Standard Identifier: ISO 19136:2007

Title of Standard:
Geographic information -- Geography Markup Language, 2007-08-23

Standards History:

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<th>Introduced to Registry</th>
<th>Date Emerging</th>
<th>Date Mandated</th>
<th>Last Status Update</th>
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Standards Body: ISO
URL to Access or Acquire: http://www.ansi.org

Working Group:
Primary Owner: Geospatial Intelligence (GWG)
Secondary Interest: No Secondary Interest

Service Area: GEOINT: Geospatial

KIPs: No KIP Found

Standard Applicability:
2008-03-27
This standard is applicable to the development of systems that have requirements to access or distribute geospatial data using the eXtensible Markup Language (XML).

Standard Abstract:
2008-03-27
ISO 19136:2007 is an XML encoding for the transport and storage of geographic information modeled according to the conceptual modeling framework used in the ISO 19100 series of International Standards including both the spatial and non-spatial properties of geographic features. The standard defines the XML Schema syntax, mechanisms, and conventions that: (1) provide an open, vendor-neutral framework for the description of geospatial application schemas for the transport and storage of geographic information in XML; (2) allow profiles that support proper subsets of framework descriptive capabilities; (3) support the description of geospatial application schemas for specialized domains and information communities; (4) enable the creation and maintenance of linked geographic application schemas and datasets; (5) support the storage and transport of application schemas and data sets; and (6) increase the ability of organizations to share geographic application schemas and the information they describe.

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application schemas for specialized domains and information communities; (4) enable the creation and maintenance of linked geographic application schemas and datasets; (5) support the storage and transport of application schemas and data sets; (6) increase the ability of organizations to share geographic application schemas and the information they describe.

**Profiling Questions**

**GEOINT: Geospatial**
- Does your system require access to geospatial feature information using an implementation of the OGC Web Feature Service specification or does your system require an ability to select objects from a net accessible data base?

**Products Incorporating This Standard**

**Relevant Information**
This change request was submitted by the GWG Information Transfer Service Architecture (ITSA) Focus Group.

**Implementation Guidance**
None. GML 3.1.1 is presently mandated in the DISR and will be retired when ISO 19136:2007 is mandated. There are no known competing standards.

**Standard Selection Criteria**

**Interoperability/Supportability**
19136:2207 is an XML encoding for the transport of geographic information over the web. It supports several geographic web service specifications published by the Open Geospatial Consortium.

**Technical Maturity**
Development of a geographic markup language (GML) began in 1999 by the Open Geospatial Consortium (OGC). The OGC Version 1.0 was published by OGC in May 2000, and Version 3.0 in January 2003. GML 3 was approved by ISO/TC211 in April, 2006, and published in 2007 as ISO 19136:2007. The published version was adopted by OGC as GML 3.2.1.

**Public Availability**

**Implementability**
Use of Geography Markup Language is specified by the DoD and IC Universal Core Data Schema. A list of commercial implementations can be obtained from http://www.opengeospatial.org/resource/products.

**Authority**
Open Geospatial Consortium (OGC) and International Standards Organization Technical
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