Proposal for FGDC endorsement of OGC GML standards

# Introduction

This proposal provides documentation needed to obtain FGDC recognition of (1) OGC® Geography Markup Language (GML) — Extended schemas and encoding rules [OGC 10-129r1], <https://portal.opengeospatial.org/files/?artifact_id=46568>, aka GML 3.3, and (2) Geography Markup Language (GML) simple features profile (with Corrigendum) [OGC® 10-100r3], <http://portal.opengeospatial.org/files/?artifact_id=42729>.

The following information responds to the specific questions outlined per Section V.1 of the [FGDC Policy on Recognition of Non-Federally Authored Geographic Information Standards and Specifications](https://www.fgdc.gov/standards/standards_publications/Non-FGDC_StandardsSpecs_Policy.pdf) (November 2005)[[1]](#footnote-1).

# Documentation

1. **The category of the standard or specification (per Section III).**

Consortium developed specifications – specifications developed by consortia such as the Open Geospatial Consortium (OGC).

1. **The proposed level of FGDC recognition (per Section IV).**

Endorsement.

1. **A discussion of the applicability of the proposed standard or specification in Federal geospatial activities, including discussion of the conditions where it should be employed and anywhere it should not be, i.e., provide the scope of Federal geospatial applicability of the standard or specification.**

Geography Markup Language (GML) is an XML grammar for expressing geographical features. It serves as both a modeling language for geographic systems and an open interchange format for geographic transactions on the Internet. M-13-13 — Memorandum for the Heads of Executive Departments and Agencies on the Open Data Policy—Managing Information as an Asset[[2]](#footnote-2) directs Federal Agencies to use machine-readable and open formats for information as it is collected or created.

The FGDC has endorsed GML 3.2.1[[3]](#footnote-3), which is equivalent to ISO 19136:2007[[4]](#footnote-4). GML 3.3 extends GML 3.2.1 with additional schema components and requirements. It is backwards compatible with GML 3.2.1. Changes to GML 3.2.1 are documented in Revision Notes[[5]](#footnote-5) for GML 3.2.1. GML 3.2.1 will be retained as an FGDC-endorsed standard.

The Geography Markup Language (GML) simple features profile (with Corrigendum) (2.0) defines a subset of XML-Schema and GML to lower the “implementation bar” of time and resources for developing software that supports GML. It constrains spatial properties to a subset of geometry types. Simple features include: Point, Curve (LineString), Surface (Polygon), Geometry, MultiPoint, MultiCurve, MultiSurface, and MultiGeometry.

1. **The specific reason(s) that the standard or specification would be of value to the Federal government and, if applicable, to other members of the FGDC. These should include, but not be limited to, identification of the specific FGDC subcommittee(s) and/or working group(s) whose members support the submission of the standard or specification and how it benefits its/their responsibilities.**

This standard is applicable to the development of systems that have requirements to access or distribute geospatial data using XML.

GML 3.2.1 and GML simple features profile are mandated standards in the DoD IT Standards Registry (DISR), which means that they required for management, development, and acquisition of new or improved systems throughout the Department of Defense. They are also identified as core information transfer standards in the SDI standards baseline (unpublished)

1. **Any restrictions, limitations, or other constraints that may affect promulgation and/or adoption and/or implementation of the standard or specification, e.g., copyright, license fees, restriction of applicability to a specific technology, and the like. The FGDC staff will negotiate with standards organizations to make an attempt to acquire free standards documents for FGDC members.**

OGC are copyrighted. See Copyright Notice and Disclaimers | OGC, [www.opengeospatial.org/ogc/legal](http://www.opengeospatial.org/ogc/legal). There is no charge in acquiring OGC Standards

1. **The name and business addresses of a point-of-contact (POC) in the proposing or sponsoring FGDC member agency and, if applicable, the name and business addresses of a POC in the proposing non-Federal body.**

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1. **Identification and/or explanation of the process by which the proposed standard or specification was developed and reviewed. This information will support FGDC determination as to whether the process meets the criteria for a voluntary consensus standards process as defined in OMB Circular A-119. When accredited standards development bodies such as ISO, ANSI/INCITS, and NIST are the authors only their identity need be supplied. Otherwise, a description of the development and review process and a list of participants must be included.**

OGC. See Section 9, Policies and Procedures for Adoption and/or Revisions of Standards, Technical Committee Policies and Procedures[[6]](#footnote-6)

1. <https://www.fgdc.gov/standards/standards_publications/Non-FGDC_StandardsSpecs_Policy.pdf>, accessed June 23, 2017 [↑](#footnote-ref-1)
2. <https://project-open-data.cio.gov/policy-memo/>, accessed August 31, 2017 [↑](#footnote-ref-2)
3. <http://portal.opengeospatial.org/files/?artifact_id=20509>, accessed August 31, 2017 [↑](#footnote-ref-3)
4. <https://www.iso.org/standard/32554.html>, accessed August 31, 2017 [↑](#footnote-ref-4)
5. <http://portal.opengeospatial.org/files/?artifact_id=26765>, accessed August 30, 2017 [↑](#footnote-ref-5)
6. <http://docs.opengeospatial.org/pol/05-020r25/05-020r25.html#93>, accessed August 30, 2017 [↑](#footnote-ref-6)