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

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Geographic information -- Web map server interface

地理信息 万维网地图服务接口

(English Translation)

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Foreword

This standard is modified using the international standard ISO 19128.:2005 (E) "Geographic Information Web Map Service Interface", and ISO 19128.

2005 compared to the main technical content made the following changes.

--- delete the original text of the original paragraph 7.2.4.6.14 "FeatureListURLisnotinheritedbychildlayers.", Because for this sentence and the second natural segment is completely repeated;

--- In Appendix B with 2000 China Earth Coordinate System (CGCS2000), Beijing1954, Xi'an1980 coordinate system instead of WGS84 and other coordinate systems are used to define LayerCRS; and the 1956 Yellow Sea Elevated Department and the 1985 National Elevation Department for optional VerticalCRS;

- Add examples of Chinese data (G.4 and G.5) in Appendix G.

This standard has also made the following editorial changes.

--- the preparation of the implementation of this standard GB/T 1.1-2000, GB/T 20000.2-2001 "Standardization Work Guide Part 2 Points. the use of international standards of the rules "requirements;

- the word "international standard" and the document ISO 19128 are replaced by "this standard";

--- removed the original international standard cover and preface;

The introduction of this standard uses the original standard of the introduction, but made a small amount of changes;

- where international standards have been used by our country, in this standard with the national standard code and name to replace the corresponding international standards Code and name.

Appendix A, Appendix B, Appendix C, Appendix D, Appendix E and Appendix F of this Standard are normative and Appendix G and Appendix H are information

Sexual appendix.

This standard is proposed by the State Bureau of Surveying and Mapping.

This standard is under the jurisdiction of the National Geographic Information Standardization Committee (SAC/TC230).

The drafting of this standard. Wuhan University, Surveying and Mapping Remote Sensing Information Elevation State Key Laboratory, Ministry of Land and Resources Information Center, Wuhan University School of Environment and Environment, Wu Daji Information Technology Co., Ltd.

Introduction

The World Wide Web Map Service Interface (WMS) dynamically generates geospatial maps based on geographic information. This standard will be provided by geographic information the "map" of the illustrated expression is defined as the digital image file displayed on the computer screen. The map itself is not data. WMS generated by the ground Graphs are generally provided in image format, such as PNG, GIF, or JPEG; or vector-based graphics in SVG or WebCGM format element.

This standard defines three operations. one operation is to return the service level metadata; another operation is to return a map whose geographic space the parameter and dimension parameters are clearly defined; the optional third operation is to return information about certain features that appear on the map. Use standard of the Web browser and issue a request in the form of a uniform resource locator (UniformResourcesLocators, URLs) the operation of the World Wide Web map service. The content of URLs depends on the requested ones. In particular, when a map is requested, URLs Point out what information is to be displayed on the map, which part of the earth is covered by the drawing, the required spatial reference system, and the width of the output image Degree and height. When generating two or more maps using the same geographic information parameters and Outsourcing Rectangle (BBOX), the results can be accurately stacked to produce a combined map. Use an image format that supports transparent background (such as GIF or PNG) to make the next the map of the layer is visible. In addition, a single map can be requested from a different server. Therefore, the World Wide Web map service can support the construction by Distributed map server network, customers can customize from the network to meet their own requirements of the map. Map request URLs and their knots an example of a fruit map is given in Appendix G.

This standard applies to the World Wide Web map service instance, which has the ability to publish and generate maps, but does not provide access to specific data Source function. The basic web map service divides the geographic information resources into Layers and provides a limited pre-defined "style" (Styles) to display these layers. This standard only supports named layers and styles, and does not include user-defined feature data symbolization mechanisms.

Geographic Information Web Map Service Interface

1 Scope

This standard specifies the service behavior of dynamically generating maps with spatial references based on geographic information. It specifies the access from the server the various operations required for the map include the description of the map, the acquisition of the map, and the operation of querying the feature information on the map.

This standard applies to the pictorial representation of the map, but does not apply to the acquisition of actual factor data or coverage data.

2.1 Consistent categories and requirements

This standard defines two types of conformance. one for basic Web map services and the other for the World Wide Web site Map service. Each level has two subclasses. one for the client and one for the server.

2.2 Basic Web Map Service

Support basic service elements (Chapter 6), GetCapabilities (7.2), and GetMap (Get Map) operations (7.3). In order to be consistent with this standard, the basic World Wide Web map service shall meet the requirements of abstract test suite A.1 in Appendix A.

2.3 can query the World Wide Web map service Meet all the requirements of the basic World Wide Web map service, and should also support GetFeatureinfo (access to feature information) operations (7.4). For consistency with this standard, the World Wide Web Map Service should meet all the requirements of the abstract test suite in Appendix A.

3 Normative references

The terms of the following documents are incorporated by reference in this standard as provisions of this standard. Whichever is the date of the reference file, which is followed by all Changes (excluding corrigenda) or revisions do not apply to this standard. However, it is encouraged to encourage parties to reach an agreement under this standard no use of the latest version of these files. For undated references, the latest edition of this document applies to this standard.

GB/T 7408-2005 Data Element and Interchange Format Information Exchange Date and Time Representation (ISO 8601.:2000, IDT) GB/T 19710-2005 Geographic Information Metadata (ISO 19115.:2003, MOD) ISO 19111.:2007 Geographic information based on spatial reference of coordinates EPSG (2003.2) European Petroleum Investigation Agency Geodetic Parameters IETF RFC2045-1996 Multipurpose Internet Mail Extensions Part 1. Internet Message Body Format Uniform resource identifiers - Generic syntax for IETF RFC2396-1998 IETF RFC2616-1999 Hypertext Transfer Protocol - HTTP/1.1 UCUM unit of measurement unified version 1.5 XML1.0 Extensible Markup Language (XML) 1.0