# **Geographic information - Services**

Geographic information - Services



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO
19119:2006 sisaldab Euroopa standardi
EN ISO 19119:2006 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 19119:2006 consists of the English text of the European standard EN ISO 19119:2006.

Käesolev dokument on jõustatud 31.07.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 31.07.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

# Käsitlusala:

# The scope of this International Standard is as follows:Identification and definition of the architecture patterns for service interfaces used for geographic information and definition of the relationships to the Open Systems Environment model.

# Scope:

The scope of this International Standard is as follows:Identification and definition of the architecture patterns for service interfaces used for geographic information and definition of the relationships to the Open Systems Environment model.

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Võtmesõnad:

# **EUROPEAN STANDARD**

# **EN ISO 19119**

# NORME EUROPÉENNE EUROPÄISCHE NORM

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### **English Version**

# Geographic information - Services (ISO 19119:2005)

Information géographique - Services (ISO 19119:2005)

Geoinformation - Dienste (ISO 19119:2005)

This European Standard was approved by CEN on 19 May 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### **Foreword**

The text of ISO 19119:2005 has been prepared by Technical Committee ISO/TC 211 "Geographic information/Geomatics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 19119:2006 by Technical Committee CEN/TC 287 "Geographic Information", the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

### **Endorsement notice**

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Avoid by Control of the Contro The text of ISO 19119:2005 has been approved by CEN as EN ISO 19119:2006 without any modifications.

# INTERNATIONAL Geo<sub>k</sub> Information y **STANDARD**

ISO 19119

> First edition 2005-02-15



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# **Contents**

Page

Forewo	ord	iv	
Introdu	ıction	v	
1	Scope	1	
2	Conformance	1	
3	Normative references	1	
4	Terms and definitions	2	
5	Abbreviated terms	3	
6 6.1 6.2 6.3	Overview of geographic services architecture	4 5	
6.4	Interoperability	7	
6.5 6.6	Use of other geographic information standards in service specifications		
7 7.1 7.2 7.3	Architecture patterns  Computational viewpoint: a basis for service chaining  Component and service interoperability and the computational viewpoint  Services, interfaces and operations	9 9 9	
7.4	Service metadata		
7.5 7.6	Service instance of unknown type		
8 8.1 8.2 8.3 8.4 8.5 8.6	Information viewpoint: a basis for semantic interoperability	23 23 24 31 32	
9 9.1 9.2	Engineering viewpoint — A basis for distribution	34	
10 10.1 10.2 10.3 10.4	Technology viewpoint — A basis for cross platform interoperability	39 39 40 40	
Annex	A (normative) Conformance	. 42	
	Annex B (informative) Example user scenarios		
	Annex C (normative) Data dictionary for geographic service metadata		
	D (informative) Mapping to distributed computing platforms		
	raphy		

# **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

OCCUPANT OCC ISO 19119 was prepared by Technical Committee ISO/TC 211, Geographic information/Geomatics.

# Introduction

The widespread application of computers and use of geographic information systems (GIS) have led to the increased analysis of geographic data within multiple disciplines. Based on advances in information technology, society's reliance on such data is growing. Geographic datasets are increasingly being shared, exchanged, and used for purposes other than their producers' intended ones. GIS, remote sensing, automated mapping and facilities management (AM/FM), traffic analysis, geopositioning systems, and other technologies for Geographic Information (GI) are entering a period of radical integration.

This International Standard provides a framework for developers to create software that enables users to access and process geographic data from a variety of sources across a generic computing interface within an open information technology environment.

- "a framework for developers" means that this International Standard is based on a comprehensive, common (i.e. formed by consensus for general use) plan for interoperable geoprocessing;
- "access and process" means that geodata users can query remote databases and control remote processing resources, and also take advantage of other distributed computing technologies, such as software delivered to the user's local environment from a remote environment for temporary use;
- "from a variety of sources" means that users will have access to data acquired in a variety of ways and stored in a wide variety of relational and non-relational databases;
- "across a generic computing interface" means that ISO 19119 interfaces provide reliable communication between otherwise disparate software resources that are equipped to use these interfaces;
- "within an open information technology environment" means that this International Standard enables geoprocessing to take place outside of the closed environment of monolithic GIS, remote sensing, and AM/FM systems that control and restrict database, user interface, network and data manipulation functions.

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# Geographic information — Services

# 1 Scope

The scope of this International Standard is as follows:

Identification and definition of the architecture patterns for service interfaces used for geographic information and definition of the relationships to the Open Systems Environment model.

This International Standard presents a geographic services taxonomy and a list of example geographic services placed in the services taxonomy.

This International Standard prescribes how to create a platform-neutral service specification, and how to derive platform-specific service specifications that are conformant with this.

This International Standard provides guidelines for the selection and specification of geographic services from both platform-neutral and platform-specific perspectives.

### 2 Conformance

Any product claiming conformance with this International Standard shall pass all the requirements described in the abstract test suite given in Annex A.

NOTE The definition of an abstract test suite appears in ISO 19105.

# 3 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 10746-1:1998, Information technology — Open Distributed Processing — Reference model: Overview — Part 1

ISO/IEC 10746-2:1996, Information technology — Open Distributed Processing — Reference model: Foundations

ISO/IEC TR 14252:1996, Information technology — Guide to the POSIX Open System Environment (OSE)

ISO/TS 19103: —<sup>1)</sup>, Geographic information — Conceptual schema language

ISO 19115:2003, Geographic information — Metadata

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<sup>1)</sup> To be published.