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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 46461.2-2025

Information service system of vessel's emergency positioning based on global navigation satellite system (GNSS) - Part 2: Information protocol for emergency position indicating radio beacon and emergency rescue centre

全球卫星导航系统（GNSS）船舶应急定位信息服务系统 第2部分：应急无线电示位标与应急救援中心信息交换协议

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 2 of GB/T 46461 "Global Navigation Satellite System (GNSS) Ship Emergency Positioning Information Service System". GB/T 46461 has published the following parts.

1.Functional Description;

2.Emergency Radio Position Beacon and Emergency Response Center Information

Exchange Protocol;

3. Performance requirements and test methods for emergency radio beacons. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the Ministry of Industry and Information Technology of the People's Republic of China. This document was drafted by: Sifang Electronics Co., Ltd., Shanghai Pusheng Navigation Technology Co., Ltd., and Fujian Feitong Communication Technology Co., Ltd. Limited Liability Company, China Electronics Technology (Ningbo) Marine Electronics Research Institute Co., Ltd., Yangtze River Communications Administration Bureau of the Ministry of Transport, China Transport Telecommunications Information Co., Ltd. center. The main drafters of this document are. Meng Xianwei, Ren Xiaowei, Shi Yuan, Sun Qiang, Yu Baohua, Zheng Yaling, Huang Lunwen, Lin Yingshi, Sun Peng, and Huang Xiang. Pang Bobo and Yao Kebo.

GB/T 46461 "Global Navigation Satellite System (GNSS) Ship Emergency Positioning Information Service System" is proposed to consist of the following three parts.

1. Functional Description. The purpose is to systematically describe the entire ship emergency positioning information service system, clarifying its basic components, Working mechanism and main functions.

2. Emergency Radio Position Beacon and Emergency Response Center Information Exchange Protocol. The purpose is to clarify the ship's emergency radio... The information interface, information exchange method, and transmitted information content between the position marker and the emergency rescue center.

3. Performance Requirements and Test Methods for Emergency Radio Position Beacons. The purpose is to standardize the performance of ship emergency radio position beacons. Technical specifications and testing methods. Global Navigation Satellite System (GNSS) Ship Emergency Response Location Information Service System Part

2. Emergency Radio Position Marker and Emergency Rescue Center Information Exchange Protocol

1 Scope

GB/T 46461.2-2025 is the Chinese national standard covering the message between the beacon and the rescue centre - the fields carrying identity, position and time, the encoding over a link with very little bandwidth, the acknowledgement back to the beacon, and the return link message that tells the survivor help is coming. Part 2 of the series, first edition, with the beacon performance requirements in Part 3. In force from 1 May 2026. Issued on 5 October 2025, it has been in force since 1 May 2026.

This document specifies the ship emergency radio positioning beacon and... (The sentence

is incomplete and requires more context to be translated accurately.) The emergency rescue center information exchange protocol includes interfaces and definitions, information exchange methods, data frame structures, information exchange procedures, and information content. This document applies to the Global Navigation Satellite System (GNSS) Ship Emergency Positioning Information Service System (hereinafter referred to as Ship Emergency Positioning System). Information exchange between the emergency rescue center of the information service system and the ship emergency radio beacon [referred to as emergency radio beacon (EPIRB)].

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 16162 Global Maritime Distress and Safety System (GMDSS) Terminology

GB/T 46461.1 Global Navigation Satellite System (GNSS) Ship Emergency Positioning Information Service System Part

3.1 Terms and Definitions The terms and definitions defined in GB/T 16162 and

GB/T 46461.1, as well as the following terms and definitions, apply to this document.

3.1.1 Return link message (RLM) In the International Search and Rescue Satellite System (COSPAS-SARSAT), the Return Link Service Provider (RLSP) uses global satellite navigation systems. (GNSS) Receipt information sent to emergency radio beacons.

3.2 Abbreviations The following abbreviations apply to this document. BCH. BCH code (BoseChaudhuri-Hocquenghemcode)