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

GB/T 30322.1-2013

**Geographic information -- Classification systems -- Part 1:
Classification system structure**

地理信息 分类系统 第1部分：分类系统结构

(English Translation)

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Foreword

GB/T 30322 "Geographic Information Classification System" is divided into two parts.

--- Part 1. Classification system structure

--- Part 2. Land Cover metalanguage this section GB/T Part of 130,322.

In accordance with this part of GB/T 1.1-2009 given rule drafting.

This section uses the translation method identical with the international standard ISO

19144-1:2009 "Geographic Information Classification systems - Part 1. Classification system Conventional structure. " Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB/T 19710-2005 Geographic Information Metadata (ISO 19115:2003, MOD) this section makes the following editorial changes.

- 1) use the "standard" instead of "ISO 19144";
- 2) with "this Part" instead of "ISO 19144-1";
- 3) Delete the original introduction of international standards;
- 4) normative reference document, with the GB/T 28585-2012 replaces ISO 19110:2005.

This part is proposed by the National Mapping Geographic Information Bureau.

This part of the National Standardization Technical Committee on Geographical Information (SAC/TC230) centralized.

This section drafted by. National Geomatics Center, National Mapping Product Quality Inspection and Test Center.

Introduction

This part of the United Nations Organization (FAO) publications to write [1] [2]. This section is the national standard geographic classification system in the first Section to determine the structure and the definition and registration mechanism classifier system.

Since different applications may therefore not a classification system can fully meet all the needs. Classification methods, depending on the definition Applications. In addition, used in a particular area classification does not necessarily apply to all cases of the application areas, and over time Goes, the classifier may also need to be extended. To facilitate the expansion of a specific application domain classifier set, need to follow the ISO 19135.

2005 register structure to categorize the register would also facilitate the maintenance of the classifier set. The use of ISO 19135:2005 Fillmore Register system can be defined as a series of multiple departments of different classifiers alone. This method not only to maintain the independence of the departments, but also allows Establish relationships between different classification systems, conversion or partial conversion from a classification system to another classification system data, or do not implement two Data with data source integration.

In the field of geographic information, the concept of classification system known. Classification system may be divided into small units in any geographical area, and each unit comes with a description of its type identifier. The results can be divided with ISO 19123:2005 describes a discrete cover sheet Shown. For any geographic area can be

defined many of these classification systems. Different applications and departments can define their own classification system EC. However, if the classification system in a manner compatible with the definition, then you can refer to interactions between the different sectors. In addition, a Specific applications, the ideal approach is to establish a few recognized by everyone in the classification system, and the internal classification system in all sectors it is standardized.

This section describes the general structure of the classification system, it will be described in subsequent sections specific standardized classification system.

Coverage is the space domain, time domain or temporal domain, there is an arbitrary coordinate position corresponding to the return value of a function. Discrete covered in a domain any objects within a space, and each time the position of the object or space-time coordinates of an object function that returns the same elements on both property values. This one Field is represented by a function coverage area, and this area into a discrete series of covered space, time, or space-time objects. It indicates classification system Discrete classification covers geometry type, may be any type of discrete cover, for example, like a jigsaw puzzle pieces together a group of multilateral Shape, a group of grid cells, a set of points or a set of curves.

Classification system consists of a set of classifiers. These categories may be defined according to the algorithm, the system can also be classified according to a series of specific Defined rules. The classification depends on the different applications and regions, will be defined in other parts of this standard, or other standards or out Version was defined. Register can be used to maintain a specific set of classification applications. According to the classification of spatial objects is set definition, time Object or objects is spatiotemporal classification object.

Commonalities between traditional geographic features and classification of objects. ISO 19101 is defined as the elements of the real world abstraction. For example, building Buildings is a feature class, specific buildings, such as the United Nations Building in New York, it is an instance of the feature class. Traditional geographic feature is the most the basic unit of the organization together in a geographic information datasets.

Classification system on the contrary, it is top-down, in a coverage area as a whole will continue to break down. Object classification is an element, but also Abstraction of real world phenomena. But the object is not the basic unit of classification, they should be linked by decomposing overall classifier together. Classification system A simple example is the system, the Earth as a whole is "land" or "waters" coverage, you can define the scope of the two classifications will attribute one point Two, and then the object is identified as "land" or "water." And classification of objects correspond to any particular region of the earth is not "land" is the "Waters." ISO 19135:2005 provides that in any register consistent with its defined term classes will need a technical standard. This section defines the Register mode and ISO 19135:2005 is consistent. This section can be registered as a definition

classification technology standard item category required. This section was built We established a set of rules to explain the definition of categories created objects under certain circumstances.

Classifier can register as other geographic information departments to establish similar reference source register and become part of the mutual reference system.

If the register structure of each of the different departments of information, will be difficult to refer to each other between classifier register individual items. This section can guide Different departments to establish compatible information register, references to support mutual classifier systems.

Classification structure and mechanism for the definition and classification system registered in this section are generic and can be applied to many different information sector Defined classification system, including soil, topography, vegetation, urbanization and biodiversity and climate change. Use this section to describe different the relationship between the classification system.

Geographic Information Classification System Part 1. Classification system structure

1 Scope

This section GB/T 30322 to establish the structure of geographic information classification system for determining the classification system to define and register the machine system. This section provides the results of the discrete expression covering a particular area classification and to determine compliance with the classification of ISO 19135 Register technical framework.

This section applies to the establishment of specific areas of application specific classification system, relevant content in another part of the standard set forth.

2.1 Category

This section provides three types of consistency. classification system consistency, classification register and classification results expressed.

Consistency 2.2 Classification System any person claiming to comply with this part of the classification system shall comply with Appendix A (see A.2) requirements.

2.3 Consistency of classification register

Any person claiming to comply with this section shall comply with the classification register Appendix A (see A.3) and ISO 19135:2005 requirements in A.1.

Consistency 2.4 classification results Expression any person claiming to comply with the legend of the sorter section shall meet in Appendix A (see A.4) requirements.