



Federal Communications Commission  
Washington, D.C. 20554

May 18, 2015

DA 15-593

Greg Kunkle  
Keller and Heckman LLP  
1001 G Street, N.W., Suite 500W  
Washington, DC 20001

Re: GE MDS, LLC Request for Waiver of Section 90.207(i) of the Commission's Rules

Dear Mr. Kunkle:

*Introduction.* We have before us a request for waiver of Section 90.207(i) of the Commission's Rules<sup>1</sup> filed by GE MDS, LLC ("GE") to allow use of the D1D emission designator<sup>2</sup> by equipment in GE's ORBIT radio platform equipment for telemetry operations.<sup>3</sup> For the reasons discussed herein, we grant GE's request.

*Background.* Section 90.207 sets forth the emissions that may be authorized under Part 90 of the Commission's Rules and references the types of operations in which they may be utilized.<sup>4</sup> Section 90.207(i) provides, "For telemetry operations, when specifically authorized under this part, only A1D, A2D, F1D, or F2D will be authorized."<sup>5</sup>

GE, a radio equipment designer/manufacturer, states that it is developing a narrowband high-efficiency point-to-point and point-to-multipoint telemetry radio system that will provide data rates greatly exceeding the 4800 bps/6.25 kHz bandwidth standard contained in Section 90.203 of the Commission's Rules.<sup>6</sup> Because the ORBIT radio platform utilizes a QAM radio module topology,<sup>7</sup> GE requests a blanket waiver of Section 90.207(i) to allow certification, licensing, and use of its ORBIT radio platform for telemetry radios with D1D emissions.<sup>8</sup>

*Discussion.* To obtain a waiver of the Commission's Rules, a petitioner must demonstrate either that the underlying purpose of the rule(s) would not be served or would be frustrated by application to the

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<sup>1</sup> 47 C.F.R. § 90.207(i).

<sup>2</sup> The emission designator is a series of alphanumeric characters that denotes the necessary bandwidth, type of modulation, nature of the signal modulating the main carrier, and type of information to be transmitted. *See* 47 C.F.R. §§ 2.201(b), 2.202(b). D1D is a digital emission that is amplitude- and angle-modulated.

<sup>3</sup> *See* Request for Waiver of Section 90.207(i) of the Commission's Rules filed by GE MDS, LLC on December 23, 2014 (Request).

<sup>4</sup> Amendment of the Commission's Rules governing the Private Land Mobile Radio Service to provide a new Part 90 that reregulates and consolidates Parts 89, 91, and 93, *Report and Order*, Docket No. 21348, 29 F.C.C. 2d 1612, 1616 ¶ 11 (1978).

<sup>5</sup> *See* 47 C.F.R. § 90.207(i).

<sup>6</sup> *See* GE Request at 4. *See also* 47 C.F.R. § 90.203(j).

<sup>7</sup> Quadrature Amplitude Modulation, or QAM, is a sophisticated modulation technique, using variations in signal amplitude and phase, that allows multiple bits to form a single "symbol," which is then impressed on a single sine wave. Cable Television Technical and Operational Requirements, *Notice of Proposed Rulemaking*, MB Docket No. 12-217, 27 FCC Rcd 9678, 9683 n. 29 (2012).

<sup>8</sup> *See* GE Request at 2.

present case and that grant of the waiver would be in the public interest; or that, in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.<sup>9</sup> We conclude that grant of a waiver to permit certification, licensing, and use of GE's ORBIT radio platform equipment is warranted. Allowing licensees to utilize the D1D emissions will promote the efficient use of limited spectrum resources, and can improve the effectiveness of critical infrastructure operations that protect life, property, and the environment.<sup>10</sup> Based on the information before us, we conclude that grant of a waiver would not frustrate the underlying purposes of the emission designator rules and would serve the public interest.<sup>11</sup>

*Conclusion.* We grant a waiver of Section 90.207(i) to permit certification, licensing, and use of GE's ORBIT radio platform equipment using D1D emissions for telemetry operations. A copy of this letter shall be submitted with any equipment authorization application. License applications must reference this letter by the DA number set forth above. No license applications will be granted until GE obtains equipment authorization.

Accordingly, IT IS ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, that the waiver request filed by GE MDS, LLC, on December 23, 2014 IS GRANTED as set forth herein.

This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Scot Stone  
Deputy Chief, Mobility Division  
Wireless Telecommunications Bureau

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<sup>9</sup> See 47 C.F.R. § 1.925(b)(3).

<sup>10</sup> See GE Request at 2-3.

<sup>11</sup> See 4RF Limited, *Order*, WT Docket No. 13-188, 29 FCC Rcd 2898, 2899 ¶ 5 (WTB MD 2014) (granting waiver to permit D1D emission for telemetry equipment utilizing linear modulation methods to address spectrum efficiency) (citing Lojack Corporation, *Order*, 20 FCC Rcd 20497, 20499 ¶ 7 (WTB PSCID 2005) (granting waiver to permit D1D emission on frequency on which 47 C.F.R. § 90.20(e)(6) permitted only F1D and F2D, on the grounds that allowing greater efficiency was in the public interest and would not frustrate the rule's underlying purpose)).