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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 35650-2017

Basic specifications for the surveying and mapping of national fundamental scale maps

国家基本比例尺地图测绘基本技术规定

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Foreword

The technical content of this standard is mandatory. This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard by the National Mapping Geographic Information Bureau and centralized. This standard drafting unit. National Institute of Surveying and Mapping Geographic Information Standardization, Geographic Information Bureau of Shaanxi Surveying and Mapping, National Geographic Information Information Center, China Academy of Surveying and Mapping, Wuhan University. The main drafters of this standard.Li Pengde, Zhang Kun, Xiao Xue years, Deng Guoqing, Liu Xiaoqiang, Wu Wei, Xie Ping, Yan Jing new, Li Li, Su Shan dance, Li Lin.

In order to meet the needs of national economic construction, national defense construction and social development, the work of surveying and mapping the basic scale map of our country, This scale map mapping content and quality of results, based on "People's Republic of China Surveying and Mapping Law," "Basic Survey Regulations" "People's Republic of China test Painted results management regulations "" People's Republic of China map publishing and management regulations "and other laws and regulations of this standard. This standard specifies China's basic scale mapping mapping surveying and mapping base, time system, mathematical basis, the contents of the results, the basic technical means The main issues of formulating and amending the specific technical standards for mapping of basic scale maps are the major issues concerning the standard, result form and quality management. The basic map of the country is the basic map for the country's economic construction, national defense construction and social development. Geographic information base map to meet the needs of the preparation of other maps. The results of the national basic scale map data are the main contents of the national basic geographic information database. National basic scale mapping specific technical methods and technical requirements, and the corresponding technical standards, to guide and regulate the relevant Mapping activities. National Basic Scale Mapping Surveying and Mapping Basic Technical Requirements

1 Scope

China's mandatory technical rules for the surveying and mapping of the national fundamental scale map series - the 1:5000 through 1:1,000,000 topographic maps that are the base layer beneath planning, infrastructure, land administration, defence and every geographic information system built on national data. It specifies the basic technical requirements for the survey and compilation of the national fundamental scale maps: the mathematical basis, the content to be represented, the accuracy to be achieved and the quality requirements for the product. It applies to the surveying, the compilation, the updating and the quality inspection of the national fundamental scale maps. The mathematical basis is where the document begins and it is what makes the series a series rather than a collection of sheets: the geodetic datum, which is the China Geodetic Coordinate System 2000, the height datum, the map projection and the sheet division and numbering by which any point on the territory belongs to exactly one sheet at each scale. Without those fixed centrally, two adjacent sheets surveyed by two organisations would not join. On top of that sit the content requirements - what must be shown at each scale and what must be generalised away, which is the substance of cartography and the thing that distinguishes a 1:50,000 map from an enlarged 1:100,000 one - and the accuracy requirements in plan and in height, expressed as tolerances against which a sheet is inspected. The document closes with the quality requirements and the inspection by which a map is accepted. Issued on 29 December 2017 and in force since 1 July 2018.

This standard specifies the basic principles of the country's basic scale mapping, the results of content, technical indicators, the results of the form, such as quality management This requirement. This standard applies to the national basic scale map mapping activities, mapping other maps can refer to the implementation.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB 22021 National Geodesy basic technical requirements

3 General rules

3.1 The scale of the country's basic scale map includes 1. 500, 1. 1000, 1..2000, 1. 5000, 1. 10000, 1. 100000, 1. 250000, 1. 500000, 1. 1000000.

3.2 National basic scale mapping should adopt the relevant national standards, norms and guidance of technical documents.

3.3 National basic scale mapping mapping should adopt the national uniform mapping

base, time system and mathematical basis.

3.4 The national basic scale map should be used under the national unity of the framing numbers, schema symbols and contour decoration.

3.5 National basic scale map elements should be the national uniform classification and description.

3.6 The national basic scale map should be authoritative, current and reliable.

3.7 National basic scale mapping should be actively using advanced technology, processes and methods.

3.8 The national basic scale mapping should be the whole process of production quality control.

3.9 National basic scale mapping should be used by the statutory metrological verification institute regularly test qualified measuring instruments.

4 Mapping base

4.1 The national basic scale map should be a unified national benchmark, elevation benchmarks, depth benchmarks.

4.2 Geodetic datum.2000 National Geodetic Coordinate System shall comply with the requirements of GB 22021.

4.3 elevation benchmark 1985 national elevation benchmark should be consistent with the requirements of GB 22021.

4.4 Depth reference The theoretical lowest tide level should be used in the sea and the designed water level can be used in inland waters.

5 Time system

Date using the Gregorian calendar era, time using Beijing time.

6 Mathematical Basis

The national basic scale map adopts the national unified plane coordinate system.