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DA 20-70

Released: January 14, 2020

OFFICE OF ENGINEERING AND TECHNOLOGY SEEKS COMMENT ON ZEBRA TECHNOLOGIES REQUEST FOR WAIVER OF PART 15 RULES TO PERMIT USE OF ITS ULTRA-WIDEBAND POSITIONING SYSTEM IN THE 7125-8500 MHZ BAND

ET Docket No. 20-17

Comment Date: February 3, 2020 Reply Comment Date: February 18, 2020

On December 20, 2019 Zebra Technologies (Zebra) filed a request for waiver of Part 15 of the Commission's rules to allow Zebra to certify a version of its Dart positioning system for operation in the 7125-8500 MHz range. Zebra states that its system, which presently operates as an ultra-wideband (UWB) device in the 5925-7250 MHz band, is used to track small battery-operated tags attached to persons, assets, or safety equipment over a range of 100 meters to an accuracy of less than 30 centimeters. Applications include tracking players in sports venues and preventing accidents for airplane maintenance personnel working on moving platforms.

Zebra states that any one of three different rules could be waived to allow it to use its Dart system at 7125-8500 MHz: Sections 15.517(a), 15.519(a)(1), or 15.250.<sup>3</sup> It therefore only asks for a waiver of one of these rules. The Commission's Office of Engineering and Technology seeks comment on Zebra's waiver request, including the relative merits of each of the three options Zebra has identified.

Section 15.517 governs the technical requirements for indoor UWB systems. Section 15.517(a) limits operation under the rule to UWB transmitters employed solely for indoor operation. Zebra states that it would require a waiver of this section because the Dart system has some outdoor applications.

Section 15.519 governs the technical requirements for hand held UWB systems. Under Section 15.519(a)(1), a UWB device may transmit only when it is sending information to an associated receiver and must cease transmission if it fails to receive an acknowledgement from the associated receiver that its transmission is being received. Because Dart tags transmit but do not receive transmissions, Zebra states that it would need a waiver of section 15.519(a)(1) for the Dart system to operate as a hand held UWB device.

Section 15.250 governs operation of wideband systems in the 5925-7250 MHz band. Specifically, Section 15.250(a) a requires that the -10 dB bandwidth of a device operating under this

<sup>&</sup>lt;sup>1</sup> Zebra Technologies Request for Waiver of the Commission's Ultra-Wideband Rules to Authorize a Positioning Device in the 7,125-8,500 MHz Band (Request), filed Dec. 20, 2019.

<sup>&</sup>lt;sup>2</sup> *Id.* Zebra states that it is pursing the waiver because of potential regulatory changes that it has concluded could make the band it currently uses "less suitable for low-power positioning." *Id.* at 1.

<sup>&</sup>lt;sup>3</sup> 47 CFR §§ 15.517(a), 15.519(a)(1), and 15.250, respectively.

section must be contained within the 5925-7250 MHz band under all conditions of operation. Zebra states that it would need a waiver of the upper frequency limit in Section 15.250 for the Dart system to operate as a wideband system under this rule.

The FCC's Office of Engineering and Technology (OET) is reviewing the waiver request. For *ex parte* purposes, this proceeding will be treated as "permit-but-disclose" in accordance with Section 1.1200(a) of the Commission's rules, subject to the requirements under Section 1.1206(b).

Zebra submitted its request electronically through the Commission's Electronic Comment Filing System (ECFS) as a non-docketed filing in FCC INBOX-PART 15 (Petition for Waiver of Part 15). We have opened a new docket, ET Docket 20-17 to facilitate consideration of this request and have moved Zebra's submission into this docket. Parties should file all comments and reply comments in ET Docket 20-17.

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <a href="http://fjallfoss.fcc.gov/ecfs2/">http://fjallfoss.fcc.gov/ecfs2/</a>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each
  filing. If more than one docket or rulemaking number appears in the caption of this proceeding,
  filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

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Parties should also send a copy of their filings to Aole Wilkins El, Office of Engineering and Technology, Federal Communications Commission, Room 7-A201, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to aole.wilkinsel@fcc.gov.

Documents in are available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th Street, S.W., Room CY-A257, Washington, D.C. 20554.

Office of Engineering and Technology contact: Aole Wilkins El at 202-418-2406.

By the Chief, Office of Engineering and Technology

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