



## IGPS ROLLOVER TT-3026X

### *Technical Notice SLS.38 Rev.1*

*Notice to Ship-owners, Ship Operators, Managers, Masters,  
Owners' Representatives and Recognized Organizations*

The Directorate would like to inform all concerned that the rollover effect on certain GPS equipment may generate errors in position's date/time stamp as regards Long Range Identification and Tracking (LRIT) reporting.

LRIT reporting is conditioned by the correct functioning of a GNSS, namely the GPS system. The operation and recording of other equipment such as ECDIS, VDR, and GMDSS equipment also depends on the accurate information transmitted by GPS system.

In recent weeks, a significant reduction in LRIT position reports processed through the EU LRIT CDC has been noticed. Initial investigations confirmed that this situation was mainly affecting some old Mini-C shipborne equipment (+13 years) that are still in operation. Further investigations have identified a software 'bug' issue caused by the GPS module (GARMIN) used in the affected terminals; making them unable to handle the recent GPS rollover.

The revised list of affected Terminal models has been communicated – namely:

TT-3026S; TT-3026M; TT-3026D; TT-3020C; TT-3000SSA (Mini C); TT-3000SSA; TT-3000LRIT; TT-3000E; SAILOR H3000M SSA.

The position indication from these units is correct, but the date shall be offset by a full "GPS period" of 1024 weeks, ie. 1024 weeks off, of the actual date.

It has been reported that the only remedy to resolve the issue is for the terminal to be replaced.

It is to be noted that the list of affected models is not exhaustive and other terminals/models may be identified and added on the list. It is to be further noted that this error does not occur on all TT-3026X series terminals. Recent models have been built with a U-Blox GPS module and can fully support the rollover update.

To this effect, ship managers and operators of Maltese registered vessels equipped with SAT-C/LRIT terminals effected with this GPS rollover error are kindly instructed to address this shortcoming within the earliest opportunity and inform the Administration on the established action plan for the replacement of such equipment.

Merchant Shipping Directorate

28 April 2023