



Radio Technical Commission for Maritime Services

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**Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554**

In the Matter of)	
)	
Radio Technical Commission for Maritime Services)	
)	
Petition for rulemaking to amend Part 95 Subpart K of the Commission's rules to provide for updated standards on Personal Locator Beacons and Maritime Survivor Locating Devices)	March 31, 2025
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PETITION FOR RULEMAKING

The Radio Technical Commission for Maritime Services (RTCM)¹ hereby requests the Commission to commence a rulemaking to amend the regulations at 47 CFR Part 95 Subpart K §95.2989. This regulation currently incorporates by reference RTCM standards

¹ The RTCM is a non-profit organization whose objectives include studying and preparing reports on maritime electronic navigation and telecommunications practices. Our focus is on needs and technologies with a view toward improving efficiency and capabilities of maritime electronic navigation and telecommunications services, suggesting ways to keep rules and regulations to the minimum essential for effectiveness, and making recommendations on important issues. Established as an advisory committee by the U.S. government in 1947 to support technical decision-making in the area of maritime radiocommunications, RTCM is now a membership organization that supports and encourages needed improvements in maritime communications and electronic navigation. RTCM technical standards have been widely incorporated in the FCC Part 80 and 95 rules, they have served as international standards, and they have been used as the basis for many more ITU and IEC international technical standards used in the maritime services.

11010.2 on 406 MHz Satellite Personal Locator Beacons (PLBs), including Amendments 1 and 2, dated June 8, 2012 (RTCM 11010) and RTCM 11901.1 on Maritime Survivor Locating Devices (MSLD), dated June 4, 2012. RTCM previously included these changes with its comments on RM-11765², noting that both standards have been updated. RTCM 11010.2 is replaced by RTCM 11010.4 Standard for 406 MHz Satellite Personal Locator Beacons (PLBs) March 17, 2023, with Amendment 1. RTCM 11901.1 is replaced by RTCM 11901.2 Standard for Maritime Survivor Locating Devices (MSLD) November 15, 2024.

Recent updates to both standards have significantly improved distress alerting and locating capabilities. These enhancements benefit not only the person in distress by using these devices but also assist search and rescue authorities. The updates ensure that authorities are quickly alerted to the distress situation, its location, and the identity of the person in distress. This allows for a faster response and helps rescuers locate the person more efficiently. Amending the regulations with these updated standards would enable manufacturers to expedite the production of PLB and MSLD devices and their introduction to the U.S. market. Including the correct references in the regulations would eliminate the delay and the cost to all parties involved in the waiver process. Since devices conforming to these standards are fully compatible with distress and locating systems used by the U.S. Coast Guard and other rescue authorities, updated regulations to include these standards will help those agencies as well.

² RTCM Comment on WT RM-11765, RTCM paper 2024-ARC-003 Annex F – Part 95 Subpart K Standards incorporated by reference, 22 October 2024.

RTCM 11010.4 Standard for 406 MHz Satellite Personal Locator Beacons (PLBs)

March 17, 2023, with Amendment 1.

Two editions of this standard have been published since the version referenced in Part 95 was adopted in 2012. Significant advances in safety reflected in the current edition have occurred since then. Those advances include:

- a) The use of Automatic Identification System (AIS) in maritime versions of the PLB for locating the device signaling distress, identifying the HEX ID of the beacon for searchers on the scene, and another method for sending the precise location. AIS also includes AIS “EPIRB ACTIVE” and “EPIRB TEST” broadcast safety-related messages available to all AIS users in the area and to rescuers.
- b) Improved testing of devices with multi-GNSS locations, including more realistic scenarios for both land use and maritime use.
- c) Three new categories of devices for use in extreme climatic conditions (-55°C to $+70^{\circ}\text{C}$), arduous climatic conditions (-40°C to $+55^{\circ}\text{C}$), or less arduous climatic conditions (-20°C to $+55^{\circ}\text{C}$) have been adopted.
- d) Compatibility with the latest COSPAS-SARSAT standards and requirements.

RTCM 11901.2 Standard for Maritime Survivor Locating Devices (MSLD),

November 15, 2024

This edition includes the following significant technical changes with respect to the previous edition published in 2012:

- a) An AIS/Digital Selective calling (DSC) MSLD type was added that is fully compliant with the requirements of ITU-R Recommendation M.2135-1 *Technical characteristics of autonomous maritime radio devices operating in the frequency band 156-162.05 MHz* and IEC 63269:2022 – *Maritime navigation and radiocommunication equipment and systems – Maritime survivor locating devices (man overboard devices) - Minimum requirements, methods of testing and required testing results.*
- b) Additional MSLD types are introduced in this edition, with a comparison table added to list the different devices, indicate the technologies used in the device, and identify the areas/regions suited for usage.
- c) A normative Annex was added to provide a cross reference to the performance and testing requirements for the 406.0-406.1 MHz Cospas-Sarsat PLB with AIS which can function as an MSLD type.
- d) A normative Annex was added to provide the performance and testing requirements for the Satellite Alerting MSLD type.
- e) An informative Annex was included addressing the selection of an MSLD, to provide information on the technology capabilities of each MSLD type and guidance to the user for selecting a MSLD suited for their planned activities and operating area.

RTCM's proposal:

We recommend that 47 CFR Part 95, Subpart K be revised as follows:

§95.2987(a)(1):

(1) ~~Beginning January 17, 2018,~~ Before submitting an application...

§95.2989(a):

(a) PLB transmitter types must be designed to comply with technical standard RTCM 11010.4. MSLD transmitter types must be designed to comply with technical standard RTCM 11901.2.

§95.2989(b)(1):

(1) The following standards are available from The Radio Technical Commission for Maritime Services (RTCM), 1150 18th Street NW, Suite 910, Washington, DC 20036; www.rtcn.org; telephone (703) 527-2000; email info@rtcn.org.

(i) RTCM Standard 11010.4 for 406 MHz Satellite Personal Locator Beacons (PLBs) March 17, 2023 with Amendment 1 (RTCM 11010).

(ii) RTCM Standard 11901.2 for Maritime Survivor Locating Devices (MSLD), November 15, 2024 (RTCM 11901).

Conclusion:

RTCM urges the FCC to amend Part 95 Subpart K in an expeditious manner to improve safety of life at sea and on land.

For the Radio Technical Commission for Maritime Services

By: /s/ E. B. Wendlandt

E. B. Wendlandt
President