

Geographic information — Metadata

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 19115:2005 sisaldab Euroopa standardi EN ISO 19115:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.02.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 19115:2005 consists of the English text of the European standard EN ISO 19115:2005.</p> <p>This document is endorsed on 22.02.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This International Standard defines the schema required for describing geographic information and services. It provides information about the identification, the extent, the quality, the spatial and temporal schema, spatial reference, and distribution of digital geographic data.</p>	<p>Scope: This International Standard defines the schema required for describing geographic information and services. It provides information about the identification, the extent, the quality, the spatial and temporal schema, spatial reference, and distribution of digital geographic data.</p>
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Geographic information - Metadata (ISO 19115:2003)

Information géographique - Métadonnées (ISO
19115:2003)

Geoinformation - Metadaten (ISO 19115:2003)

This European Standard was approved by CEN on 24 December 2004.

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Foreword

The text of ISO 19115:2003 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 19115:2005 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of an identical text or by endorsement, at the latest by July 2005, and conflicting national standards shall be withdrawn at the latest by July 2005.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 19115:2003 has been approved by CEN as EN ISO 19115:2005 without any modifications.

Introduction

A revival in the awareness of the importance of geography and how things relate spatially, combined with the advancement of electronic technology, have caused an expansion in the use of digital geographic information and geographic information systems worldwide. Increasingly, individuals from a wide range of disciplines outside of the geographic sciences and information technologies are capable of producing, enhancing, and modifying digital geographic information. As the number, complexity, and diversity of geographic datasets grow, a method for providing an understanding of all aspects of this data grows in importance.

Digital geographic data is an attempt to model and describe the real world for use in computer analysis and graphic display of information. Any description of reality is always an abstraction, always partial, and always just one of many possible "views". This "view" or model of the real world is not an exact duplication; some things are approximated, others are simplified, and some things are ignored. There is seldom perfect, complete, and correct data. To ensure that data is not misused, the assumptions and limitations affecting the creation of data must be fully documented. Metadata allows a producer to describe a dataset fully so that users can understand the assumptions and limitations and evaluate the dataset's applicability for their intended use.

Typically, geographic data is used by many people other than the producer. It is often produced by one individual or organization and used by another. Proper documentation will provide those unfamiliar with the data with a better understanding, and enable them to use it properly. As geographic data producers and users handle more and more data, proper documentation will provide them with a keener knowledge of their holdings and will allow them to better manage data production, storage, updating, and reuse.

The objective of this International Standard is to provide a structure for describing digital geographic data. This International Standard is intended to be used by information system analysts, program planners, and developers of geographic information systems, as well as others in order to understand the basic principles and the overall requirements for standardization of geographic information. This International Standard defines metadata elements, provides a schema and establishes a common set of metadata terminology, definitions, and extension procedures. When implemented by a data producer, this International Standard will:

- 1) Provide data producers with appropriate information to characterize their geographic data properly.
- 2) Facilitate the organization and management of metadata for geographic data.
- 3) Enable users to apply geographic data in the most efficient way by knowing its basic characteristics.
- 4) Facilitate data discovery, retrieval and reuse. Users will be better able to locate, access, evaluate, purchase and utilize geographic data.
- 5) Enable users to determine whether geographic data in a holding will be of use to them.

This International Standard defines general-purpose metadata, in the field of geographic information. More detailed metadata for geographic datatypes and geographic services are defined in other ISO 19100 series standards and user extensions.

1 Scope

This International Standard defines the schema required for describing geographic information and services. It provides information about the identification, the extent, the quality, the spatial and temporal schema, spatial reference, and distribution of digital geographic data.

This International Standard is applicable to:

- the cataloguing of datasets, clearinghouse activities, and the full description of datasets;
- geographic datasets, dataset series, and individual geographic features and feature properties.

This International Standard defines:

- mandatory and conditional metadata sections, metadata entities, and metadata elements;
- the minimum set of metadata required to serve the full range of metadata applications (data discovery, determining data fitness for use, data access, data transfer, and use of digital data);
- optional metadata elements – to allow for a more extensive standard description of geographic data, if required;
- a method for extending metadata to fit specialized needs.

Though this International Standard is applicable to digital data, its principles can be extended to many other forms of geographic data such as maps, charts, and textual documents as well as non-geographic data.

NOTE Certain mandatory metadata elements may not apply to these other forms of data.

2 Conformance

2.1 Conformance requirements

Metadata shall be provided as specified in Clause 6 and Annexes A and B.

User-defined metadata shall be defined and provided as specified in Annex C.

Any metadata claiming conformance with this International Standard shall pass the requirements described in the abstract test suite presented in Annex D.

2.2 Metadata Profiles

Any profile conforming to this International Standard shall conform to the rules in Annex C, Clause C.6.

2.3 Obligation and condition

For the purposes of conformance testing using the abstract test suite in Annex D, metadata entities and elements shall be considered to be mandatory, conditional or optional as specified in the applicable profile.

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 639 (all parts), *Code for the representation of names of languages*

ISO 3166 (all parts), *Codes for the representation of names of countries and their subdivisions*

ISO 4217:2001, *Codes for the representation of currencies and funds*

ISO 8859 (parts 1 to 16), *Information technology — 8-bit single-byte coded graphic character sets*

ISO 8879, *Information processing — Text and office systems — Standard Generalized Markup Language (SGML)*

ISO/IEC 10646-1, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane*

ISO/IEC 11179 (all parts), *Information technology — Specification and standardization of data elements*

ISO 19106:—¹⁾, *Geographic information — Profiles*

ISO 19107:—¹⁾, *Geographic information — Spatial schema*

ISO 19108:2002, *Geographic information — Temporal schema*

ISO 19109:—¹⁾, *Geographic information — Rules for application schema*

ISO 19110:—¹⁾, *Geographic information — Methodology for feature cataloguing*

ISO 19111:2003, *Geographic information — Spatial referencing by coordinates*

ISO 19112:—¹⁾, *Geographic information — Spatial referencing by geographic identifiers*

ISO 19113:2002, *Geographic information — Quality principles*

ISO 19114:—¹⁾, *Geographic information — Quality evaluation procedures*

ISO 19117:—¹⁾, *Geographic information — Portrayal*

ISO 19118:—¹⁾, *Geographic information — Encoding*

1) To be published.