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

GB/T 42807-2023

**Technical requirements of interchange service for port basic
geographic information**

港口基础地理信息交换服务技术要求

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents" drafting: Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents: This document is proposed by the Ministry of Transport of the People's Republic of China: This document is under the jurisdiction of the National Port Standardization Technical Committee (SAC/TC530): This document was drafted by: Institute of Water Transport Science, Ministry of Transport, Shandong Port Qingdao Port Group Co., Ltd., Ningbo Zhoushan Port Group Co., Ltd.: Co., Ltd., Xiamen Port Holdings Group Co., Ltd., China Communication Network Technology Co., Ltd: The main drafters of this document: Zheng Guixiang, Wu Fang, Lu Dong, Dong Xiaoyan, Li Guiping, Yao Xufei, Liu Li, Zhang Hua, Wang Tao, Xu Bin, Wang Jing, Rao Jingchuan, Peng Jie, Zhang Lei, Huang Zirong, Zhang Lili, Qu Guochen, Wang Huichao: Technical requirements for port basic geographic information exchange services

1 Scope

GB/T 42807-2023 sets the technical requirements for exchanging basic geographic information about ports. A port is a piece of geography that several authorities hold data about - the port operator, the maritime safety administration, customs, the pilots and the city - and each holds it in its own coordinate system, at its own currency, with its own idea of where the berth line is. Ship movements, dangerous goods handling and emergency response all depend on those views agreeing. The standard sets the exchange elements, the exchange service and the application of the service, with an informative annex giving a worked example of a port geographic information exchange service. It took effect on 1 September 2023.

This document specifies the technical requirements for basic geographic information

exchange elements, exchange services and service applications of ports: This document applies to the planning, design, development, construction and application of basic geographic information systems for ports:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document:

GB/T 2260 Administrative division codes of the People's Republic of China

GB/T 7407 China and the world's major maritime trade port codes

GB/T 19710 Geographic Information Metadata

GB/T 23708 Geographic Information Geographic Markup Language (GML)

GB/T 25530 Geographic Information Services

GB/T 25597 Geographic Information World Wide Web Map Service Interface

GB/T 30169 Web-based feature services for geographic information

GB/T 30170 Geographic Information Coordinate-Based Spatial Reference GB/T 33187:

1 Geographic Information Simple Feature Access Part 1: General Architecture JT/T 697:

1 Traffic Information Basic Data Element Part 1: General Rules JT/T 697:

3 Traffic Information Basic Data Elements Part 3: Port Information Basic Data Elements JT/T 1140:

1 Transportation Safety Emergency Resource Data Element Part 1: Highways JT/T 1140:

3 Terms and Definitions

The following terms and definitions apply to this document: 3:

1 Geospatial data as a unified spatial orientation framework and basis for spatial analysis: 3:

2 Provides users with services for converting, managing, or representing geographic information: 3:3 element feature Abstraction of real world phenomena: