**OGC ModSpec Version 1.1 Release Notes**

Open Geospatial Consortium

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OGC Release Notes

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**Preface**

Preface

This document provides the set of release notes for the OGC ModSpec: Core Standard (including Part1, and Part2), version 1.1 [OGC 08-131r5](https://opengeospatial.github.io/ogc-modspec/documents/document.html) and does not modify that Standard.

This document provides the details of the edits, deficiency corrections, and enhancements of the above-referenced Standard. It also documents those items that have been deprecated. Finally, this document provides implementations details related to issues of backwards compatibility.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The Open Geospatial Consortium shall not be held responsible for identifying any or all such patent rights.

Recipients of this document are requested to submit, with their comments, notification of any relevant patent claims or other intellectual property rights of which they may be aware that might be infringed by any implementation of the standard set forth in this document, and to provide supporting documentation.

**Abstract**

The OGC ModSpec defines a model and related requirements and recommendations for writing and structuring modular standards documents. Further, this model is designed to enable the consistent and verifiable testing of implementations of a standard that claim conformance.

The goal is to ensure that a standard specifies requirements in a common and consistent manner and that these requirements are testable.

|  |  |
| --- | --- |
| Note | Historically, this document has been known and abbreviated as the "ModSpec". For continuity and ease of understanding this document may also be referred to as the "OGC ModSpec".  |

For OGC Standards work, the word “standard” in the ModSpec applies to all OGC draft standards, approved standards, draft Abstract Specifications, and approved Abstract Specifications. The exceptions are OGC Abstract Specifications that originate in ISO or Community Standards that are developed external to the OGC and then submitted to the OGC.

The goal of this Policy is to ensure that a standard specifies requirements in a common and consistent manner and that these requirements are testable.

**Introduction**

**Scope**

The ModSpec Core Standard defines characteristics and structure for the specification of Standards that will encourage implementation by minimizing difficulty determining requirements, mimicking implementation structure, and maximizing usability and interoperability.

Part 1 of the ModSpec defines the requirements for using UML. The use case is if the organizing mechanism for the data model used in a standard is an object model, then the mapping from parts of the model to the requirements classes should follow the logical mechanism described in Part 1 of the ModSpec.

Part 2 of the ModSpec defines the requirements for using XML. The XML related requirements classes cover any standard which has as one of its purposes the introduction of a new XML schema. Such a standard would normally define the schema, all of its components, and its intended uses.

**Document contributor contact points**

All questions regarding this document should be directed to the contacts provided below or the referenced standard editor(s).

Table 1. Contacts

| **Name** | **Organization** |
| --- | --- |
| Carl Reed | Carl Reed |
| Jeff Yutzler  | Tepa/Image Matters |

**References**

There are no new normative documents or updated references in the standard to which these Release Notes apply.

**Terms and definitions**

This document uses the terms defined in Sub-clause 5.3 of [[OGC06-121r9]](https://github.com/opengeospatial/ogc-modspec/blob/main/sources/release-notes-1-1/sections/clause-3-terms.adoc#OGC06-121r9), which is based on the ISO/IEC Directives, Part 2, Rules for the structure and drafting of International Standards. In particular, the word “shall” (not “must”) is the verb form used to indicate a requirement to be strictly followed to conform to this standard.

This document also uses terms and definitions from the OGC ModSpec: Core Standard Clause 3, Terms and Definitions.

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

**administrative change**

change that does not alter the conformance abstract tests for any requirements

|  |  |
| --- | --- |
| Note | An administrative change includes typographical errors, changes in wording to improve clarity or consistency, and perfunctory changes such as changes in version numbers.  |

**critical Change**

change that alters requirements in a way that is known to cause reverse compatibility issues

**substantive change**

change that alters requirements in a way that is not deemed to have a high risk for causing reverse compatibility issues

**Administrative Edits Change Log**

This section provides information on the administrative edits/changes to the ModSpec.

* Source:
	+ Change Request
	+ GitHub Issue
	+ Other
* Identifier: Change Request number or issue number and pull request/commit in GitHub
* Type:
	+ A=Administrative
	+ S=Substantive
	+ C=Critical

See [[Clause\_Critical]](https://github.com/opengeospatial/ogc-modspec/blob/main/sources/release-notes-1-1/sections/clause-4-change-log.adoc#Clause_Critical) for more information on critical changes and [[Clause\_Substantive]](https://github.com/opengeospatial/ogc-modspec/blob/main/sources/release-notes-1-1/sections/clause-4-change-log.adoc#Clause_Substantive) for more information on substantive changes.

* Section: Section number in the updated document
* Description: Brief text describing the change
* Purpose: the reason for the change:
	+ Clarity
	+ Consistency
	+ Interoperability
	+ Perfunctory
	+ Readability
	+ Usability

**Summary of administrative changes**

| **Source** | **Identifier** | **Type** | **Section** | **Description** | **Purpose** |
| --- | --- | --- | --- | --- | --- |
| Other | NA | A | Metanorma | Put document into Metanorma compatible AsciiDoc | Consistency for publication |
| Other | NA | A | Requirements list | Removed from table of contents | Shorten document. |
| Other | NA | A | ATS list of classes | Removed from table of contents | Shorten document. |
| Other | NA | A | All sections | Use ModSpec as name. Backwards use, easy to use and say | Clarity and consistency |
| GitHub | 38 | A | All sections | Added bookmarks and anchors | Ease of navigation. |
| GitHub | 8 | A | Preface | Rewrote Preface | Clarity and shorten document |
| GitHub | 17, 18, 20 | A | Future Work | Added new future work items for JSON and RDFS, SHACL, and OWL to state requirements. | Completeness for submitted issue resolution |
| GitHub | 12 | A | Preface | Rewrote Forward | Clarity and shorten document |
| Other | NA | A | Scope 1.0 | Rewrote Scope | Clarity and shorten document |
| Other | NA | A | New Clause 1.0 | Add Clause Understanding the ModSpec | Provide guidance to reader |
| Other | NA | A | New Clause 1.0 | Add Clause ModSpec document structure | Provide guidance to reader |
| GitHub | 13 | A | Introduction | Rewrote Introduction | Clarity and shorten |
| GitHub | 8, 12, 13 | A | Conformance | Rewrote and modified. Shorten and be consistent with Git issues 8, 12, and 13 | Clarity |
| GitHub | 15 | A | References | Updated dates and provide references to most recent versions of each of the referenced standards. | Completeness and accuracy |
| Other | NA | A | Terms & Defs | Reorganized T&Ds into logical groupings | Clarity |
| GitHub | 45, 59 | A | Terms & Defs | Added concept building block definition for OGC wide use. | Completeness |
| GitHub | 34 | A | Terms & Defs | Added permission because was a note but should be a separate T&D entry | Clarity |
| Other | NA | A | Terms & Defs | Added module because was never defined in ModSpec v 1.0! | Clarity and completeness |
| Other | NA | A | Terms & Defs | will defined in old ModSpec body but now a separate T&D entry | Completeness and clarity |
| Other | NA | A | Terms & Defs | Removed notes as appropriate. | Clarity and readability |
| Other | NA | A | Conventions | 6.2. Identifiers | Updated for 1.1 |
| Other | NA | A | Conventions | 6.3. Abbreviated terms. Removed abbreviations not used in core. | Clarity |
| GitHub | 16 | A | Conventions | Rewrote 6.4. Finding requirements and recommendations. Some content moved to new Fundamentals clause | Clarity and shorten document. |
| GitHub | 14, 33, 45 | A | Fundamentals | Add new Clause 7 Fundamentals. Some content moved from original ModSpec, new content based on Git Issues for more info on some topics. | Clarity and readability |
| GitHub | 45 | A | Fundamentals | Add description of concept Building Block. Required for OGC wide usage and Common understanding | Clarity and consistency |
| GitHub | 14, 33, 44 | A | Add 7.2. to Fundamentals Standardization Context — Goals and Targets | required for OGC wide usage and Common understanding. | Clarity and consistency |
| GitHub | 14, 33 | A | 7.0 Fundamentals Added concept of a standardization goal | Need this requirement so every standard tells the reader what the goal or aim of the standard is. | Clarity and readability |
| Other | NA | A | 7.3. Conformance, Requirements, and key information | Moved content from just after Requirement 2, ModSpec version 1 to new location | Clarity |
| Other | NA | A | 8.1. Using the model | Removed confusing paragraphs after Figure 1 - no impact. | Clarity |
| GitHub | 32 | A | 8.2. The “standards” document | Removed confusing paragraphs after Req 7 and before Clause 8.3 | Clarity and shorten document. |
| Other | NA | A | Requirement 1 Testable | Broke into two parts and made wording consistent | Clarity and consistency |
| Other | NA | A | Requirement 2 URI | Removed OGC specific content and made general | Clarity and consistency |
| Other | NA | A | Requirement 14 | Removed Einstein reference - no impact. | Clarity |
| Other | NA | A | Annex B | Re-wrote content to be consistent with Version 1.1 | Consistency |
| GitHub | 10 | A | Annex C  | Rewrote Specification/Standard description to be consistent with Critical Change 4 | Consistency |
| GitHub | 33 | A | Annex C  | Added examples of requirement, requirements class. | Clarity |
| Other | NA | A | Bibliography | Update dates for documents | Consistency |

**Description of substantive changes**

There are seven (7) substantive changes in the ModSpec: Core Standard. None of these changes affect backwards compatibility.

**Substantive Change 1: ModSpec 1.1 is not OGC Policy.**

The decision was made to not have the OGC ModSpec: Core document itself as an OGC Policy Document. The reason is that the ModSpec should be useable by any Standards organization and not just the OGC. Instead:

* The ModSpec document itself is now an OGC Standard.
* A separate document titled, [The ModSpec Model: OGC Policy](https://portal.ogc.org/files/?artifact_id=110275&version=1) was developed. This Policy will be reviewed, discussed, and approved as an OGC Policy document

The impact was to modify the ModSpec 1.1 document to remove all references to the ModSpec being a Policy document. Most of the time the word Policy was changed to Standard or standard.

This is GitHub issue 9 and 37.

**Substantive Change 2: ModSpec 1.1: Core and Parts**

To be consistent with itself, the ModSpec was restructured into a core and two Parts:

* Part 1: Core contains all the core requirements and informational text that define the model and internal structure of a standard.
* Part 2: UML Model requirements
* Part 3: XML and Schematron Model requirements

This is GitHub issue 36.

**Substantive Change 3: ModSpec Permissions and Recommendations clearly identified**

In the ModSpec version 1.0, permissions and recommendations were embedded in the general text and were not specifically highlighted. In version 1.0 the concept permission was not defined. In the ModSpec, version 1.1, the concept permission is defined. In version 1.1, all permissions and recommendations are extracted from the general text and placed in tables as per the Metanorma template. Finally, all permissions and recommendations are bookmarked for easier navigation.

This is GitHub issue 34.

**Substantive Change 4: Clarification and consistent use of specification and standard**

In the ModSpec Version 1.0 there is a short paragraph:

In this standard, other documents which may be standards but are being tested for conformance to this standard are referred to as “specifications.” The purpose of this linguistic artifact is to prevent confusion between this standard and the standardization targets of its requirements. However, this artifact is inconsistently implemented in the current document. Sometimes specification is used when the term should be standard and visa-versa.

There were two main issues with this statement:

* The statement is confusing and to an extent artificial;
* This artifact is inconsistently implemented in the ModSpec Version 1.0. Sometimes specification is used when the term should be standard and visa-versa, causing confusion.

The ModSpec Version 1.1 revision clearly states that the ModSpec is indeed a standard for writing/structuring standards. However, the wording “this document” or “the ModSpec” is used throughout the document to avoid confusion. As appropriate, all instances of “specification” are changed to “standard”. The change was applied consistently throughout Version 1.1.

This is GitHub issue 10.

**Substantive Change 5: What is a Requirements Module?**

In the ModSpec Version 1.0 there is a logical inconsistency related to the definitions, relationship, and modeling of requirements modules and requirements classes. In Version 1.0, a Requirements Class can be composed of one or more Requirements Modules and one or more Recommendations. However, multiple locations in the Version 1.0 document state that recommendations are not testable (Old Section 6.1 for example). This created a logical inconsistency as a Requirements Class is composed of requirements and recommendations. The wording of the conformance test class states that to be conformant, all elements of a requirements class must pass, but recommendations cannot be tested.

Given that most OGC Standards do not use Requirements Modules, a straightforward solution is to swap Requirements Modules and Requirements classes in the hierarchy. Therefore, a Requirements Module would consist of Requirements Classes, Recommendations, and Permissions. A Requirements Class then has no recommendations and is therefore testable.

|  |  |
| --- | --- |
| Note | CDB 2.0 does define Requirements Modules based on the above proposed definition.  |

**Substantive Change 6: Standardization Goal**

In considering the roles of the standardization target and standardization target types, the contributors noticed that there is no requirement to state what the goal (problem to be addressed) of the standard is. A goal provides the context for standardization target and standardization target types`. This is a concise statement of the problem that the standard helps address and the strategy envisioned for achieving a solution.

A clause stating this requirement is in the ModSpec v 1.1 in the Fundamentals clause. All new OGC Standards and revisions to existing OGC Standards *SHOULD* contain a statement of the Standardization Goal.

**Substantive Change 7: Rework of UML Model**

The ModSpec includes Annex C. Annex C provides a UML diagram that documents the ModSpec Model. The UML diagram was updated to reflect changes made based on submitted issues.

**Description of critical changes**

There are no critical changes in this release.