



PUBLIC NOTICE

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**OFFICE OF ENGINEERING AND TECHNOLOGY SEEKS COMMENT ON
VALEO NORTH AMERICA INC. REQUEST FOR WAIVER OF SECTION 15.255(c)(3) OF
THE COMMISSION'S RULES FOR IN-VEHICLE RADAR OPERATION IN THE
57-64 GHZ BAND**

ET Docket No. 20-121

Comment Date: June 8, 2020
Reply Comment Date: June 23, 2020

On March 31, 2020, Valeo North America, Inc. (Valeo) filed a request for waiver of section 15.255(c)(3) of the Commission's rules¹ to allow Valeo to market short-range sensing devices operating in the 57-64 GHz band at a higher power than specified in the rule, limited to operation within automotive vehicle passenger cabins.²

Valeo indicates that its devices would be used for in-vehicle child safety systems and other in-cabin safety-related monitoring.³ In particular, Valeo describes the risks of inadvertently leaving children in hot vehicles, and an automobile industry commitment to providing a widely deployed rear seat reminder no later than the 2025 model year.⁴ While we are aware that many manufacturers are exploring different technological solutions to the problem of leaving children in hot vehicles, we believe that Valeo is the first to seek a narrow waiver of our Part 15 rules for this particular purpose.

Section 15.255(c)(3) requires short-range devices for interactive motion sensing to comply with a peak transmitter conducted output power limit of -10 dBm and a peak equivalent isotropically radiated power (EIRP) limit of +10 dBm. Valeo requests to operate its devices under the same technical parameters as those we granted to Google in a 2018 waiver order.⁵ Under that waiver, we permitted Google to deploy its Soli sensor technology to enable touchless control of device functions or features (such as its Pixel phone) at +10 dBm peak transmitter conducted output power, +13 dBm peak EIRP

¹ 47 CFR § 15.255(c)(3).

² Valeo North America, Inc. Request for Waiver (*Request*), filed March 31, 2020.

³ *Id.* at 1. Valeo states that its sensors will be installed in the vehicle roof, behind the "headliner" (the materials that are adhered to the cabin's inside roof) and will issue an alert when a child is left behind. The sensors also could be used for other in-vehicle functionalities such as seat belt reminders and decision criteria for airbag deployments based on seating position and occupant class. *Id.* at 3.

⁴ *Request* at 3.

⁵ *Id.* at 3-4. We note that Valeo only seeks a waiver of 15.255(c)(3). Google also received a waiver of 15.255(b)(2), which restricts airborne operation; Valeo states that it only plans to deploy its technology in automotive vehicles. *Id.* at 5.

level, and +13 dBm/MHz peak power spectral density, with a 10 per cent duty cycle in any 33 milliseconds (ms) interval.⁶

Although Valeo filed its petition electronically as a non-docketed proceeding in the Commission's Electronic Comment Filing System,⁷ it also filed a copy in ET Docket No. 20-15, a petition by Vayyar Imaging Ltd. for waiver of sections 15.255(b)(2) and (c)(3) of the rules to allow the marketing of a device that is designed for a variety of 3D interactive motion-sensing applications. While Valeo states that it supports both the Vayyar request as well as comments filed in the docket suggesting that the Commission undertake a comprehensive rulemaking proceeding to update the technical rules for the 60 GHz band, it asserts that the life-saving technology associated with Valeo's device justifies granting its request in near term rather than waiting for the completion of a lengthy rulemaking process.⁸

The Office of Engineering and Technology (OET) seeks comment on Valeo's request to waive section 15.255(c)(3) of the Commission's rules. We also seek comment on whether Valeo's sensors, under the application it describes could be operated as "short-range devices used for interactive motion sensing" under Section 15.255(a)(2) of the rules. The Commission's rules prohibit operation of field disturbance sensors within the 57-64 GHz band unless those sensors are employed for fixed operation or short-range devices used for interactive motion sensing.⁹ Although Valeo did not ask for a waiver of this rule, we raise this issue because its application is different from Google's in that its users (i.e. children left in vehicles) will not be engaging in touchless control of device functions in the same way that a Google phone user uses gestures and hand movements to interact with his or her personal device.

To develop a complete record on the issues presented by this request, the proceeding will be treated, for *ex parte* purposes, as a "permit-but-disclose" proceeding in accordance with Section 1.1200(a) of the Commission's rules, subject to the requirements under Section 1.1206(b). We have opened a new docket, ET Docket 20-121 to facilitate consideration of this request and have moved Valeo's submission into this docket. Parties should file all comments and reply comments in ET Docket 20-121.

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: <http://apps.fcc.gov/ecfs/>.
- 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 commercial overnight courier, or by first-class or overnight U.S. Postal

⁶ *Google LLC Request for Waiver of Section 15.255(c)(3) of the Commission's Rules Applicable to Radars used for Short Range Interactive Motion Sensing in the 57 64 GHz Frequency Band*, Order, DA 18-1308, 33 FCC Rcd 12542 (OET 2018). Google developed the Soli sensor to capture motion in a three-dimensional space using a radar beam, which enables persons to use gestures and motions to control a smartphone's functions or features. *See* www.google.com/soli.

⁷ Valeo filed in INBOX-1.3 ("Petition for Waiver (Miscellaneous)" and not INBOX-PART15 ("Petition for Waiver of Part 15"), which is our preferred intake for waivers of the Part 15 rules.

⁸ *Request* at 7.

⁹ 47 CFR § 15.255(a)(2).

Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.¹⁰
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- 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 Anh T. Wride, Office of Engineering and Technology, Federal Communications Commission, Room 7-A363, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to anh.wride@fcc.gov.

Documents 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.

By the Acting Chief, Office of Engineering and Technology

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¹⁰ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, DA 20-304 (March 19, 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.