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Geografisk information – Begreppskatalog med register (ISO 19126:2009)

Geographic information – Feature concept dictionaries and registers (ISO 19126:2009)

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EUROPEAN STANDARD
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English Version

Geographic information - Feature concept dictionaries and registers (ISO 19126:2009)

Information géographique - Dictionnaires de concepts de caractéristiques et registres (ISO 19126:2009)

Geoinformation - Verzeichnisse und Register für Featurekonzepte (ISO 19126:2009)

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Contents	Page
Foreword	v
Introduction.....	vi
1 Scope	1
2 Conformance	1
2.1 Introduction.....	1
2.2 Conformance for a feature concept dictionary	1
2.3 Conformance for a register of feature concept dictionaries and/or feature catalogues	1
3 Normative references	2
4 Terms, definitions and abbreviations.....	2
4.1 Terms and definitions	2
4.2 Abbreviations.....	5
5 Concepts	5
5.1 Introduction.....	5
5.2 Feature concept dictionary.....	6
5.3 Registers	6
5.4 Feature concept dictionary register	8
5.5 Register of feature concept dictionary and feature catalogue registers	8
5.6 Relationship to data product specifications and application schemas	8
5.7 Community implementations	8
5.8 Notation	9
5.9 Packages	10
6 Feature concept dictionary schema	10
6.1 Introduction.....	10
6.2 CD_FeatureConceptDictionary	11
6.3 CD_Scope.....	12
6.4 CD_Concept	13
6.5 CD_ConceptRelationship	15
6.6 CD_ConceptRelationshipType	15
6.7 CD_FeatureConcept	15
6.8 CD_FeaturePropertyConcept	16
6.9 CD_FeatureAttributeConcept	16
6.10 CD_NominalValueConcept	17
6.11 CD_FeatureAssociationConcept	18
6.12 CD_FeatureRoleConcept	19
6.13 CD_FeatureOperationConcept	19
7 Management of feature concept dictionaries as registers.....	20
7.1 Introduction.....	20
7.2 Item class for feature concepts	20
7.3 Item class for feature attribute concepts	20
7.4 Item class for nominal value concepts	21
7.5 Item class for feature association concepts.....	21
7.6 Item class for feature operation concepts	21
8 Register of feature concept dictionaries and feature catalogues	22
8.1 Introduction.....	22
8.2 HR_FeatureInformationSubregisterDescription	22
8.3 Item classes for feature information subregisters.....	24
Annex A (informative) Feature concepts in dictionaries, catalogues and application schemas	25

Annex B (normative) Abstract test suite	27
Annex C (normative) Information to be included in registration proposals	28
Annex D (informative) Example implementation of the feature concept dictionary schema as a register	33
Annex E (informative) UML notation	35
Bibliography	40

Foreword

This document (EN ISO 19126:2009) 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 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 May 2010, and conflicting national standards shall be withdrawn at the latest by May 2010.

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Endorsement notice

The text of ISO 19126:2009 has been approved by CEN as a EN ISO 19126:2009 without any modification.

Introduction

This International Standard specifies a schema for geographic feature concept dictionaries managed as registers. As described in ISO 19101, geographic features are abstractions of real world phenomena associated with a location relative to the surface of the earth, about which data are collected, maintained and disseminated.

A feature concept dictionary provides basic definitions and related information about a set of concepts that may be used to describe geographic features and shared across multiple application areas. Elements from a feature concept dictionary may be reused in one or more feature catalogues. A feature catalogue is often associated with a particular application schema, product specification and data set. It provides a complete textual specification of a set of feature types and their properties and relationships. See Annex A for further discussion of the relationships between feature concept dictionaries, feature catalogues, application schemas and product specifications.

ISO 19135 specifies procedures for the registration of items of geographic information. Items of geographic information that may be registered are members of object classes specified in technical standards such as those developed by ISO/TC 211. This International Standard defines object classes and specifies rules used to establish and maintain feature concept dictionaries as ISO 19135 conformant register schemas.

ISO 19135 specifies the structure of a hierarchical register in which the principal register holds a set of items that describe the subregisters. This International Standard specifies a schema for a hierarchical register where the subregisters are feature concept dictionaries and/or feature catalogues. This International Standard specifies an accompanying schema. The resulting hierarchical register may be used as a basis for harmonization and the establishment of interoperability between different geographic information communities.

Feature concept dictionaries and feature catalogues maintained as registers may serve as sources of reference for similar registers established by other geographic information communities as part of a system of cross-referencing. Cross-referencing between respective items in registers of items of geographic information may be difficult in cases where the structure of registers differs between information communities. This International Standard may serve as a guide for different information communities to develop compatible registers that can support a system of geographic information cross-referencing.

The Digital Geographic Information Working Group (DGIWG) community feature concept dictionary and register is described as an example implementation of this International Standard.

Geographic information — Feature concept dictionaries and registers

1 Scope

This International Standard specifies a schema for feature concept dictionaries to be established and managed as registers. It does not specify schemas for feature catalogues or for the management of feature catalogues as registers. However, because feature catalogues are often derived from feature concept dictionaries, this International Standard does specify a schema for a hierarchical register of feature concept dictionaries and feature catalogues. These registers are in accordance with ISO 19135.

2 Conformance

2.1 Introduction

To conform to this International Standard, all of the conditions specified for at least one of the two conformance classes described below shall be satisfied.

2.2 Conformance for a feature concept dictionary

Any feature concept dictionary that claims conformance to this International Standard shall satisfy all of the conditions specified in the following abstract test suites:

- a) ISO 19135, A.1, for general conformance to ISO 19135, and
- b) B.2 of this International Standard.

A feature concept dictionary register established by ISO/TC 211 shall in addition satisfy all of the conditions specified in the ISO 19135 abstract test suite for registers established by ISO/TC 211 (ISO 19135, A.3).

2.3 Conformance for a register of feature concept dictionaries and/or feature catalogues

Any register of feature concept dictionaries and/or feature catalogues that claims conformance to this International Standard shall satisfy all of the conditions specified in the following abstract test suites:

- a) ISO 19135, A.1, for general conformance to ISO 19135,
- b) ISO 19135, A.2 for conformance to ISO 19135 as a hierarchical register, and
- c) B.3 of this International Standard.

A register of feature concept dictionaries and/or feature catalogues established by ISO/TC 211 shall in addition satisfy all of the conditions specified in the ISO 19135 abstract test suite for registers established by ISO/TC 211 (ISO 19135, A.3).