ICS 35.240.70 SLOVENSKÁ TECHNICKÁ NORMA Február 2014

STN	**Geografické informácie Pozorovania a merania (ISO 19156: 2011)**	**STN EN ISO 19156** 01 9359

Geographic information. Observations and measurements

Information géographique. Observations et mesures

Geoinformation. Erdbeobachtung und Erdmessung

Táto norma obsahuje anglickú verziu európskej normy EN ISO 19156: 2013 a má postavenie oficiálnej verzie.

This standard includes the English version of the European Standard EN ISO 19156: 2013 and has the status of the official version.

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Anotácia

V tejto medzinárodnej norme sa definuje konceptuálna schéma pre pozorovania a pre objekty, ktoré sú súčasťou vzorkovania počas pozorovaní. Poskytujú sa tu modely na výmenu informácií, ktoré opisujú realizácie pozorovaní a ich výsledky, a to v rámci rôznych vedeckých a technických komunít, ako aj medzi rôznymi vedeckými a technickými komunitami.

Pozorovania zvyčajne zahŕňajú vzorkovanie z objektov záujmu pozorovaných in situ. V tejto medzinárodnej norme je definovaná zvyčajná množina typov objektov vzorkovania, ktoré sú klasifikované primárne podľa ich topologickej dimenzie, ako aj vzorky pre pozorovania ex situ. Schéma obsahuje vzťahy medzi objektmi vzorkovania (čiastkové vzorkovanie, odvodené vzorky).

Táto medzinárodná norma sa týka iba rozhraní viditeľných navonok a nekladie žiadne obmedzenia na vnútorné implementácie okrem tých, ktoré sú potrebné na dodržanie špecifikácií rozhrania v konkrétnej situácii.

Národný predhovor

Táto norma obsahuje národnú prílohu NA (informatívnu), v ktorej je zoznam slovenských a anglických termínov.

Táto norma obsahuje tri národné poznámky v národnej prílohe.

Citované normy

ISO 19101: 2002 zavedená v STN EN ISO 19101: 2005 Geografická informácia. Referenčný model (ISO 19101: 2002) (01 9325)

ISO/TS 19103: 2005 dosiaľ nezavedená

ISO 19107: 2003 zavedená v STN EN ISO 19107: 2005 Geografická informácia. Priestorová schéma (ISO 19107: 2003) (01 9330)

ISO 19108: 2002 zavedená v STN EN ISO 19108: 2005 Geografická informácia. Časová schéma (ISO 19108: 2002) (01 9331)

ISO 19109: 2005 zavedená v STN EN ISO 19109: 2007 Geografická informácia. Pravidlá aplikačnej schémy (ISO 19109: 2005) (01 9335)

ISO 19111: 2007 zavedená v STN EN ISO 19111: 2007 Geografická informácia. Priestorové referencovanie pomocou súradníc (ISO 19111: 2007) (01 9329)

ISO 19115: 2003 zavedená v STN EN ISO 19115: 2005 Geografická informácia. Metadáta (ISO 19115: 2003) (01 9332)

ISO 19115: 2003/Cor. 1: 2006 zavedená v STN EN ISO 19115/AC: 2009 Geografická informácia. Metadáta (ISO 19115: 2003/Cor. 1: 2006) (01 9332)

ISO 19123: 2005 zavedená v STN EN ISO 19123: 2007 Geografická informácia. Schéma geometrie a funkcií povrchov (ISO 19123: 2005) (01 9340)

ISO 19136: 2007 zavedená v STN EN ISO 19136: 2009 Geografická informácia. Geografický značkovací jazyk (GML) (ISO 19136: 2007) (01 9349)

ISO/IEC 19501: 2005 dosiaľ nezavedená

ISO 19157: --- dosiaľ nepublikovaná v ISO

Vypracovanie normy

Spracovateľ normy: SvF STU v Bratislave, Ing. Jana Faixová Chalachanová, PhD.

Technická komisia: TK 89 Geodézia a kartografia

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 19156

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ICS 35.240.70

English Version

Geographic information - Observations and measurements (ISO 19156:2011)

Information géographique - Observations et mesures (ISO 19156:2011)

Geoinformation - Erdbeobachtung und Erdmessung (ISO 19156:2011)

This European Standard was approved by CEN on 27 July 2012.

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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.

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

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Ref. No. EN ISO 19156:2013: E

Foreword

The text of ISO 19156:2011 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 19156:2013 by 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 January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.

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

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 19156:2011 has been approved by CEN as EN ISO 19156:2013 without any modification.

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Introduction

This International Standard arises from work originally undertaken through the Open Geospatial Consortium's Sensor Web Enablement (SWE) activity. SWE is concerned with establishing interfaces and protocols that will enable a "Sensor Web" through which applications and services will be able to access sensors of all types, and observations generated by them, over the Web. SWE has defined, prototyped and tested several components needed for a Sensor Web, namely:

— Sensor Model Language (SensorML).

— Observations & Measurements (O&M).

— Sensor Observation Service (SOS).

— Sensor Planning Service (SPS).

— Sensor Alert Service (SAS).

This International Standard specifies the Observations and Measurements schema, including a schema for sampling features.

The content presented here derives from an earlier version published by Open Geospatial Consortium as OGC 07-022r1, *Observations and Measurements — Part 1 — Observation schema* and OGC 07-002r3, *Observations and Measurements — Part 2 — Sampling Features*. A technical note describing the changes from the earlier version is available from the Open Geospatial Consortium (see http://www.opengeospatial.org/standards/om).

INTERNATIONAL STANDARD ISO 19156:2011(E)

Geographic information — Observations and measurements

1 Scope

This International Standard defines a conceptual schema for observations, and for features involved in sampling when making observations. These provide models for the exchange of information describing observation acts and their results, both within and between different scientific and technical communities.

Observations commonly involve sampling of an ultimate feature-of-interest. This International Standard defines a common set of sampling feature types classified primarily by topological dimension, as well as samples for ex-situ observations. The schema includes relationships between sampling features (sub-sampling, derived samples).

This International Standard concerns only externally visible interfaces and places no restriction on the underlying implementations other than what is needed to satisfy the interface specifications in the actual situation.