ICS 35.240.70 SLOVENSKÁ TECHNICKÁ NORMA Jún 2024

STN	**Geografické informácie Model domény územnej správy (LADM) Časť 1: Zásady (ISO 19152-1: 2024)**	**STN EN ISO 19152-1** 01 9358

Geographic information
Land Administration Domain Model (LADM)
Part 1: Generic conceptual model

Information géographique
Modèle du domaine de l'administration des terres (LADM)
Partie 1: Modèle conceptuel générique

Geoinformation
Land Administration Domain Model (LADM)
Teil 1: Grundlagen

Táto slovenská technická norma obsahuje anglickú verziu európskej normy EN ISO 19152-1: 2024 a má postavenie oficiálnej verzie.

This Slovak standard includes the English version of the European Standard EN ISO 19152-1: 2024 and has the status of the official version.

Nahradenie predchádzajúcich dokumentov

Táto slovenská technická norma nahrádza STN EN ISO 19152 z júna 2013 v celom rozsahu.

138537

Anotácia

Tento dokument:

- definuje referenčný model domény územnej správy (LADM), ktorý pokrýva základné zložky územnej správy/georegulácie vztiahnuté k informáciám;
- poskytuje abstraktný konceptuálny model s časťami súvisiacimi s:
  - účastníkmi (ľuďmi a organizáciami),
  - základnými administratívnymi jednotkami, právami, povinnosťami a obmedzeniami (PPO),
  - priestorovými jednotkami,
  - všeobecným konceptuálnym modelom (zdroje a verzionovaný objekt);
- poskytuje terminológiu pre územnú správu/georegulácia založenú na rôznych národných a medzinárodných systémoch, ktorá je čo najjednoduchšia, tak aby bola užitočná v praxi. Terminológia umožňuje spoločný opis rôznych formálnych alebo neformálnych postupov a procedúr v rôznych jurisdikciách;
- poskytuje model obsahu nezávislý od kódovania, čo umožňuje podporu rôznych kódovaní;
- poskytuje základ pre národné a regionálne profily;
- umožňuje koherentným spôsobom kombinovať informácie o územnej správe/georegulácii z rôznych zdrojov.

Nasledujúce je mimo rozsahu tohto dokumentu:

- zasahovanie do (vnútroštátnych) zákonov o územnej správe/georegulácii s potenciálne právnymi dôsledkami v dôsledku možnosti opísať rôzne typy systémov, ale rovnakou notáciou;
- vybudovanie externých databáz s dátami o účastníkoch, adresnými dátami, dátami o krajinnej pokrývke, dátami o fyzických inžinierskych sieťach, archívnymi dátami a daňovými dátami. LADM však poskytuje triedy stereotypov pre tieto súbory dát, aby určil, prvky ktorého súboru dát LADM sa očakávajú z týchto externých zdrojov, ak sú dostupné.

Tento dokument poskytuje koncepty a základnú štruktúru pre štandardizáciu v oblasti územnej správy/georegulácie. Definuje všeobecnú schému na opis regulačných informácií. Umožňuje tiež vyjadrenie vzťahu k viacerým stranám a skupinám spolu s referenčnou štruktúrou tak, aby bolo možné zachovať zdroje všetkých informačných systémov. Tento dokument stanovuje spoločné prvky a základnú schému, na základe ktorej je možné vytvoriť podrobnejšiu schému.

Národný predhovor

Normatívne referenčné dokumenty

Na nasledujúce dokumenty sa odkazuje v texte takým spôsobom, že časť ich obsahu alebo celý obsah predstavuje požiadavky tohto dokumentu. Pri datovaných odkazoch sa používa len citované vydanie. Pri nedatovaných odkazoch sa používa najnovšie vydanie citovaného dokumentu (vrátane akýchkoľvek zmien).

POZNÁMKA 1. – Ak bola medzinárodná publikácia zmenená spoločnými modifikáciami, čo je indikované označením (mod), použije sa príslušná EN/HD.

POZNÁMKA 2. – Aktuálne informácie o platných a zrušených STN a TNI možno získať na webovom sídle www.unms.sk.

ISO 19103 dosiaľ neprijatá

ISO 19105 prijatá ako STN EN ISO 19105 Geografické informácie. Zhoda a skúšanie (ISO 19105) (01 9326)

ISO 19107 prijatá ako STN EN ISO 19107 Geografické informácie. Priestorová schéma (ISO 19107) (01 9330)

ISO 19109 prijatá ako STN EN ISO 19109 Geografická informácia. Pravidlá aplikačnej schémy (ISO 19109) (01 9335)

Vypracovanie slovenskej technickej normy

Spracovateľ: Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, Bratislava

Technická komisia: TK 89 Geodézia, kartografia a geoinformatika

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 19152-1

January 2024

ICS 35.240.70

Supersedes EN ISO 19152:2012

English Version

Geographic information - Land Administration Domain Model (LADM) - Part 1: Generic conceptual model (ISO 19152-1:2024)

Information géographique - Modèle du domaine de l'administration des terres (LADM) - Partie 1: Modèle conceptuel générique (ISO 19152-1:2024)

Geoinformation - Land Administration Domain Model (LADM) - Teil 1: Grundlagen (ISO 19152-1:2024)

This European Standard was approved by CEN on 18 December 2023.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 19152-1:2024 E

ISO 19103, *Geographic information — Conceptual schema language*

ISO 19105, *Geographic information — Conformance and testing*

ISO 19107, *Geographic information — Spatial schema*

ISO 19109, *Geographic information — Rules for application schema*

European foreword

This document (EN ISO 19152-1:2024) has been prepared by Technical Committee ISO/TC 211 "Geographic information/Geomatics" in collaboration with Technical Committee CEN/TC 287 “Geographic Information” the secretariat of which is held by BSI.

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 2024, and conflicting national standards shall be withdrawn at the latest by July 2024.

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

This document supersedes EN ISO 19152:2012.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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

Endorsement notice

The text of ISO 19152-1:2024 has been approved by CEN as EN ISO 19152-1:2024 without any modification.

ISO 19152-1:2024(en)

ISO 19103, *Geographic information — Conceptual schema language*

ISO 19105, *Geographic information — Conformance and testing*

ISO 19107, *Geographic information — Spatial schema*

ISO 19109, *Geographic information — Rules for application schema*

Introduction

To achieve public policy objectives, authorities establish rules for mandating or enabling particular behaviours or outcomes. Some of these rules use territorial strategies. In the previous edition of this document, ISO 19152:2012, the term "land administration" was used in the broad sense. In this new edition of the document, ISO 19152-1:2023, a new term, with a wider meaning is introduced: "georegulation". This is defined as an activity to delimit and assert control over geographical spaces through regulations.

Through land administration/georegulation, it is possible to create a multitude of geographic spaces serving multiple functions in the contexts of international law, constitutional law, administrative law, private law and customary law. Land administration/georegulation can potentially be used, for example, to delegate powers regionally, to control accessibility to a territory for security or health reasons, to organize the circulation of people, goods and information, to manage resources or for conservation purposes. These geographic spaces are juxtaposed or overlap, producing a complex legal spatial configuration.

The purpose of this document is to present the fundamental notions and define the basic components and relations shared by all objects created by land administration/georegulation.

The first goal of this document is to enable involved parties, both within one country and between different countries, to communicate, based on the shared vocabulary implied by the model. This document does not aim to replace existing systems, but rather to provide a formal language (the Unified Modelling Language, UML) for describing them, so that their similarities and differences can be better understood.

The second goal is to provide an extensible basis for the development and refinement of land administration systems, based on a Model Driven Architecture (MDA). This document is relevant for creating standardized information services in a national or international context, where land administration domain semantics have to be shared between organizations, regions or countries, in order to enable necessary translations. Four considerations during the design of the model were:

1) it will cover common aspects shared by objects created by land administration/georegulation;

2) it will be based on the conceptual framework of "Cadastre 2014" of the International Federation of Surveyors (FIG);[14]

   NOTE 1 The principle of legal independence from Cadastre 2014 can be implemented with complete separate LADM implementations of Cadastre 2014 per layer or with only the spatial unit package of LADM per layer.

3) it will be as simple as possible in order to be useful in practice;

4) the geospatial aspects will follow the ISO/TC 211 conceptual model, i.e. basic types are defined in ISO 19103, geometric elements are defined in ISO 19107 and the General feature model used in this document is defined in ISO 19109.

This document defines the Land Administration Domain Model (LADM). It allows different types of systems to be described but in the same notation. Other parts of the ISO 19152 series will address specific areas of the land administration paradigm, building upon the common core schema defined in this document. The previous edition of this document, ISO 19152:2012, concentrated on land registration. This subject is now contained in ISO 19152-2. This document provides the general reference model for all objects of land administration/georegulation and also provides an overview of all parts. Additional parts are planned to align with the model defined in this document, addressing the following topics:

— Land registration (ISO 19152-2:—[1])

— Marine georegulation (ISO 19152-3:—[2])

— Valuation information (ISO 19152-4:—[3])

1) Under preparation. Stage at the time of publication: ISO/CD 19152-2:2023.

2) Under preparation. Stage at the time of publication: ISO/FDIS 19152-3:2023.

3) Under preparation. Stage at the time of publication: ISO/CD 19152-4:2023.

ISO 19152-1:2024(en)

— Spatial plan information (ISO 19152-5[4])

This document is backwards compatible to the ISO 19152:2012 version of the LADM. Any country profile established using the elements defined in accordance with ISO 19152:2012 remains compliant with this edition of ISO 19152-1, as the main changes do not affect the main structure of the model given in ISO 19152:2012.

ISO 19103, *Geographic information — Conceptual schema language*

ISO 19105, *Geographic information — Conformance and testing*

ISO 19107, *Geographic information — Spatial schema*

ISO 19109, *Geographic information — Rules for application schema*

4) Under preparation. Stage at the time of publication: ISO/CD 19152-5:2023.

ISO 19103, *Geographic information — Conceptual schema language*

ISO 19105, *Geographic information — Conformance and testing*

ISO 19107, *Geographic information — Spatial schema*

ISO 19109, *Geographic information — Rules for application schema*

Geographic information — Land Administration Domain Model (LADM) —

Part 1: Generic conceptual model

1 Scope

This document:

— defines a reference Land Administration Domain Model (LADM) covering basic information-related components of land administration/georegulation;

— provides an abstract, conceptual model with packages related to:

  — parties (people and organizations),

  — basic administrative units, rights, responsibilities and restrictions (RRRs),

  — spatial units,

  — a generic conceptual model (sources and versioned object);

— provides terminology for land administration/georegulation, based on various national and international systems, that is as simple as possible in order to be useful in practice. The terminology allows a shared description of different formal or informal practices and procedures in various jurisdictions;

— provides a content model independent of encoding, allowing for the support of various encodings;

— provides a basis for national and regional profiles;

— enables the combining of land administration/georegulation information from different sources in a coherent manner.

The following are outside the scope of this document:

— interference with (national) land administration/georegulation laws with potentially legal implications due to the possibility of describing different types of systems but in the same notation;

— construction of external databases with party data, address data, land cover data, physical utility network data, archive data and taxation data. However, the LADM provides stereotype classes for these data sets to indicate which data set elements the LADM expects from these external sources, if available.

This document provides the concepts and basic structure for standardization in the land administration/georegulation domain. It defines a general schema that permits regulatory information to be described. It also allows for the relationship to multiple parties and groups to be expressed together with a referencing structure so that sourcing of all information systems can be maintained. This document establishes the common elements and basic schema upon which more detailed schema can be established.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 19103, *Geographic information — Conceptual schema language*

ISO 19105, *Geographic information — Conformance and testing*

ISO 19107, *Geographic information — Spatial schema*

ISO 19109, *Geographic information — Rules for application schema*