



# Federal Geographic Data Committee Standards Update February 2016

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## FGDC

### ***United States Thoroughfare, Landmark and Postal Address Data Standard (Address Data Standard)***

The call for comments for the Address Data Standard was published in the January 25, 2016 edition of the Federal Register. The comment period closes April 25, 2016. See <https://federalregister.gov/a/2016-01337> for more information, including instructions on how to submit comments.

### ***FGDC Standards WG on LinkedIn***

Julie Maitra has created a private LinkedIn group for the FGDC Standards WG. Please contact her if you would like to join.

### **INCITS Technical Committee L1, Geographic information systems – U.S. Technical Advisory Group to ISO Technical Committee 211, Geographic information/Geomatics**

#### ***Meetings***

The ISO/TC 211 41<sup>th</sup> plenary and meetings were held December 7-11, 2015 in Sydney, Australia. INCITS L1 met on December 18, 2015 at Esri, Vienna, VA to discuss outcomes from the ISO/TC 211 41<sup>th</sup> plenary and meetings.

The ISO/TC211 42<sup>th</sup> Plenary and meetings will be held June 13 -17 in Tromsø, Norway. INCITS L1/U.S. TAG will meet April 29 at ESRI, Vienna, VA and May 23 at USGS, Reston, VA to prepare for the ISO/TC211 42<sup>th</sup> Plenary and meetings.

#### ***Leadership***

At its December 2015 plenary, ISO/TC 211 recommended that the ISO Technical Management Board (TMB) accept the re-nomination of Mr. Olaf Østensen as ISO/TC 211 chair for one year. Norway has announced its intent to relinquish the ISO/TC 211 Secretariat.

The INCITS Secretariat issued a request for INCITS/L1 input on US acquisition of the ISO Technical Committee 211 Secretariat.

The INCITS Secretariat issued a call for volunteers to chair INCITS/L1, Geographic Information Systems. Dr. Liping Di's second term ends in July 2016.

### ***Liaison between ISO TC/211 and United Nations Statistical Division***

Resolution 721 from the December 2015 ISO/TC 211 plenary:

*ISO/TC 211 accepted the request for a category A liaison from the United Nations Statistics Division (UNSD), which serves as the secretariat for the United Nations Committee of Experts on Global Geospatial Information Management (UNCE-GGIM) (N 4177).*

Resolution 722 from December 2015 ISO/TC 211 plenary:

*ISO/TC 211 offers to contribute the multilingual glossary of terms to the UN-GGIM knowledge base and discuss with the USND how other resources from ISO/TC 211, like ontologies, XML schemas, etc. might be contributed.*

### ***Terminology***

Resolution 724 Terminology repository implementation from December 2015 ISO/TC 211 plenary:

*ISO/TC 211 recognizes the need for the implementation of the terminology repository into contemporary technology.*

Resolution 725 ISO Concept Database from December 2015 ISO/TC 211 plenary:

*Noting the success of the ISO concept database, ISO/TC 211 instructs the secretariat to contact the ISO Central Secretariat to discuss (with the TMG convener) the potential for using the concept database as a distribution and maintenance platform for the multilingual glossary of terms and for the expansion of the concept database along the lines of the multilingual glossary of terms.*

### ***CEN Technical Reports***

[CEN/TC 287](#) Geographic information (CEN is the European Committee for Standardization) invited ISO/TC 211 to adopt the following Technical Reports:

- CEN/TR 15449-1, Spatial data infrastructures – Part 1: Reference model
- CEN/TR 15449-2, Spatial data infrastructures – Part 2: Best practices
- CEN/TR 15449-3, Spatial data infrastructures – Part 3: Data centric view
- CEN/TR 15449-4, Spatial data infrastructures – Part 4: Service centric view
- CEN/TR 15449-5, Spatial data infrastructures – Part 5: Validation and testing

ISO/TC 211 noted interest from members and instructed the secretariat to investigate the process and progress adoption.

## **Contact**

Contact Julie Maitra, principal FGDC rep to L1, or your agency's representative(s) to INCITS L1 for more information.

## **Open Geospatial Consortium**

### **OGC TC/PC meetings**

The last OGC TC/PC meeting was held November 30 - December 4, 2015 in Sydney, Australia. The next OGC TC/PC meeting will be held March 7-11, 2016 at the World Bank, Washington, DC.

### **Arctic Spatial Data Infrastructure Project**

The Arctic Spatial Data Pilot is an OGC Interoperability Program initiative sponsored by the U.S. Geological Survey (USGS) and Natural Resources Canada. It aims to improve access to online Arctic geographic information. The Arctic SDI will play a key role in pan-Arctic science and monitoring and societal, economic, regulatory, and environmental decision support. An open Arctic SDI is essential infrastructure for widespread Arctic geospatial data discovery, sharing, integration and commerce to support many different communities of interest.

The Arctic Spatial Data Pilot has two phases. Phase 1 began in December 2015. In Phase 1, project planners are building an inventory of currently available Arctic geospatial data layers and Web services and defining the Arctic SDI architecture. Findings from Phase 1 will also serve as input for Phase 2, which will be an OGC Interoperability Program Pilot Project. Phase 1 will also provide direct input into OGC's major Testbed 12 Interoperability Program initiative.

OGC® requests information to help advance the Arctic Spatial Data Pilot. The RFI will elicit ideas, experiences, and projects in industry, research institutions and public administration. Subject matter experts are encouraged to recommend procedures, technology, data, and open standards for the Arctic SDI. The deadline for comments is March 18, 2016. For instructions on how to respond to the RFI, see <http://www.opengeospatial.org/standards/requests/149>.

Through the RFI, USGS and Natural Resources Canada will collect information to demonstrate web services that can be made available to Arctic SDI stakeholders. USGS and Natural Resources Canada will review information interoperability and integration requirements and then outline funding opportunities for Arctic SDI standards technology developments. OGC will document interoperability and integration requirements in a Request for Quotations (RFQ). The RFQ will invite technology providers to describe work they offer to address those Arctic SDI interoperability requirements.

### **OGC North American Forum**

Dave Beddoe is stepping down as U.S. co-chair of the OGC North American Forum.

The OGC North American Forum Open Standards Technology Exposition and 2016 Innovations Fair will be held March 14-15 at World Bank Headquarters, in conjunction with the 17th Annual World Bank Conference on Land and Poverty Conference 2016. The OGC North American Forum Open Standards Technology Exposition and 2016 Innovations Fair will demonstrate how products that implement OGC Standards can interoperate to provide location-enabled Web Service applications for Land Governance and Poverty Reduction.

### **Alignment of ISO/TC 211 and OGC standards on coverages**

Coverages support mapping from a spatial, temporal or spatiotemporal domain to feature attribute values where feature attribute types are common to all geographic positions within the domain.

OGC submitted OGC® Implementation Schema for Coverages (GMLCOV) (09-146r2) as a New Work Item Proposal (NWIP). GMLCOV will become ISO 19123-2, Geographic information — Schema for coverage geometry and functions — Part 2: Coverage Implementation Specification (CIS). ISO/TC 211 issued a ballot on TC 211 N 4233 - NWIP/CD 19123-2. The TC 211 ballot will close on May 20.

The plan is to use ISO 19123-2 to build ISO 19163-2, binding encodings such as GMLJP2, GeoTIFF etc. to ISO 19163-1:2016, Geographic information - Content components and encoding rules for imagery and gridded data. ISO 19163-2 will also need to harmonize with CIS 1.1.

CIS is being revised in OGC. CIS 1.1 contains some new concepts that need to be added to the revision of ISO 19123-1, Geographic information — Schema for coverage geometry and functions. CIS 1.1 will be an OGC standard before the ISO standard is complete. OGC will submit a revision to ISO/TC 211 to introduce new concepts from CIS 1.1. It will go through the entire ISO development process, but will remain a joint standard. Since changes might be introduced during the ISO process as a result of ballot comments, OGC might need to revise CIS 1.1. OGC might also revise OpenGIS® Abstract Specification Topic 6: Schema for coverage geometry and functions.

Other items:

- Other ISO standards shall work with the latest ISO 19123 and 19123-2.
- OGC encodings shall work with CIS 1.0 and CIS 1.1.
- GMLJP2 will be introduced into ISO as a joint project.
- The OGC Web Coverage Service (WCS) standard shall work with both CIS 1.0 and CIS 1.1. The WCS standard will be introduced into ISO as a joint project.
- ISO 19129, Geographic information -- Imagery, gridded and coverage data framework, will need to be reviewed. By adding an annex to 19101-2, Geographic information -- Reference model -- Part 2: Imagery, it might be possible to retire ISO 19129.

### ***Point cloud standards***

The OGC Point Cloud Domain Working Group (Point Cloud DWG) was formed in late 2015 to assess standards and best practices in management of point cloud data and guide OGC activities in working with or developing standards for point cloud data interoperability, discovery, and dissemination. It has issued an RFI for input and details about usage of various point cloud formats, sizes, device types, etc. Stakeholders are invited to complete a brief online survey, <https://goo.gl/dhomVq>. Members of the point cloud data community can also join the Point Cloud DWG e-mail list.

OGC and the American Society for Photogrammetry and Remote Sensing (ASPRS) agreed to work together to apply and promote standards and best practices for the location and geospatial industries. An early priority is to jointly assess adopted and de facto standards for Point Cloud data and consider collaborative publication of one or more standards where there is mutual benefit.

### ***OGC compliance testing***

A list of available tests and roadmap for OGC compliance testing is located at <http://cite.opengeospatial.org/roadmap>.

### ***OWS-12***

The OGC® kickoff event for the Testbed 12 Interoperability Initiative will be held at USGS HQ in Reston, VA on March 2-4. At the Kickoff Event, Testbed 12 sponsors and OGC staff will present interoperability requirements and objectives. OGC Staff will introduce the technology provider organizations that have been selected to work with the sponsors. FGDC member agencies sponsoring Testbed 12 are FAA, USGS, NASA and NGA.

In a testbed's planning phase, sponsors and participants define use cases and weave them into a scenario. Then technology providers use rapid prototyping to develop and test candidate standards that enable successful and dramatic enactment of the scenario at the end of the testbed.

In November 2016, participating technology providers will demonstrate interoperability for all use cases based on the scenario. Participants will deliver completed OGC Engineering Reports for public review and deliberation in the OGC Standards Program. These reports may evolve into Discussion Papers, candidate OGC standards, revisions to existing OGC standards, or best practices for using OGC standards and related standards from other standards development organizations.

### ***Contact***

Contact your agency's representative(s) to OGC for more information.

## **Geospatial-Intelligence Standards WG (GWG)**

### ***GWG voting meeting***

The 16-1 GWG voting meeting was held on February 17, 2016.

### ***Contact***

For more information, contact Julie Maitra, FGDC representative to GWG, or your agency's representative to GWG.

## **Other**

### ***EPSG Geodetic Parameter Dataset***

Version 8.9 of the EPSG Geodetic Parameter Dataset was released on February 15, 2016. The EPSG Dataset is a collection of definitions of coordinate reference systems and coordinate transformations. It is maintained by members of the International Association of Oil & Gas Producers (IOGP) through the Geodesy Subcommittee of the IOGP Geomatics Committee. For information about the release of Version 8.9 of the EPSG Geodetic Parameter Dataset, visit <http://www.epsg.org/EPSGDataset/WhatisNew.aspx>.

## Monthly Standards Tracking Workbook

February 2016 marks the 5<sup>th</sup> anniversary of the monthly standards update. The workbook tracks individual FGDC, INCITS L1/ISO TC 211, GWG, OGC, and other standardization activities over time. There are over 300 standards tracked in the workbook.

[Download Workbook](#) (xls)