**ISO 19156:202X(X)**

ISO TC 211/WG 9

Secretariat: XXXX

**Geographic information** — Observations and measurements

CD stage

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Published in Switzerland

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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](https://www.iso.org/directives-and-policies.html)).

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This document was prepared by Technical Committee ISO/TC 211, *Geographic information/Geomatics****,***  Working Group 9, *Information management*,  in collaboration with the Open Geospatial Consortium, Inc. (OGC).

This second edition cancels and replaces the first edition (ISO 19156:2011), which has been technically revised.

The main changes compared to the previous edition are as follows:

— xxx xxxxxxx xxx xxxx

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](https://www.iso.org/members.html).

Introduction

This International Standard arises from work originally undertaken through the Open Geospatial Consortium’s Sensor Web Enablement (SWE) activity. A set of interfaces and protocols was standardized, through which applications and services are able to access sensors of all types, and observations generated by them, over the Web.

A new generation of geospatial standards is now emerging, based on general Web standards, architecture, and current practice, as described in <https://www.w3.org/TR/sdw-bp/>. This includes several new standards for describing and publishing sensors and observations, such as OGC SensorThings API and W3C/OGC Semantic Sensor Network Ontology. This new version of the Observations and Measurements Standard is informed by these recent developments and is aimed at enabling the publication of observation data as part of the Web of data, while also supporting other means of data exchange.

The content presented here derives from the previous version published by Open Geospatial Consortium as OGC 10-004r3, OGC Abstract Specification Geographic information — Observations and measurements (ISO 19156:2011). A technical note describing the changes from the earlier version is available from the Open Geospatial Consortium (see http://www.opengeospatial.org/standards/om).

Title (Introductory element — Main element — Part #: Part title)

# Scope *(mandatory)*

Type text.

# Normative references *(mandatory)*

*Two options of text (remove the inappropriate option).*

*1) The normative references shall be introduced by the following wording.*

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 #####‑#, *General title — Part #: Title of part*

ISO #####‑##:20##, *General title — Part ##: Title of part*

*2) If no references exist, include the following phrase below the clause title:*

There are no normative references in this document.

# Terms and definitions *(mandatory)*

*Four options of text (remove the inappropriate options).*

*1) If all the specific terms and definitions are provided in Clause 3, use the following introductory text:*

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

*2) If reference is given to an external document, use the following introductory text:*

For the purposes of this document, the terms and definitions given in [external document reference xxx] apply.

*3) If terms and definitions are provided in Clause 3, in addition to a reference to an external document, use the following introductory text:*

For the purposes of this document, the terms and definitions given in [external document reference xxx] and the following apply.

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No terms and definitions are listed in this document.

*The list below is always included after each option:*

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— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <http://www.electropedia.org/>

3.1

term

text of the definition

Note 1 to entry: Text of the note.

[SOURCE: …]

3.2

term

text of the definition

# Clause title autonumber

Type text.

# Clause title

Type text.

*Use subclauses if required e.g. 5.1 or 5.1.1. For example:*

## Subclause autonumber

### Subclause autonumber

*There are two options for providing formulae: Equation Editor in MS Word, or MathType Equation.*

Example of formula in MS Equation Editor:

where

|  |  |  |
| --- | --- | --- |
|  | *A* | is the equivalent absorption area of the room, in square meters; |
|  | *S* | is the area in square meters of the measurement surface (in the case of this procedure, *S* is a sphere with a radius of 1 m, i.e. *S* = 4*π*). |

The same formula in MathType Equation:



# Clause title

Example of codes:

<xs:complexType name="Route">

 <xs:sequence>

 <xs:element name="routeID" type="tdt:IntUnLoMB"/>

 <xs:element name="routeListID" type="tdt:IntUnLoMB"/>

 <xs:element name="listCount" type="tdt:IntUnLoMB"/>

 </xs:sequence>

</xs:complexType>

1. (informative)  
     
   Annex title e.g. Example of a figure and a table
   1. Clause title autonumber

*Use subclauses if required e.g. A.1.1 or A.1.1.1. For example:*

* + 1. Subclause autonumber
       1. Subclause autonumber

Type text.

Dimensions in millimetres

figure_exemple

**Key**

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | desiccant/aqueous saturated salt solution |  |  |
| 2 | test specimen |  |  |
| 3 | sealant |  |  |
| 4 | template |  |  |

NOTE Figure note.

|  |  |
| --- | --- |
| a | It is the upper exposed area. |
| b | It is the lower exposed area. |

**Figure A.1 — Example**

**Table A.1 — Example**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type** a | **No. series** | **Pressure** | **Length** | **Temperature** |
| *p*1 | *l*2 | *T*1 |
| MPa | mm | °C |
| A | 248-i | 50 | 216 | 50 |
| B | 556-i | 100 b | 287 | 60,5 |
| C | 43-ii | 200 | 300 | 38 |
| NOTE   Table note.  a   Table footnote.  b   Second table footnote. | | | | |

Bibliography

[1] ISO #####‑#, *General title — Part #: Title of part*

[2] ISO #####‑##:20##, *General title — Part ##: Title of part*