



National Marine Electronics Association

International Marine Electronics Association

Technical Bulletin

Amendment to NMEA0183 Version 4.10 # AT 0183 20150806

NMEA 0183 Amendment

An amendment is a technical specification that is publically available and will be added to this version at a later date altering this version to a new version.

This document contains the final approved NMEA 0183 / IEC 61162-1 sentence for:

• RLM – Return Link Message

This Amendment had been reviewed and approved by NMEA and IEC TC80 Working Group 6 with assistance from Cospas Sarsat Council.

RLM – Return Link Message

The RLM sentence is used to transfer a Return Link Message received by a Return Link Service (RLS) compatible GNSS Receiver from a Cospas-Sarsat recognized Return Link Service Provider (RLSP) to an RLS compliant Cospas-Sarsat 406 MHz Beacon.

The RLM sentence supports communications to an emitting beacon once a distress alert has been detected, located and confirmed. The communications may include acknowledgement of the alert to the emitting beacon as well as optional text messages, and may also include remote beacon configuration and testing.

The European GNSS (Galileo) Open Service Signal In Space Interface Control Document Issue 1.2 (Galileo OS SIS ICD) defines the content and structure of Fields 1, 3, and 4.

This sentence cannot be queried. All fields in the RLM sentence cannot be null.



Notes:

- 1) The Beacon ID field identifies the beacon intended to receive this message. This is a fixed length 15 hexadecimal character data field.
- 2) The Time of Reception field indicates the RLM timestamp (i.e. the time of reception of the last 20 bit packet of the RLM) in UTC. The field does not support decimal seconds. Any decimal point or decimal seconds should be ignored.
- 3) The Message code field identifies the Type of RLM Message Service.
 - 0 =Reserved for future RLM services
 - 1 = Acknowledgement Service RLM
 - 2 =Command Service RLM
 - 3 = Message Service RLM
 - 4 E = Reserved for future RLM services
 - F = Test Service RLM (currently used only by the Galileo Program)
- 4) The Message Body is a variable length field encapsulating the data parameters provided by the RLSP into hexadecimal format. Galileo OS SIS ICD defines a Short Message containing 16 bits (4 hex characters) and a Long Message containing 96 bits (24 hex characters). Other GNSS, such as GLONASS may define a different length message.