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**Geographic information —
Referencing by coordinates**

AMENDMENT 1

Information géographique — Système de références par coordonnées
AMENDEMENT 1

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Geographic information — Referencing by coordinates

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3.1.8

Add Note 1 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: Generalization of coordinate conversion, coordinate transformation and point motion operation.

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7.4, Figure 5

Replace Figure 5 with the following:

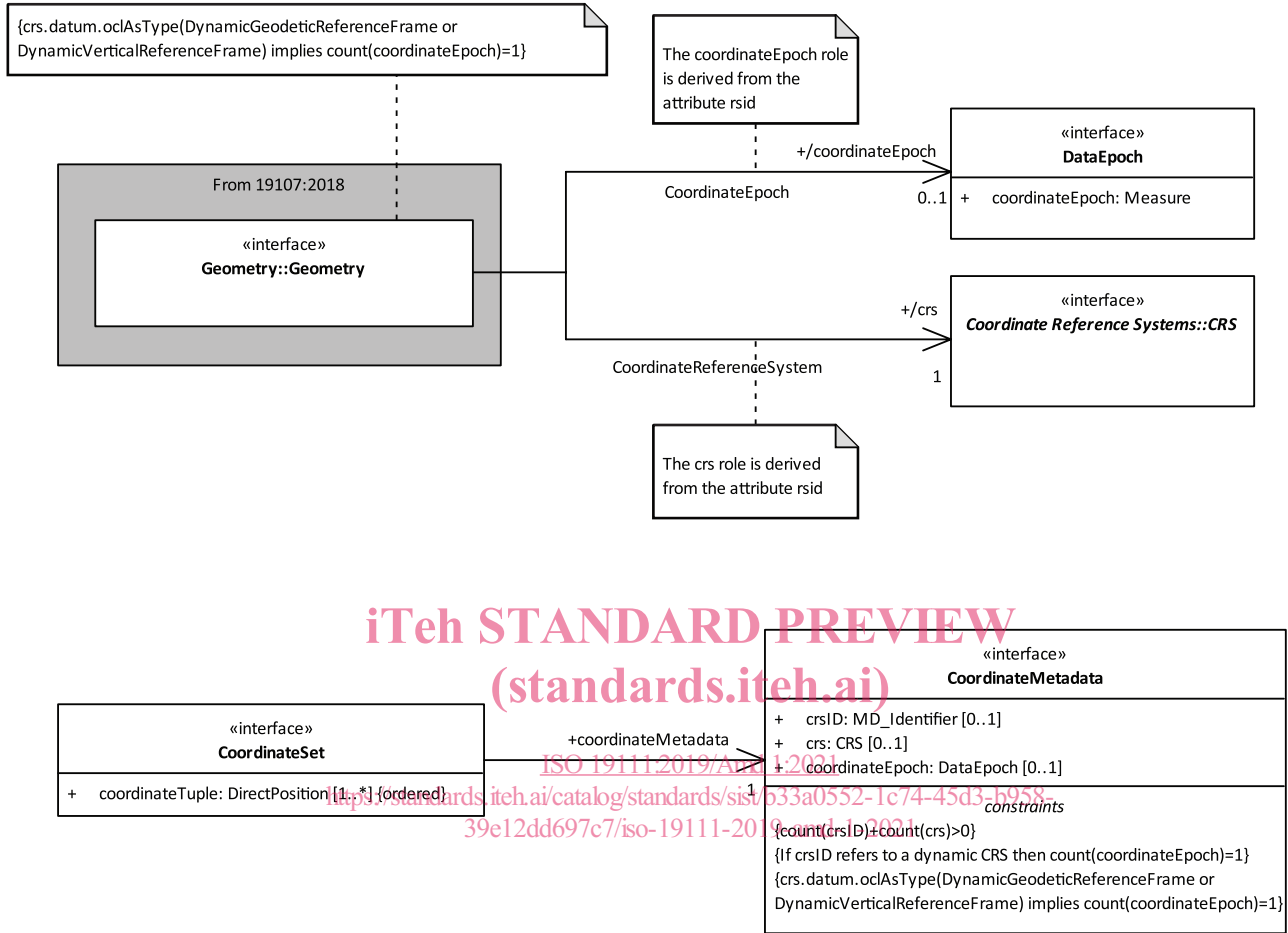


Figure 5 — UML diagram — Relationship of coordinates and coordinate metadata

7.4, Table 2

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:					
<u>Attribute name</u>	<u>UML identifier</u>	<u>Data type</u>	<u>Obligation</u>	<u>Maximum Occurrence</u>	<u>Attribute definition</u>
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:	<pre>{count(crsID)+count(CRS)>0}</pre> <p>Remarks: See 7.2</p> <pre>{crs.datum.oclAsType(DynamicGeodeticReferenceFrame or DynamicVerticalReferenceFrame) implies count(coordinateEpoch)=1}</pre> <pre>{if crsID refers to a dynamic CRS then count(coordinateEpoch)=1}</pre> <p>Remarks: These constraints provide the conditionality for coordinate epoch.</p>				