

## **VIA FCC ELS**

Re: Requested Additional Information ORBCOMM License Corp.

File No. 0373-EX-CN-2022

Correspondence Reference No. 68906

This submission provides responses to the questions set forth in the April 20, 2022, Experimental Licensing Branch E-Mail regarding ORBCOMM's above-referenced experimental license application.

## **April 20, 2022 FCC OET Experimental Licensing Branch Questions**

1. Please provide Technical Parameters for 50 unit of ORBCOMM L-band, mobile earth terminals ("METs") to support higher throughput IoT services.

ANSWER: Please see below.

2. Are these METs installed on aircraft, on ships, or on ground.

ANSWER: Ground only.

3. Please provide the size (meter), antenna gain(dBi), input power at antenna flange (watts), and EIRP (dBW) of the proposed METs operating in the 1626.5-1660.5 MHz band.

ANSWER: 0.1m, 5.5dBi, 1.4W, 7 dBW

4. Please provide Specification data sheet from ORBCOMM manufacture for the L-band METs.

ANSWER: Please see attached ORBCOMM ST-6100 data sheet; an example of one of the ORBCOMM MET models that will be used for the experimental program (using firmware variations providing higher throughput IoT data services).

5. Please clarify and confirm that applicant is the "owner" of 50 unites of ORBCOMM L-band METs; which will be used to conduct tests for the provision of low-cost, low power Internet-of- Things ("IoT) services and solutions via the Inmarsat 4F3 satellite located at 98 degrees West latitude (S2932, United Kingdom-licensed).

ANSWER: CONFIRMED.

6. Please certify the proposed METs will conform to the FCC limits for out-of-band and spurious emissions as set forth in Section 25.202(f) and 25.216 of the FCC's Rules.

ANSWER: CONFIRMED.



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7. Please describe how the proposed will meet the requirements pertaining to operation of mobile stations as set forth in the §25.287(a) (1) to (8).

ANSWER: All experimental operations will utilize Inmarsat network assigned and Inmarsat LES-controlled channels provided by Inmarsat to ORBCOMM in accordance with Inmarsat's FCC authorization, thus meeting the requirements of 47 CFR 25.297(a) (1) to (8).

8. Are the proposed Mets type approval by Inmarsat? and certified pursuant to the Commission's equipment certification procedure?

#### ANSWER:

ORBCOMM is a worldwide provider of Inmarsat-based IoT data products and services, and will conduct the program of experimentation in full cooperation with Inmarsat. All METs used for experimentation will comply with Inmarsat operating requirements and the FCC's Rules. The MET variants to be used are based on MET models and/or components that have been certified in accordance with FCC equipment certification procedures. As indicated in the Application Narrative Exhibit, one of the principal objectives of the testing to be performed under the proposed FCC Experimental License is to verify the performance of new ORBCOMM L-Band MES capabilities to support higher throughput IoT services in preparation for obtaining any required new or modified FCC Equipment Authorizations for ORBCOMM METs prior to commercial launch of higher throughput IoT products and services.

9. Are these full-duplex or half- duplex METs?

ANSWER: Half-duplex. All experimental MET receivers will operate in the 1525 – 1559 MHz band (using Inmarsat network assigned and Inmarsat LES-controlled channels in accordance with Inmarsat's FCC space segment authorization).

10. What is the shut-off time of the proposed METs? Will the METs be capable of remote operation from Inmarsat?

ANSWER: 5 seconds, NO

11. If so, where is the remote-control location?

ANSWER: N/A

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12. Where is the network control and monitoring center for the proposed METs?

ANSWER: All ORBCOMM METs using the Inmarsat system are monitored and controlled from the ORBCOMM NetOps Center located at ORBCOMM's Ottawa, Ontario offices.

13. Please provide a point of contact available 24 hours per day, seven days per week, with the authority and ability to terminate operations authorized herein, for discussing interference concerns with other licensees.

## ANSWER:

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# With a copy to:

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Kindly direct any inquiries concerning this submission to the undersigned.

Respectfully submitted,

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May 4, 2022

**ATTACHMENT: ST 6100 Data Sheet**