNICATIONS COMMISSION

Andrew C. Hendrickson
Chief
Office of Engineering and Technology