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## **Guidance to Editors and Authors of OGC Documents that use the OGC Standards document template.**

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### **Warning**

This document is not an OGC Standard. This is an OGC Guidance Document for the OGC Document template

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## 1. Preface

This document provides guidance for Editors to use when writing and modifying any OGC document using the OGC document template. These documents include OGC standards, profiles of OGC standards, abstract specifications, and best practices documents<sup>1</sup>. The guidance provided in this document used to be contained in the actual template document.

The authors and editors of OGC documents should also be aware of the directives contained in the OGC Policy document, “Policy Directives for Writing and Publishing OGC Standards: TC Decisions”. This document, also known as “135”, can be referenced from the OGC Policy page: <http://www.opengeospatial.org/ogc/policies/directives> .

Finally, authors and editors of OGC standards shall follow the guidance provided in “The Specification Model — A Standard for Modular specifications” [08-131]. This OGC Policy document contains requirements for writing standards to be used for any document whose eventual purpose is the specification of requirements for software, services or data structures. The key aspect of the guidance is the specification of requirements and the relationship between requirements and conformance classes. This document may also be found at <http://www.opengeospatial.org/ogc/policies/directives> .

## 2. Terms used in this document and the template

### Conformance test

A **conformance test**, abstract or real, contains one or more requirements specified within a standard, or set of standards. Annex A of any OGC standards document shall be used to define the abstract test suite.

### Paragraph

A **paragraph** is an unnumbered subdivision of a clause or sub-clause.

### Requirement

A requirement is an expression in the content of a document conveying criteria to be fulfilled if compliance with the document is to be claimed and from which no deviation is permitted. Each **requirement** is a normative criterion for a single **type of standardization target**. In an OGC standards context, **requirements** will be associated to **conformance tests** that can be used to

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<sup>1</sup> There is a complete enumeration of OGC document types at <http://www.opengis.net/register/ogc-na/doc-type/>

prove compliance to the underlying criteria by the **standardization target**<sup>2</sup>. Examples of requirements are:

1. Each component of the standard, including requirements, requirements modules, requirements classes, conformance test cases, conformance modules and conformance classes SHALL be assigned a URI as specified by the OGC naming authority or its equivalent.
2. When a WCS server encounters an error while performing a GetCapabilities operation, it SHALL return an exception report message as specified in Clause 8 of [OGC 06-121r8].

The policies and guidance related to how to document a requirement are found in the OGC Specification Model - A Standard for Modular specifications [OGC 08-131].

## Requirement Class

Aggregate of all **requirement modules** that must be satisfied for a **conformance test class**.

## Requirement Module

Aggregate of **requirements** and **recommendations** of a specification against a single **standardization target type**.

## 3. Cover Page

Please replace any red text with the appropriate information. For example, the red “XXXX” following editor needs to be replaced with the name of the document editor or editors.

### Cover page elements

There are a number of elements on the cover page that need to be correctly structured. The following is guidance for those elements.

*Date:* The date shall be specified in the form Day, Month, Year. An example is 23/12/2010. An optional time may be specified. The form of the time shall be based on using a 240 hour clock.

*External identifier of this OGC<sup>®</sup> document:* This is the HTTP URI that identifies the candidate standard. Examples are <http://www.opengis.net/doc/policy/2.0> and <http://www.opengis.net/doc/standard/gml/3.2>.

*Version:* This is the version number of the standard. The guidance on how to specify the version number is in the TC Policies and Procedures, section 8.6.2.

*Category:* The category shall specify the OGC<sup>®</sup> document type selected from the valid items in <http://www.opengis.net/register/ogc-na/doc-type/>. Typical document types are Implementation, Abstract Specification, or Best Practice.

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<sup>2</sup> From the Modular Specification Policy document.

*Warning:* Please do not change the warning. Once a candidate standard is approved, OGC staff shall edit the warning to contain the correct language.

### **Cover page Title**

For the “Document Title” please enter a title that describes the content of the document. There is guidance regarding the naming of OGC standards in section 7 of the Directives (135) document. Please follow this guidance.

### **Cover page Copyright**

For the copyright, please use the copyright as specified in the document template.

There is guidance regarding the naming of OGC standards in section 3 of the Directives (135) document. Please follow this guidance.

However, if the copyright is being granted by an OGC Member organization or organizations, please use the following:

Copyright yyyy Company 1

Copyright yyyy Company 2

The companies listed above have granted the Open Geospatial Consortium, Inc. (OGC) a nonexclusive, royalty-free, paid up, worldwide license to copy and distribute this document and to modify this document and distribute copies of the modified version.

Once the document is approved as a formal OGC standard, then the copyright shall be fully vested with the OGC.

### **Table of Contents**

The **table of contents** is a mandatory preliminary element. The table of contents shall be entitled «Contents» and shall list clauses and, if appropriate, sub-clauses with titles, annexes together with their status in parentheses, the bibliography, index(es), figures and tables. The order shall be as follows: clauses and sub-clauses with titles; annexes (including clauses and subclauses with titles if appropriate); the bibliography; index(es); figures; tables. All the elements listed shall be cited with their full titles. Terms in the «Terms and definitions» clause shall not be listed in the table of contents.

The table of contents shall begin on a new page following the cover page.

## **4. Preliminary elements (clauses)**

The following are the preliminary elements in any OGC standard. Some are mandatory and some are optional. Please note that 'chapter' should *\*not\** be used for textual references to other parts.

## **Abstract (Clause 1)**

All OGC standards shall contain an abstract as a mandatory preliminary element. An abstract specifies in very clear language the interoperability problem that the standard is addressing. Abstracts should be short. An example of an abstract is:

Abstract for WaterML 2.0

WaterML 2.0 is an information model and encoding that supports the common exchange of hydrologic information. The encoding is an application schema based on OGC GML, O&M and OGC Sensor Web Enablement standards. WaterML 2.0 was advanced by an international team from the US, Canada, Australia and Europe, and supports sharing of water and hydrologic information between thousands of organizations worldwide.

## **Keywords (Clause 2)**

This is a mandatory preliminary element. For the keywords section, select up to 8 key terms for a search on your standards subject. Currently the following list of keywords is used for the OGC document catalogue. Please select from this list as required and only add new keywords as required.

Document types:

Standard, abstract specification, best practice

OGC Standards related acronyms

Citygml, csw, filter, georss, geosync, geoxacml, gml, go, kml, opensl, o&m, owc, ows, pubsub, sas, sdi, sensorml, sf, sld, sos, styling, swe, tjs, waterml, wcs, wfs, wfs-t, wmc, wms, wmts, wps, 3d, soap, rest, uncertml, ows-6, ows-7, ows-8, P&P.

## **Preface (Clause 3)**

The **Preface** is an optional preliminary element, included if needed to give OGC specific information or commentary. This preliminary information and/or introductory comments should be placed as paragraphs just before the OGC Intellectual Property statement. Introductory comments give specific information or commentary about the technical content of the document and about the reasons prompting its preparation. The preface shall not contain requirements and is considered informative. The preface should also include a statement regarding future work, including any updates to the OGC Abstract Specification.

An example of the type of content that may be included in the preface is as follows:

This document is a deliverable of the Open Geospatial Consortium (OGC) Interoperability Program Open Web Service (OWS) Testbed phase 7 (OWS-7).

The document describes the architecture that was implemented in the Aviation thread of OWS-7. It gives an overview of the architecture and describes the implemented

components. In addition it discusses eventing and notification techniques relevant for the aviation domain.

This work was supported by the European Commission through the GENESIS project (an Integrated Project, contract number 223996).

This document does not suggest any updates to the OGC Abstract Specification.

The Preface shall end with the standard intellectual property wording as shown in the document template. The IPR statement shall be italics and may not be modified or removed.

### **Submitting Organizations (Clause 4)**

This is a list of OGC Member organizations submitting or contributing to the document. Only OGC Member organizations shall be listed in this section.

### **Submitters (Clause 5)**

This section allows you to list all of the individuals who have contributed to this document. Please complete the table with the names and Member organization affiliation for each contributor to the document. Please DO NOT include email addresses or other contact information.

### **Scope (Clause 6)**

Immediately following the Submission Contact points is the Scope. The **Scope** clause shall appear at the beginning of each OGC document and define without ambiguity the subject of the document and the aspect(s) covered, thereby indicating the limits of applicability of the document or particular parts of it. The Scope shall not contain requirements.

The scope shall be succinct so that it can be used as a summary for bibliographic purposes.

It shall be worded as a series of statements of fact. Forms of expression such as «This OGC™ Standard specifies [establishes] [gives guidelines for] [defines terms] ...» shall be used.

Statements of applicability of the standard shall be introduced by the wording «This OGC® Standard is applicable to ...».

In the case of an OGC Standard, the Scope should include the scope of the Standards Working Group Charter.

The following is a good example of a well defined scope:

This OpenGIS® standard defines a simplified profile of GML 3.2 that supports GML features and a limited set of linearly interpolated geometric types. A set of application schema encoding rules is defined that allow features to be encoded using GML application schemas.



This OGC<sup>®</sup> document defines:

Rigid coding patterns for the use of a subset of XML Schema constructs (XML Schema profile)

Rigid coding patterns for the use of a subset of GML constructs (GML profile).

This document prescribes the encoding of GML application schemas in sufficient detail that client applications do not need to deal with the entire scope of XML-Schema and GML but only need to understand a restricted subset of both specifications in order to be able interpret schema documents referenced by data encoded in GML. It is expected that making it easier to interpret GML application schemas will enhance interoperability between clients and servers and make the task of implementing client applications less onerous.

This document specifies three compliance levels for this profile. Level 0 compliance is the simplest and easiest to understand, but does not support the entire set of GML features. Level 1 compliance is somewhat more complex and difficult to understand, but includes more feature encoding abilities sometimes needed. The “full” (level 2) compliance is the most complex, and is intended to include all the feature encoding abilities provided by the OpenGIS<sup>®</sup> Simple Features access - Part 1: Common architecture.

## **Conformance (Clause 7)**

Please use the wording in the template. If you have additional clarifying text, please add. In terms of the following:

This <document> defines XXXX.

Requirements for N standardization target types are considered:

- AAAA
- BBBB

<document> should be the correct OGC document type.

XXXX is a short description.

AAAA, BBBB and so on are selected from the types defined in the Modular Specification document.

An example is:

This OGC encoding standard defines three compliance levels called SF-0, SF-1, and SF-2

## Normative References (Clause 8)

This section provides a list of normative references to other OGC, ISO and related standards. If there are no normative references, then the document should make such as statement.

Examples of normative references are:

IETF RFC 2396, *Uniform Resource Identifiers (URI): Generic Syntax*. 1998

ISO 8601:2000, *Data elements and interchange formats — Information interchange — Representation of dates and times*. 2000

OGC 06-042, *Web Map Service (WMS) Implementation Standard*, version 1.3.0. 2007

Please use the format as shown above. Specifically:

<Standards organization acronym> <Document number><,> <Document Title including version if appropriate> <year>

The list shall not include documents that are not publicly available.

## Terms and Definitions (Clause 9)

The Terms and definitions clause is a mandatory element giving definitions necessary for the understanding of certain terms used in the standard. The minimum set of terms and definitions is included in the template and references OWS Common for definition of the terms Shall, Should, May, and so forth. If there are no more Terms and Definitions, please remove the text starting “For the purposes . . .”.

The Terms and Definitions clause should almost always be included in an OGC Implementation Specification or Abstract Specification. Wherever possible the definition should reproduce an existing one from one of the normative references. An excellent source of such terms is the ISO TC 211<sup>3</sup> terminology dictionary.

The term and definition list is introduced by the standard wording in the template, which shall be modified as appropriate. A definition may reference other normative standards. Such references shall be enclosed in square brackets, such as [OGC 06-135r8].

Below are some examples of terms and definitions:

**channel**

A logical grouping of information transmitted to or from a CCSI sensor.

**coordinate reference system**

Coordinate system that is related to an object by datum [ISO 19111:2009].

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<sup>3</sup> <http://www.isotc211.org/> - Terms on the left side of the page.

### **entry resource**

Members of a collection that are represented as ATOM entry documents [IETF RFC 4287].

## **5. Conventions**

This section provides details and examples for any conventions used in the document. Examples of conventions are symbols, abbreviations, use of XML schema, or special notes regarding how to read the document. If UML is used in the document, please insert the following text in the template under Conventions:

All UML diagrams in this document follow the guidance as documented in OGC OWS Common 2.0 section 5.2.

Following are some examples.

### **Symbols**

All symbols used in this document are either:

1. common mathematical symbols
2. UML 2 (Unified Modeling Language) as defined by OMG and accepted as a publicly available standard (PAS) by ISO in its earlier 1.3 version.

### **Abbreviations**

In this document the following abbreviations and acronyms are used or introduced:

- ERA Entity, Relation, Attribute (pre-object modeling technique)
- ISO International Organization for Standardization (from Greek for “same”)
- OGC Open Geospatial Consortium (<http://www.opengeospatial.org/>)

### **XML Schema**

The following notations are used in XML Schema fragment presented in this document:

- 1) Brackets ([ ]) are used to denote constructs that can be optionally specified. In the following example:

```
<xsd:element name="MyElement" minOccurs="0" [maxOccurs="1"]>
```

the brackets around *maxOccurs="1"* mean that this construct is optional and can be omitted.

## Other informative conventions

For clarity, each normative statement (requirement) in this standard is in one and only one place and is set in a **bold font**. If the statement of the requirement or recommendation is repeated for clarification, the “**bold font**” home of the statement is considered the official statement of the normative requirement or recommendation. In this sense, all requirements in this standard should be listed in a Table of Requirements at the beginning of a standard. The following is an example of a table of requirements. The table should be placed in Section 2 (Clause 7).

Requirement Class	Requirement Class URI	Dependency
AsyncCancellation	<a href="http://www.opengis.net/spec/OSEO/1.0/AsyncCancellation">http://www.opengis.net/spec/OSEO/1.0/AsyncCancellation</a>	Cancellation
AsyncSubmit	<a href="http://www.opengis.net/spec/OSEO/1.0/AsyncSubmit">http://www.opengis.net/spec/OSEO/1.0/AsyncSubmit</a>	Core
Cancellation	<a href="http://www.opengis.net/spec/OSEO/1.0/Cancellation">http://www.opengis.net/spec/OSEO/1.0/Cancellation</a>	Core
Core	<a href="http://www.opengis.net/spec/OSEO/1.0/Core">http://www.opengis.net/spec/OSEO/1.0/Core</a>	
MediaDelivery	<a href="http://www.opengis.net/spec/OSEO/1.0/MediaDelivery">http://www.opengis.net/spec/OSEO/1.0/MediaDelivery</a>	Core
Notification	<a href="http://www.opengis.net/spec/OSEO/1.0/Notification">http://www.opengis.net/spec/OSEO/1.0/Notification</a>	Core
OnlineDataAccess	<a href="http://www.opengis.net/spec/OSEO/1.0/OnlineDataAccess">http://www.opengis.net/spec/OSEO/1.0/OnlineDataAccess</a>	Core
OnlineDataDelivery	<a href="http://www.opengis.net/spec/OSEO/1.0/OnlineDataDelivery">http://www.opengis.net/spec/OSEO/1.0/OnlineDataDelivery</a>	Core
ProductOrder	<a href="http://www.opengis.net/spec/OSEO/1.0/ProductOrder">http://www.opengis.net/spec/OSEO/1.0/ProductOrder</a>	Core
Quotation	<a href="http://www.opengis.net/spec/OSEO/1.0/Quotation">http://www.opengis.net/spec/OSEO/1.0/Quotation</a>	Core
QuotationAsync	<a href="http://www.opengis.net/spec/OSEO/1.0/QuotationAsync">http://www.opengis.net/spec/OSEO/1.0/QuotationAsync</a>	Quotation
QuotationMonitoring	<a href="http://www.opengis.net/spec/OSEO/1.0/QuotationMonitoring">http://www.opengis.net/spec/OSEO/1.0/QuotationMonitoring</a>	Quotation
QuotationOffLine	<a href="http://www.opengis.net/spec/OSEO/1.0/QuotationOffLine">http://www.opengis.net/spec/OSEO/1.0/QuotationOffLine</a>	Quotation
QuotationSync	<a href="http://www.opengis.net/spec/OSEO/1.0/QuotationSync">http://www.opengis.net/spec/OSEO/1.0/QuotationSync</a>	Quotation
SceneSelection	<a href="http://www.opengis.net/spec/OSEO/1.0/SceneSelection">http://www.opengis.net/spec/OSEO/1.0/SceneSelection</a>	ProductOrder
SubscriptionOrder	<a href="http://www.opengis.net/spec/OSEO/1.0/SubscriptionOrder">http://www.opengis.net/spec/OSEO/1.0/SubscriptionOrder</a>	Core
TaskingOrder	<a href="http://www.opengis.net/spec/OSEO/1.0/TaskingOrder">http://www.opengis.net/spec/OSEO/1.0/TaskingOrder</a>	Core

## 6. Clause

A **clause** is the basic component in the subdivision of the content of a standard. Each clause shall have a title, placed immediately after its number, on a line separate from the text that follows it.

The clauses in each standard or part shall be numbered with Arabic numerals, beginning with 1 for the «Scope» clause. The numbering shall be continuous up to but excluding any annexes.

Numbers given to the clauses of an annex shall be preceded by the letter designating that annex followed by a full-stop. The numbering shall start afresh with each annex.

The following is an example of a Clause

This Clause specifies the underlying coverage data model used in the further Clauses of this standard.

A WCS server offers a – possibly empty – set of coverage objects. WCS operations deliver different parts of a coverage offered:

- *GetCapabilities* delivers an overview of the server offerings, among them a list of the identifiers of all coverages available (see Subclause **Error! Reference source not found.**).

## Sub-clause

A sub-clause is a numbered subdivision of a clause. A primary subclause (e.g. 6.1, 6.2, etc.) may be subdivided into secondary sub-clauses (e.g. 6.1.1, 6.1.2, etc.), and this process of subdivision may be continued as far as the fifth level (e.g. 6.1.1.1.1, 6.1.1.1.2, etc.).

Sub-clauses shall be numbered with Arabic numerals. Numbers given to the subclauses of an annex shall be preceded by the letter designating that annex followed by a full-stop.

A sub-clause shall not be created unless there is at least one further sub-clause at the same level. For example, a piece of text in clause 10 shall not be designated sub-clause «10.1» unless there is also a sub-clause «10.2».

Each primary sub-clause should preferably be given a title, which shall be placed immediately after its number, on a line separate from the text that follows it. Secondary sub-clauses may be treated in the same way. Within a clause or sub-clause, the use of titles shall be uniform for sub-clauses at the same level, e.g. if 10.1 has a title, 10.2 shall also have a title. In the absence of titles, key terms or phrases (composed in distinctive type) appearing at the beginning of the text of the sub-clause may be used to call attention to the subject matter dealt with. Such terms or phrases will not be listed in the table of contents.

## 7. Requirement

Often a Clause or Sub-clause may specify a requirement. See the definition of a requirement in Terms and definitions above.

There are several ways that a requirement may be specified.

There are various ways to express a requirement in an OGC document. While we would like to see consistency on how requirements are expressed in OGC standards, there is no right way. That said, following are some examples of how to clearly and cleanly express requirements. The first is from the OGC Sensor Observation Service 2.0 document:

Requirement
<a href="http://www.opengis.net/spec/SOS/2.0/req/core/request-version">http://www.opengis.net/spec/SOS/2.0/req/core/request-version</a>
<b>Req 1</b> For ALL SOS request types defined in this standard except the request type of the GetCapabilities operation, a mandatory <code>version</code> parameter SHALL specify the service type specification. It is of type <code>CharacterString</code> and SHALL have the fixed value “2.0.0”.

The following is an example of another way of documenting a requirement in an OGC standard.

**Req 2** When a WCS server encounters an error while performing a `GetCapabilities` operation, the server *shall* return an exception report message as specified in Clause 8 of [OGC 06-121r8].

Finally the following is a more complex example showing how requirement class and not a simple requirement may be documented.

Requirements Class	
<a href="http://www.opengis.net/spec/ABCD/m.n/req/req-class-a">http://www.opengis.net/spec/ABCD/m.n/req/req-class-a</a>	
Target type	Token
Dependency	<a href="http://www.example.org/req/blah">http://www.example.org/req/blah</a>
Dependency	<a href="urn:iso:ts:iso:19139:clause:6">urn:iso:ts:iso:19139:clause:6</a>
Requirement	<a href="http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-1">http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-1</a> <i>requirement description</i>
Requirement	<a href="http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-2">http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-2</a> <i>requirement description</i>
Requirement	<a href="http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-3">http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-3</a> <i>requirement description.</i>

Token should be selected from types defined in Modular Specifications document. They should match one of the types from clause 2

Dependency is a reference to another requirements class in this standard or another standard.

“req-name” should be a short token.

## 8. Document Annexes

Annexes shall appear in the order in which they are cited in the text. Each annex shall be designated by a heading comprising the word «Annex» followed by a capital letter designating its serial order, beginning with «A», e.g. «Annex A». The annex heading shall be followed by

the indication «(normative)» or «(informative)», and by the title, each on a separate line. Numbers given to the clauses, sub-clauses, tables, figures and mathematical formulae of an annex shall be preceded by the letter designating that annex followed by a full-stop. The numbering shall start afresh with each annex. A single annex shall be designated «Annex A».

**Normative annexes** are integral parts of the standard. Appendix A and Appendix B are mandatory elements and shall always be considered normative. An annex’s normative status (as opposed to informative) shall be made clear by the way in which it is referred to in the text, by a statement to this effect in the foreword and by an indication in the table of contents and under the heading of the annex.

**Informative annexes** give additional information intended to assist the understanding or use of the standard and shall not contain provisions to which it is necessary to conform in order to be able to claim compliance with the standard. Their presence is optional. An annex’s informative status (as opposed to normative) shall be made clear by the way in which it is referred to in the text, by a statement to this effect in the foreword and by an indication in the table of contents and under the heading of the annex.

The following are the typical annexes for an OGC document. Please note that **for a standards document, Annex A shall always be the Abstract Conformance Test Suite**

### **Annex A: Abstract Conformance Class Test Suite**

For a standards document, this section defines the abstract conformance test suite. Policy guidance for the structure and format for this section is found in Annex A of The Specification Model - A Standard for Modular specifications [OGC 08-131].

The following is an example of how to express a conformance class.

There is a dependency on the conformance class for GML documents, defined in clause 2.4 (with the test suite in A.3) of *Error! Reference source not found.*

There is a dependency on the conformance class for Geographic Metadata XML encoding, described in Clause 2 and Annex A of *Error! Reference source not found.*

<b>Conformance Class</b>	
	<a href="http://www.opengis.net/spec/ABCD/m.n/conf/conf-class-a">http://www.opengis.net/spec/ABCD/m.n/conf/conf-class-a</a>
Requirements	<a href="http://www.opengis.net/spec/ABCD/m.n/req/req-class-a">http://www.opengis.net/spec/ABCD/m.n/req/req-class-a</a>
Dependency	<a href="#">Error! Reference source not found./clause/2.4</a> Additional explanation if necessary.
Dependency	<a href="urn:iso:ts:iso:19139:clause:2">urn:iso:ts:iso:19139:clause:2</a> Additional information if required
Test	<a href="http://www.opengis.net/spec/ABCD/m.n/conf/conf-class-a/test-1">http://www.opengis.net/spec/ABCD/m.n/conf/conf-class-a/test-1</a>

	Requirement	<a href="http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-1">http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-1</a>
	Test purpose	Explanation
	Test method	Explanation.
	Test type	Basic or capability (optional)
Test	<a href="http://www.opengis.net/spec/ABCD/m.n/conf//test-2">http://www.opengis.net/spec/ABCD/m.n/conf//test-2</a>	
	Requirement	<a href="http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-2">http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-2</a>
	Requirement	<a href="http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-3">http://www.opengis.net/spec/ABCD/m.n/req/req-class-a/req-name-3</a>
	Test method	Validate the XML document using the Schematron document <a href="http://schemas.opengis.net/om/2.0/resultTypeConsistent.sch">http://schemas.opengis.net/om/2.0/resultTypeConsistent.sch</a> . Pass if no errors reported. Fail otherwise.
	Test type	Capability

Note: A single test may relate to more than one requirement

## Annex B: Revision History

Annex B documents revisions to the document. This is an informative annex and is not mandatory.



## 9. Guidance on other document elements

### Footnotes

Footnotes to the text give additional information; but their use shall be kept to a minimum. They shall not contain requirements.

Footnotes to the text shall be placed at the foot of the relevant page and be separated from the text by a short thin horizontal line on the left of the page.

Footnotes to the text shall normally be distinguished by Arabic numerals, beginning with 1, followed by one parenthesis and forming a continuous numerical sequence throughout the document: 1), 2), 3), etc. The footnotes shall be referred to in the text by inserting the same numerals, as superscripts, after the word or sentence in question: <sup>1) 2) 3)</sup> etc.

In certain cases, for example in order to avoid confusion with superscript numbers, one or more asterisks or other appropriate symbols may be used instead: \*, \*\*, \*\*\*, etc.; \*, †, ‡, etc.

A paragraph with a footnote<sup>4</sup>:

### Ordered Lists

An ordered list is a sequentially lettered and numbered list of text elements, for example:

- a) first list item at level 1 xxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxx  
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxx;
- b) second list item at level 1;
  - 1) first list item at level 2;
  - 2) second list item at level 2:
    - first list item at level 3;
    - second list item at level 3 xxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxx  
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxxxxxx  
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx;
    - third list item at level 3.

---

<sup>4</sup>) A footnote to the text.

Lists may be introduced by a sentence, a complete grammatical proposition followed by a colon, or by the first part of a proposition (without a colon), completed by the items in the list.

Two different types of lists can be used: ordered and unordered. In an ordered list, each list item is preceded by an item letter or number for easy reference. In an unordered list, each list item is preceded by a dash. The ordered list is most often used, and shall be used when it may be useful to refer to a specific item in the list.

Key terms or phrases may be composed in distinctive type to call attention to the subject matter dealt with in the various list items. Such terms or phrases will not be listed in the table of contents; if it is a requirement that they are listed, they shall not be presented as list items but as subclause titles.

## Unordered Lists

An unordered list is an unlettered and unnumbered list of text elements, for example:

- first unordered list item at level 1 xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx  
xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
- first unordered list item at level 2 xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx  
xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
- second unordered list item at level 2 xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx  
xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
- first unordered list item at level 3 xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx  
xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
- second unordered list item at level 3 xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx  
xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
- second unordered list item at level 1

## Figures

A sample figure is shown in Figure 1.

Dimensions in millimetres

PLACE FIGURE ART HERE

NOTE 1 Figure note.

NOTE 2 Figure note.

<sup>a</sup> Figure footnote.

**Figure 1 — Figure title**

**Figures** should be used wherever appropriate to present information in an easily comprehensible form. Each figure shall be referred to explicitly within the text.

One level of subdivision only is permitted [e.g. Figure 1 may be subdivided as a), b), c), etc.].

Figures shall be numbered with Arabic numerals, beginning with 1. This numbering shall be independent of the numbering of the clauses and of any tables. A single figure shall be designated «Figure 1». The numbering shall be continuous up to but excluding any annexes. Numbers given to the figures of an annex shall be preceded by the letter designating that annex followed by a full-stop. The numbering shall start afresh with each annex.

The title shall be centred horizontally below the figure and laid out as shown in the preceding example.

**Notes to figures** shall be treated independently from notes integrated in the text. They shall be located above the title of the relevant figure and shall precede figure footnotes. A single note in a figure shall be preceded by «NOTE», placed at the beginning of the first line of the text of the note. When several notes occur in the same figure, they shall be designated «NOTE 1», «NOTE 2», «NOTE 3», etc. A separate numbering sequence shall be used for each figure.

Notes to figures shall not contain requirements. Any requirements relating to the content of a figure shall be given in the text, in a footnote to the figure or as a paragraph between the figure and its title. It is not necessary that notes to figures are referred to.

**Footnotes to figures** shall be treated independently from footnotes to the text. They shall be located immediately above the title of the relevant figure, and shall follow figure notes.

Footnotes to figures shall be distinguished by superscript lower-case letters, beginning with «a». The footnotes shall be referred to in the figure by inserting the same superscript lower-case letter.

Footnotes to figures may contain requirements. As a consequence, it is particularly important when drafting the text of the figure footnote to distinguish clearly between different types of provision by using the appropriate verbal forms.

## Tables

A sample table is shown in Table 1.

**Table 1 — Table title**

Dimensions in millimetres

XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX

XXXXXXXXXX	XXXXXXXXXX
A paragraph containing a requirement.	
NOTE 1	Table note.
NOTE 2	Table note.
A Table footnote.	

**Tables** should be used wherever appropriate to present information in an easily comprehensible form. It shall be possible to refer to each table explicitly within the text.

The text in the table cells shall be in the style “Body Text”, “Body Text 2”, or “Body Text 3”. The style Body Text uses a larger font and larger spacings, and is thus suitable for small tables. The styles Body Text 2 and Body Text 3 use progressively smaller fonts and spacings, and are thus suitable for larger tables.

A table within a table is not permitted. Subdivision of a table into subsidiary tables is not permitted.

Tables shall be numbered with Arabic numerals, beginning with 1. This numbering shall be independent of the numbering of the clauses and of any figures. A single table shall be designated «Table 1». The numbering shall be continuous up to but excluding any annexes. Numbers given to the tables of an annex shall be preceded by the letter designating that annex followed by a full-stop. The numbering shall start afresh with each annex.

The title shall be centred horizontally above the table and laid out as shown in the preceding example.

The first word in the heading of each column shall begin with a capital letter. The units used in a given column shall generally be indicated under the column heading. As an exception to this rule, when all units are the same, a suitable statement shall instead be placed above the right-hand corner of the table, as shown in the preceding example.

The column headings together with any statement concerning units shall be repeated on all pages after the first.

**Notes to tables** shall be treated independently from notes integrated in the text. They shall be located within the frame of the relevant table and shall precede table footnotes. A single note in a table shall be preceded by «NOTE», placed at the beginning of the first line of the text of the note. When several notes occur in the same table, they shall be designated «NOTE 1», «NOTE 2», «NOTE 3», etc. A separate numbering sequence shall be used for each table.

Notes to tables shall not contain requirements. Any requirements relating to the content of a table shall be given in the text, in a footnote to the table or as a paragraph within the table. It is not necessary that notes to tables are referred to.

**Footnotes to tables** shall be treated independently from footnotes to the text. They shall be located within the frame of the relevant table, and shall follow table notes.

Footnotes to tables shall be distinguished by superscript lower-case letters, beginning with «a». The footnotes shall be referred to in the table by inserting the same superscript lower-case letter.

Footnotes to tables may contain requirements. As a consequence, it is particularly important when drafting the text of the table footnote to distinguish clearly between different types of provision by using the appropriate verbal forms.

## **Equations**

A sample equation is:

$$\frac{a}{b} = c \quad (1)$$

where

*a* is the numerator;

*b* is the denominator;

*c* is the result of the division.

Equations between quantities are preferred to equations between numerical values. Equations shall be expressed in mathematically correct form, the variables being represented by letter symbols the meanings of which are explained in connection with the equations, unless they appear in a «Symbols and abbreviated terms» clause. Descriptive terms or names of quantities shall not be arranged in the form of an equation.

If it is necessary to number some or all of the formulae in a standard in order to facilitate cross-reference, Arabic numbers in parentheses shall be used, beginning with 1. The numbering shall be consecutive and independent of the numbering of clauses, tables and figures.

Numbers given to the formulae of an annex shall be preceded by the letter designating that annex followed by a full-stop. The numbering shall start afresh with each annex.

The International System of units (SI) as set out in ISO 31<sup>[1]</sup> shall be used. Symbols for quantities shall be chosen, wherever possible, from the various parts of ISO 31 and IEC 60027<sup>[2]</sup>. For further guidance on application, see ISO 1000<sup>[3]</sup>.

The units in which any values are expressed shall be specified.

The decimal sign shall be a comma on the line in all language versions of International Standards.

For clarity, the symbol × rather than a point shall be used to indicate multiplication of numbers and numerical values.

If a value less than 1 is written in decimal form, the decimal sign shall be preceded by a zero.

## Notes

Notes can be integrated in the text of a standard to give additional information intended to assist the understanding or use of the standard. Notes shall not contain provisions to which it is necessary to conform in order to be able to claim compliance with the standard. Notes should preferably be placed at the end of the clause or subclause, or after the paragraph to which they refer.

A single note in a clause or subclause shall be preceded by “NOTE”, placed at the beginning of the first line of the text of the note. When several notes occur within the same clause or subclause, they shall be designated “NOTE 1”, “NOTE 2”, “NOTE 3”, etc. A sample note follows this paragraph.

NOTE      Note integrated in the text. xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx

## Examples

Examples integrated in the text of a standard shall only be used for giving additional information intended to assist the understanding or use of the standard. Examples shall not contain provisions to which it is necessary to conform in order to be able to claim compliance with the standard. Examples should preferably be placed at the end of the clause or subclause, or after the paragraph to which they refer.

A single example in a clause or subclause shall be preceded by «EXAMPLE», placed at the beginning of the first line of the text of the example. When several examples occur within the same clause or subclause, they shall be designated «EXAMPLE 1», «EXAMPLE 2», «EXAMPLE 3», etc. An sample example follows this paragraph.

EXAMPLE      Example integrated in the text. xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx

## Code listings

A sample code listing is:

```
Code text xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
Code text xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
Code text xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
xxxxxxxxxxx xxxxxxxxxxx xxxxxxxxxxx
```

## Indented code listings - general

A sample indented code listing is:



**Throwaway insert OGC xyz-TPGN160308-EN-P20**

Use the style **Special** for any element of text for which you are unsure as to the correct style to use, or for which you feel that none of the styles contained in the template is appropriate. Note that if you create your own style(s), they will be mapped to Special on exportation/importation.