LXE, Inc. FCC Form 312 -- Modification Application Description of Modification Attachment to Question 43

By this modification application, LXE, Inc. ("LXE") seeks to modify its Title III authorization to provide certain Inmarsat services to customers in the United States. *See* Call Sign E020074. LXE's affiliate company, EMS Global Tracking, formerly known as Satamatics Ltd., offers Inmarsat-D services, which include both the D+ and IsatM2M modes of operation.¹ Inmarsat D is a low data-rate two-way store and forward short messaging and tracking system. Inmarsat-D provides low cost satellite communications for such applications as asset tracking and SCADA. EMS Global Tracking provides essential services to government customers, such as the U.S. Coast Guard and the U.S. Navy in connection with their homeland security efforts (e.g., surveillance and warnings for terrorist hijackings of marine vessels), and to private sector customers to track their assets and to monitor sensitive energy facilities, including natural gas well heads, pipelines, shipping containers and service vehicles.

LXE is currently authorized to provide the Inmarsat D service over a total of 25,000 mobile earth terminals ("METs"), model numbers JUE-610 DT, DMR-200, SAT 101, SAT-201, and SAT 200/202. By this modification application, LXE seeks to add another MET manufactured by EMS Global Tracking (Model No. SAT-232, FCC ID No. X38SAT-232) to its authorization. LXE is **not** seeking to increase the overall number of terminals that it is authorized for; rather, it seeks to use the SAT-232 terminal as part of the 25,000 terminals for which it is already authorized.

As set forth in the attached engineering certificate and supporting materials from EMS Global Tracking, new MET model number SAT-232 is electrically equivalent in terms of its underlying RF characteristics to the MET model number SAT-200 that is already covered by Call Sign E020074. Because the SAT-232 is meant as a portable device, LXE has obtained certification of the device under section 25.129 of the Commission's rules.²

¹ The difference in the two modes of operation is that the IsatM2M mode is capable of longer messages and reduced messaging latency. As a result, there is a difference in the receive modulation for those Inmarsat-D terminals that are capable of operating in the IsatM2M mode. *See* File No. SES-MOD-2007-1107-01542. As originally authorized, the license was limited to only the D+ mode of operation. However, after changes implemented by Inmarsat to its network of satellites and corresponding modulation changes requested to its authorization, LXE is now authorized to operate in either mode of the Inmarsat-D service.

² See Grant of Equipment Authorization, FCC ID No. X38SAT-232 (granted May 25, 2010). A detailed description of the proposed equipment, along with a demonstration of compliance with the Part 25 rules, is set forth in the underlying application for the certification. *See* Application of EMS Global Tracking for Equipment Certification, FCC ID No. X38SAT-232 (filed on May 25, 2010), *available at* https://fjallfoss.fcc.gov/oetcf/eas/Generic Search.cfm. The certification application is hereby incorporated into this application by reference.

The addition of this terminal does not require any technical changes to the LXE authorization. In addition, new MET model number SAT-232 complies with all the terms and conditions of LXE's authorization, including the requirement of having an average shut-down time of 1.35 seconds and maximum shut-down time of 2.6 seconds (condition 3920) in order to protect the Global Maritime Distress and Safety Service ("GMDSS").

LXE respectfully requests that the Commission grant this application for modification as promptly as possible so that LXE's end-users can have the most up to date and efficient equipment at their disposal. It is critical for LXE's government and private sector end-users to have access to the most technologically advanced METs in order to accurately track and monitor sensitive assets throughout the United States.