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

GB/T 42810-2023

**Specification for classification and coding of port geographic
feature**

港口地理要素分类与编码规范

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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 and managed by the National Port Standardization Technical Committee (SAC/TC530): This document was drafted by: Institute of Water Transport Science, Ministry of Transport, Guangzhou Port Group Co., Ltd., Guangdong Waterway Surveying and Mapping Center, Shandong Port Qingdao Port Group Co., Ltd: The main drafters of this document: Liu Li, Gu Qun, Li Xiaoyu, Lu Dongqi, Chen Hongwei, Liu Yongtao, Wang Degui, Zhang Lei, Yan Mingwei, Wang Taiwei, Ji Yingye, Wang Junwen, Xu Xihe, Li Xinzhaoh, Cheng Weiping: Specification for classification and coding of geographical elements of ports

1 Scope

GB/T 42810-2023 specifies the classification and coding of port geographic features. A port contains objects that exist nowhere else and that general topographic classifications have no place for - berths, aprons, dolphins, fenders, gantry rails, container blocks, oil pipelines and channel markers - so port data held in a general GIS schema is either forced into the wrong categories or carried as free text. The standard gives them a classification of their own. It sets the classification and coding principles, the classification of the features, the coding, and the rules for extending the scheme, with informative annexes giving the high-level classification and codes and the full list of port geographic feature codes. It took effect on 1 September 2023.

This document stipulates the principles of classification and coding of geographical elements of ports, element classification, element coding and expansion rules: This

document is applicable to the collection, processing, database building, updating, management, sharing, exchange, mapping and product development of port geographic information data:

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 25529 Geographic Information Classification and Coding Rules

3 Terms and Definitions

The following terms and definitions defined in GB/T 25529 apply to this document: 3:1 geographicfeature A representation of a real-world phenomenon relative to a location on Earth: [Source: GB/T 25529-2010, 3:3] 3:2 A fixed or relatively fixed geographical element within the geographical scope of the port: 3:3 feature type featuretype A type of real-world geographic object with homogeneous characteristics, that is, a collection of feature instances with homogeneous attributes and the same geometric characteristics: A given feature type is all the metaclasses that make up instances of that feature type:

Note: referred to as "feature class": [Source: GB/T 25529-2010, 3:5, with modifications]

4 Classification and coding principles

1 Systematic Aiming at the construction and management of port informatization and the construction and application of port spatial data, scientific research is carried out according to the characteristics of port geographical elements: Scientifically and systematically classify to form a classification system with clear logic levels, reasonable structure and clear categories, which not only fully reflects the level of geographical elements of the port structure, and correctly reflect the correlation between the geographical elements of the port: 4:

2 Stability The formulation of the classification and coding system is based on the most stable characteristics of each geographical element of the port, and reflects the attributes and requirements of the geographical elements of the port: