# Open Geospatial Consortium Inc.

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# Technical Committee Policies and Procedures: MIME Media Types for GML

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#### Warning

This document is a Policies and Procedures Document. It is subject to change based on membership requirements. This document is an <u>official</u> position of the OGC membership.

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#### i. Preface

This document provides guidance on GML MIME type specification. An Internet media type, originally called a MIME type after **Multipurpose Internet Mail Extensions** and sometimes a Content-type after the name of a header in several protocols whose value is such a type, is a two-part identifier for file formats on the Internet. The identifiers were originally defined in <u>RFC 2046</u> for use in e-mail sent through <u>SMTP</u>, but their use has expanded to other protocols such as <u>HTTP</u>, <u>RTP</u> and <u>SIP</u>.

The Open Geospatial Consortium (OGC) is an international industry consortium comprised of companies, government agencies, research organizations, and universities participating in a consensus process to develop publicly available geo-processing standards.

## ii. Document terms and definitions

This document uses the normative terms (SHALL, SHOULD, MAY, NOT etc) defined in Subclause 5.3 of [OGC 06-121r3], 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 comply with this specification.

# iii. Revision History

Date	Internal version	Editor	Sections modified	Description
October 2009	0.1.0 Draft	Clemens Portele	N/A	Draft Document.
January 2010	1.0	Carl Reed, Clemens Portele	Various	Craft document for publication as an OGC P&P

#### 1 Scope

This document the OGC Technical Committee and Planning Committee regarding the GML MIME type policy for use in GML profiles and application schemas. As new MIME rules (policy) are identified and agreed to, this document will be updated.

## 2 The GML MIME Type specification

#### 2.1 General

A GML document, when serialized as XML 1.0, can be identified with the following media type:

MIME media type name:

application

MIME subtype name:

gml+xml

Mandatory parameters:

None.

Optional parameters:

"charset": Same as charset parameter of the "application/xml" media type as specified in RFC 3023.

"version": If provided, this parameter indicates the GML version used in the GML document. Only the major and the first minor version number are provided, e.g. "3.2".

#### 2.2 Encoding considerations

Same as those of the "application/xml" media type as specified in RFC 3023, section 3.2.

#### 2.3 Security considerations

GML is a generic format for exchanging geographic information, but application designers must not assume that it provides generic protection against security threats. RFC 3023, section 10, discusses security concerns for generic XML, which are applicable to GML, too.

Xlink references in GML documents may cause arbitrary URIs to be dereferenced. In this case, the security issues of RFC 3986, section 7, should be considered.

#### 2.4 Interoperability considerations

Different versions of GML specify different XML Schema documents used for the validation of GML documents. Starting with version 3.2 the GML version information is represented in the namespace. As applications may only support a subset of all published GML versions, the use of the version parameter is recommended.

#### 2.5 Published standard

GML (Geography Markup Language) is an international standard adopted by both the Open Geospatial Consortium (OGC) and International Organization for Standardization (ISO). The latest version at the time of this writing is 3.2.1 which is published by ISO as ISO 19136:2007. The standard can be accessed online at http://www.opengeospatial.org/standards/gml.

#### 2.6 Applications that use this media type

GML is a generic device-, platform-, and vendor-neutral XML grammar and is supported by a range of applications creating, providing access to and processing geographic information.

#### 2.7 Additional information

Magic number(s):

None. Although no byte sequences can be counted on to consistently identify GML documents, GML documents will have the sequence "http://www.opengis.net/gml" as part of a namespace declaration to identify the GML namespace. This will usually be towards the top of the document.

File extension(s):

.xml or .gml

Macintosh File Type code:

**TEXT** 

Person and email address to contact for further information:

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# Intended usage:

### COMMON

# Author/Change controller:

The GML standard is a work product of the Open Geospatial Consortium (OGC). The OGC and the GML Standards Working Group have change control over the standard.

GML is also an International Standard published by ISO. For future revisions of the ISO standard, change control may temporarily be assigned to an Editing Committee of ISO Technical Committee 211 (TC 211).