



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

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**Data model and data exchange format for navigable spatial
database**

导航地理数据模型与交换格式

(English Translation)

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Navigation geographic data model and exchange format

1 Scope

This standard specifies the conceptual data model, logical data structure and physical coding format of navigation geodatabases. Given that the database can be can have content (elements, attributes and relationships), and explain how to express these content and how to define metadata.

This standard focuses on the description of roads and road-related information, and also includes other relevant information required for the application of intelligent transportation systems (ITS).

Interest, such as.

Example 1.ITS application needs to use address system information to specify the location and/or destination. Therefore, this standard regards administrative divisions and postal divisions as information One of the important content.

Example 2.Map display is an important part of ITS application. In order to improve the effect of map expression, this standard includes land cover, water cover, etc.

information.

Example 3.Points of interest or service information are important content that travelers pay attention to, and this standard describes them.

Typical application areas of this standard are in-vehicle and portable navigation systems, traffic management centers, or services related to road management systems (such as Public transportation system, etc.).

This standard applies to ITS applications and services. Among them, the conceptual data model is not only suitable for ITS applications, but also for other related applications.

use. The conceptual model is application-independent and can be integrated with other geographic database standards.

This standard only specifies the representation method of geographic data and does not involve the specific content of the data. In the process of using this standard, if the user adopts the content of the electronic map data used conflicts with the confidentiality principle of the national map, and the confidentiality principle of the national map data should be followed first.

2 Normative references the following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 2659-2000 Codes for names of countries and regions in the world (eqvISO 3166-1.1997) GB/T 4880.2 Language Name Code Part 2.3-letter Code (GB/T 4880.2-2000, eqvISO 639-2.1998) GB/T 15273.1-1994 Information Processing Eight-bit Single-Byte Coded Graphic Character Set Part 1: Latin Alphabet One (ISO 8859-1.

1987, IDT)

GB/T 16831-2013 Coordinate-based standard representation of geographic point location (ISO 6709:2008, IDT)

3 Terms and definitions the following terms and definitions apply to this document.

3.1 General terms

3.1.1

Cartographicprimitive Primitives in cartographic representations, such as nodes, edges, and faces.

3.1.2

Datafile

A collection of related data records with the same structure.

Appendix D

(Informative appendix) Divide the data set D.1 Purpose of division the purpose of dividing data is to effectively organize the data records in geographic data files to reduce the processing of large amounts of data.

It just organizes the data to make its processing more optimized, rather than defining the coverage area of a database. A specific geographic data file the file area is defined by the