

ICS 35.240.70; 07.040
CCS A 75



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

GB/T 27918-2011

**Geographic information -- Location based services -- Reference
model**

地理信息 基于位置服务 参考模型

(English Translation)

Issued on: December 30, 2011

Implemented on: February 1, 2012

Issued by: Standardization Administration of China

Table of Contents

Preface	
Introduction	
1 Scope	
Consistency 1	
3 Normative references	
4 Terms and definitions	
5 Symbols and abbreviations	
9 5.1 Acronyms	
5.2 UML notation	
5.3 Data and Services Classification. Mapping to RDF	
6 ODP (Open Distributed Processing) Perspective	
6.1 Enterprise specification	
6.2 Message Specification	
6.3 Calculation Specifications	
7 Participation Model	
7.1 Model Overview - Package. ISO 19132 (the present standard)	
7.2 Package -LBSParticipants (LBS participants)	
7.2.1 Scene and semantics	
7.2.2 Type -LBS_Participant (LBS_ participants)	
7.2.3 Type -LBS_User (LBS_ users)	
7.2.4 Type -LBS_ApplicationProvider (LBS_ application provider)	
7.2.5 Type -LBS_DataProvider (LBS_ data provider)	
7.2.6 Type -LBS_FeatureDataProvider (LBS_ element data provider)	
7.2.7 Type -LBS_ContentProvider (LBS_ content provider)	
7.2.8 Type -LBS_SpatialContentProvider (LBS_ space content provider)	
7.2.9 Type -LBS_ServiceProvider (LBS_ ISP)	
7.2.10 Type -LBS_ServiceBroker (LBS_ service agents)	
7.2.11 Type -LBS_MobileDevice (LBS_ mobile device)	
7.2.12 Type -LBS_DataBroker (LBS_ Data Distributor) - Semantic class	
8 Service model	
8.1 Package -LBS_Services (LBS_ Service)	
8.1.1 Package structure	

- 21 8.1.2 Service Categories
- 8.2 Package -BasicService (basic services)
 - 8.2.1 Package structure
 - 8.2.2 Type -LBS_Tracking (LBS_ tracking)
 - 8.2.3 Type -LBS_Routing (LBS_ Path Planning)
 - 8.2.4 Type -LBS_Navigation (LBS_ Navigation)
- 8.3 Package -GeomaticsServices (Geographic Information Service)
 - 8.3.1 Package structure
 - 8.3.2 Type -LBS_LocationTransformation (LBS_ position conversion)
 - 8.3.3 Type -LBS_AddressParsing (LBS_ address resolution)
 - 8.3.4 Type -LBS_Geoparsing (LBS_ Geographical Analysis)
 - 8.3.5 Type -LBS_Gazetteer (LBS_ gazetteer)
 - 8.3.6 Type -LBS_MapService (LBS_ Map Service)
- 8.4 Package -InformationServices (Information Services)
 - 8.4.1 Package structure
 - 8.4.2 Type -LBS_DataService (LBS_ Data Services)
 - 8.4.3 Type -LBS_NetworkDataService (LBS_ Data Network Services) - Semantics
 - 8.4.4 Type -LBS_EventSubscription (LBS_ event subscription)
 - 8.4.5 Type -LBS_MovingObjectManagement (LBS_ moving object management)
- 8.5 Package -SystemManagement (System Administration)
 - 8.5.1 Managing users and groups
 - 8.5.2 Type -LBS_UserProfileService (LBS_ user-specific standard service)
 - 8.5.3 Type -LBS_LocationTriggerControl (LBS_ trigger position control)
- 8.6 Package -DigitalRightsManagement (digital rights management)
 - 8.6.1 Digital Rights Management
 - 8.6.2 Type -LBS_Resource (LBS_ resources)
 - 8.6.3 Type -LBS_License (LBS_ License)
 - 8.6.4 Type -LBS_Right (LBS_ authority)
 - 8.6.5 Type -LBS_RightsCondition (LBS_ permission condition)
- 9 MessageDataModel (message data model)
 - 9.1 Semantics
 - 9.2 Package -Package-MessageDataTypes (message data type)
 - 9.2.1 Package structure
 - 9.2.2 Type -LanguageSpecificCharacterString (specific language strings)
 - 9.2.3 Type -LBS_AccessInfo (LBS_ access information)

9.2.4 Type -LBS_Accuracy (LBS_ accuracy) - Semantic class

9.2.5 Type -LBS_Address (LBS_ address)

9.2.6 Type -LBS_CostFunction (LBS_ cost function)

9.2.7 Type -LBS_Data (LBS_ data)

9.2.8 Type -LBS_DataSource (LBS_ data sources)

9.2.9 Type -LBS_DisplayParameters (LBS_ display parameters)

9.2.10 Type -LBS_EventInfo (LBS_ event information)

9.2.11 Type -LBS_Instruction (LBS_ Directive)

9.2.12 Type -LBS_Location (LBS_ Location)

9.2.13 Type -LBS_Maneuver (LBS_ travel policy)

9.2.14 Type -LBS_MapFormat (LBS_ map format)

9.2.15 Type -LBS_Notification (LBS_ notification)

9.2.16 Type -LBS_Position (LBS_ position)

9.2.17 Type -LBS_Preference (LBS_ preference)

9.2.18 Type -LBS_Route (LBS_ Path Planning)

9.2.19 Type -LBS_RouteConstraint

9.2.20 Type -LBS_RouteCriteria (LBS_ path Guidelines)

9.2.21 Type -LBS_SecurityCertificate (LBS_ security verification)

9.2.22 Type -LBS_SymbolSet (LBS_ symbol sets)

9.2.23 Type -LBS_TrackingLocation (LBS_ tracking)

9.2.24 Type -LBS_Trigger (LBS_ trigger)

9.2.25 Type -LBS_UserID (LBS_ user ID)

9.2.26 Joint -LBS_FeatureData (LBS_ element data)

9.2.27 Joint -LBS_GeometryChoice (LBS_ geometry selection)

9.2.28 Joint -LBS_NamedLocation (LBS_ named location)

9.2.29 Joint -LBS_TrackTrigger (LBS_ trigger)

Appendix A (normative) Test Suite

Annex B (informative) architecture

Annex C (normative) scenarios

Appendix D (Informative Appendix) LBS standards

Appendix E (Informative Appendix) ISO/TC211 and ISO/TC204 terminology track

Annex F (informative) Example use location-based services

References

1 LBS and GIS VII relationship diagram

Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard uses the translation method identical with the International Standards Organization for Standardization Technical Committee of Geographic Information (ISO/TC211) developed ISO 19132:2007 "location-based geographic information service reference model." According to our country, the international standards for the following series Series of Review.

Write a method --- the implementation of standards GB/T 1.1-2009 "Standardization Guide Part 1. Standard structure and drafting" GB/T 20000.2-2009 "Standardization Guide Part 2. the use of international standards";

--- Deleted the preface to the international standards;

--- Introduction of this standard uses the ISO 19132:2007 introduction, but made minor modifications;

--- For the ISO 19132:2007 and other international standards are adopted as our reference standard, this standard direct reference to our standards on behalf of the for the corresponding international standards;

--- Modify the original text with the latest technology applications incompatible Description. text translation appendix C.6 period to the effect that "This information is ideal for details and format depends on the user and internet access services through phone access is limited to words or language Sound information, and get access journey PDA or similar device through full-color map "; Currently, 3G mobile phones have been able to it provides graphics services, current technology does not meet the original application, this standard to increase the labeling will be explained;

--- In order to maintain traceability references, citations of entries use the original English label.

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

This standard by the National Geographic Information Standardization Committee (SAC/TC230) centralized.

This standard was drafted. Beijing NavInfo Technology Co., Ltd., National Geomatics Center of China, Beijing hypergraph Geographic Information Technology Surgery Ltd., Wuhan University.

Drafters of this standard. Huang Dong, Li Li, Sun Yuguo, CAO Xiao Hang, Li Lin, Li Kai.