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**Geographic information — Data  
quality —**

**Part 2:  
XML schema implementation**

*Information géographique — Qualité des données —  
Partie 2: Implémentation de schémas XML*



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## 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](http://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](http://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 on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 211, *Geographic information/Geomatics*.

A list of all parts in the ISO 19157 series can be found on the ISO website.

## Introduction

This document utilizes encoding rules from ISO 19118 and ISO/TS 19139, and the implementation approach from ISO/TS 19115-3 to define an XML schema implementation of ISO 19157:2013, and the data quality related concepts from ISO 19115-2. This schema can be used to validate conformance of XML instance documents with these conceptual models.



# Geographic information — Data quality —

## Part 2: XML schema implementation

### 1 Scope

This document defines data quality encoding in XML. It is an XML schema implementation derived from ISO 19157:2013 and the data quality related concepts from ISO 19115-2.

### 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 19103:2015, *Geographic information — Conceptual schema language*

ISO 19105:2000, *Geographic information — Conformance and testing*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp/ui/>

#### 3.1

##### **document**

<XML> well-formed data object

[SOURCE: W3C XML]

#### 3.2

##### **schema document**

<XML Schema> XML document containing schema component definitions and declarations

Note 1 to entry: The W3C XML Schema provides an XML interchange format for schema information. A single schema document provides descriptions of components associated with a single XML namespace, but several documents may describe components in the same schema, i.e. the same target *namespace* (3.3).

[SOURCE: ISO 19136:2007, 4.1.55]

#### 3.3

##### **namespace**

collection of names, identified by a URI reference, which are used in XML documents (3.1) as element names and attribute names

[SOURCE: W3C XML]