SLOVENSKI STANDARD
SIST EN ISO 19111:2020/oprA1:2021

01-januar-2021

Geografske informacije - Lociranje s koordinatami - Dopolnilo 1 (ISO/DAM 19111:2020)

Geographic information - Referencing by coordinates - Amendment 1 (ISO/DAM 19111:2020)

Geoinformation - Koordinatenreferenzsysteme - Änderung 1 (ISO/DAM 19111:2020)

Information géographique - Système de références par coordonnées - Amendment 1 (ISO/DAM 19111:2020)

Ta slovenski standard je istoveten z: **EN ISO 19111:2020/prA1**

ICS:

07.040	Astronomija. Geodezija. Geografija	Astronomy. Geodesy. Geography
35.240.70	Uporabniške rešitve IT v znanosti	IT applications in science

SIST EN ISO 19111:2020/oprA1:2021 **en,fr,de**

DRAFT AMENDMENT

ISO 19111:2019/DAM 1

ISO/TC **211**

Secretariat: **SIS**

Voting begins on:
2020-11-16

Voting terminates on:
2021-02-08

Geographic information — Referencing by coordinates

AMENDMENT 1

Information géographique — Système de références par coordonnées

AMENDEMENT 1

ICS: 35.240.70

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

Reference number
ISO 19111:2019/DAM 1:2020(E)

COPYRIGHT PROTECTED DOCUMENT

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 211, *Geographic information/Geomatics*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The purpose of this amendment is to correct an omission in the requirements for coordinate metadata.

CRS identification may be through either a full description or through reference to a full description in a register of geodetic parameters (ISO 19111:2019, 7.2). Coordinate epoch is required to be given with a coordinate set when those coordinates are referenced to a dynamic coordinate reference system. This requirement is described in the UML through constraints in the CoordinateMetadata class. A constraint applying when CRS identification is through reference to a register has been added to the description of the data model.

This amendment also updates the definition of coordinate operation (ISO 19111:2019, 3.1.8) by adding a note to indicate its relationship to the terms coordinate conversion, coordinate transformation and point motion operation.

Geographic information — Referencing by coordinates

AMENDMENT 1

Page 3, 3.1.8, definition of coordinates operation

Add note to entry. The complete revised definition becomes:

3.1.8
coordinate operation
process using a mathematical model, based on a one-to-one relationship, that changes coordinates in a source coordinate reference system to coordinates in a target coordinate reference system, or that changes coordinates at a source coordinate epoch to coordinates at a target coordinate epoch within the same coordinate reference system

Note 1 to entry: Generalisation of coordinate conversion, coordinate transformation and point motion operation.

Page 17, 7.4, UML schema for Coordinates package

Replace Figure 5 with the following:

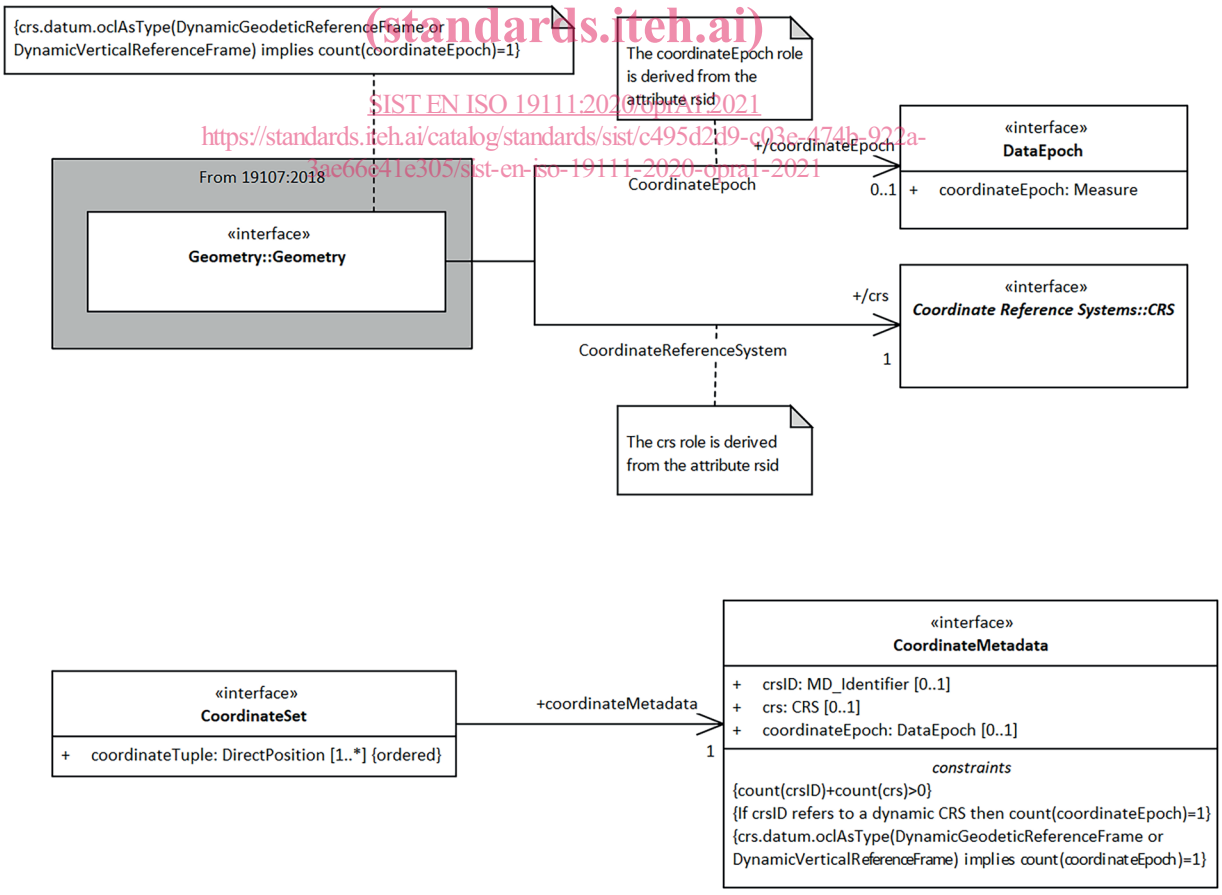

Figure 5 — UML diagram — Relationship of coordinates and coordinate metadata

Page 18, 7.4, UML schema for Coordinates package

Replace Table 2 with the following:

Table 2 — Defining elements of Coordinates::CoordinateMetadata class

Definition:	metadata required to reference coordinates				
Stereotype:	Interface				
Class attribute:	Concrete				
Inheritance from:	(none)				
Public attributes:					
Attribute name	UML identifier	Data type	Obligation	Maximum Occurrence	Attribute definition
CRS ID	crsID	MD_Identifier	C	1	identifier of the coordinate reference system to which a coordinate set is referenced
CRS definition	crs	CRS	C	1	full description of the coordinate reference system to which a coordinate set is referenced
Coordinate epoch	coordinateEpoch	DataEpoch	C	1	epoch at which a coordinate set referenced to a dynamic CRS is valid Note: Required if the CRS is dynamic.
Constraints:					
{count(crsID)+count(CRS)>0} Remarks: See 7.2					
{crs.datum.oclAsType(DynamicGeodeticReferenceFrame or DynamicVerticalReferenceFrame) implies count(coordinateEpoch)=1}					
{if crsID refers to a dynamic CRS then count(coordinateEpoch)=1}					
Remarks: These constraints provide the conditionality for coordinate epoch.					