



# Federal Geographic Data Committee Standards Update April 2015

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## FGDC

### *Standards pending FGDC Steering Committee endorsement*

The following standards are pending FGDC Steering Committee endorsement:

- Aeronautical Information Exchange Model (AIXM) 5.1
- ISO/IEC 15444-1:2004 Technical Corrigenda 1:2007 and 2:2008 JPEG 2000
- OGC GeoPackage 1.0
- Geopolitical Entities, Names, and Codes (GENC) Standard Edition 2
- GeoRSS-Simple and GeoRSS-GML: 9 yes, 0 no, 21 not voting, 1 abstain

The CG vote on standards other than GeoRSS-Simple and GeoRSS-GML was 10 yes, 0 no, 21 not voting, 0 abstain. The CG vote on GeoRSS-Simple and GeoRSS-GML was 9 yes, 0 no, 21 not voting, 1 abstain: NGA abstained because GeoRSS-Simple and GeoRSS-GML are not in the DoD Information Technology Standards Repository (DISR).

### *June 18, 2015 FGDC Standards Working Group meeting*

The next FGDC Standards WG meeting is scheduled for **Thursday, June 18, 2015**. It will be a face-to-face meeting. Topics:

- SWG recommendation on FGDC endorsement of draft Part 2, Digital orthoimagery (revised), of the Geographic Information Framework Data Standard
- 2015 ASPRS Positional Accuracy Standards for Digital Geospatial Data
- Infrastructure for Spatial Information in the European Community (INSPIRE)
- GEO Standards & Interoperability Forum
- Geospatial Platform and standards

Topics help fulfill Objective 3.1, Lead and participate in the development and coordination of national and international standards applicable to the geospatial community, of the NSDI Strategic Plan.

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

Julie Maitra has created a private LinkedIn group for the FGDC Standards WG:

<https://www.linkedin.com/groups?home=&gid=8243676>. Please contact her if you would join

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

### ***Meetings***

INCITS L1/U.S. TAG met April 10, 2015. The next INCITS L1/U.S. TAG meeting is scheduled for May 15.

The British Standards Institute (BSI) will host ISO/TC 211 2015-06-08/12 in Southampton, United Kingdom.

## ***2015 Five-Year National Maintenance of INCITS Standards***

The INCITS Secretariat issued a call for the 2015 5-year national maintenance review of the standards listed in Table 1:

**Table 1 5-year national maintenance review**

<b>Standard Designation [adoption year]</b>	<b>Title</b>
INCITS/ISO 19108:2002/COR1:2006[2010]	Geographic information - Temporal schema TECHNICAL CORRIGENDUM 1
INCITS/ISO/TS 19139:2007[2010]	Geographic information - Metadata - XML schema implementation
INCITS/ISO/TS 19138:2006[2010]	Geographic information - Data quality measures
INCITS/ISO 19128:2005[2010]	Geographic information - Web Map server interface
INCITS/ISO/TS 19127:2005[2010]	Geographic information - Geodetic codes and parameters
INCITS/ISO 19136:2007[2010]	Geographic information - Geography Markup Language
INCITS/ISO 19125-2:2004[R2010]	Geographic information - Simple feature access - Part 2: SQL option
INCITS/ISO 19125-1:2004[R2010]	Geographic information - Simple feature access - Part 1: Common architecture
INCITS/ISO 6709:2008/COR 1:2009[2010]	Standard representation of geographic point locations by coordinates
INCITS/ISO 19144-1:2009[2010]	Geographic information - Classification Systems - Part 1: Classification system structure
INCITS/ISO 19111-2:2009[2010]	Geographic information - Spatial referencing by coordinates - Part 2: Extension for parametric value
INCITS/ISO/TS 19103:2005[2010]	Geographic information - Conceptual schema language
INCITS/ISO/TS 19104:2008[2010]	Geographic information - Terminology
INCITS/ISO 19110:2005[R2010]	Geographic information - Methodology for feature cataloguing
INCITS/ISO 19116:2004[R2010]	Geographic information - Positioning services
INCITS/ISO 19106:2004[R2010]	Geographic information - Part 6: Profiles
INCITS/ISO 19119:2005[R2010]	Geographic information - Services

The INCITS due date for 2015 5-year national maintenance review is May 15, 2015.

## Contact

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

## Open Geospatial Consortium

### TC/PC meetings

The OGC TC/PC Meeting was held March 9-13, 2015 in Barcelona, Spain. Actions from the Technical Committee plenary are recorded in the standards tracking log.

The next OGC TC/PC meeting will be held June 1-5, 2015 in Boulder, Colorado #OGCBoulder15

### OGC compliance tests

Table 2 – Available OGC compliance tests

Available OGC compliance tests	Version
Catalogue Service - Web (CSW)	2.0.2
Geography Markup Language (GML)	3.2.1
<b>OGC KML</b>	<b>2.2</b>
Sensor Observation Service (SOS)	1.0.0
Sensor Observation Service (SOS)	2.0
Sensor Planning Service (SPS)	1.0
Sensor Planning Service (SPS)	2.0
Simple Feature Access - SQL (SFS)	1.1
Simple Feature Access - SQL (SFS)	1.2.1
Web Coverage Service (WCS)	1.0.0
Web Coverage Service (WCS)	1.1.1
Web Coverage Service (WCS)	2.0.1
Web Feature Service (WFS)	1.0.0
Web Feature Service (WFS)	1.1.0
<b>Web Feature Service (WFS)</b>	<b>2.0</b>
Web Map Service (WMS)	1.1.1
Web Map Service (WMS)	1.3.0

Table 3 Projected OGC compliance tests

Projected in 2015	Version
Catalogue Service - Web (CSW)	3.0
WFS (Basic)	1.1
WMS Client	1.3
WMTS	1.0

## Geospatial-Intelligence Standards WG (GWG)

The 15-1 GWG voting meeting is scheduled for June 18, 2015.

The GWG Geospatial Web Services Focus Group met March 30 at Scitor in Reston. There are no change requests for the 15-1 DISR cycle. The Focus Group recommended action on the following 4 standards for the 15-2 DISR cycle:

Standard	Action for 15-2 DISR cycle
U.S. National System for Geospatial-Intelligence (NSG) WMS 1.3 Profile (revised)	Action will be to recommend retirement of current NSG WMS 1.3 Profile as Information Guidance and adoption of the revised NSG WMS 1.3 Profile as a mandated standard.
Web Map Tile Service (WMTS) Simple Specification 1.0	Action will be to recommend adoption as emerging standard
Web Processing Service (WPS) 2.0	Action will be to recommend adoption as emerging standard
OGC GML Application Schema-JPEG200- Coverage Encoding Extension	Action TBD

The GWG Plenary was held 2015-04-14.

### Contact

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

## American Society for Photogrammetry and Remote Sensing (ASPRS)

### LAS

The LAS file format is a public file format for the interchange of 3-dimensional point cloud data between data users. Although developed primarily for exchange of lidar point cloud data, this format supports the exchange of any 3-dimensional x,y,z tuple. This binary file format is an alternative to proprietary systems or a generic ASCII file interchange system used by many companies.

The LAS 1.4 Specification was approved by the ASPRS Board on November 14, 2011 and is the most recent approved version of the document. It is required for delivery for 3DEP data.

"The Open Source Geospatial Foundation (OSGeo) is gathering signatures for an open letter (see [http://wiki.osgeo.org/wiki/LIDAR\\_Format\\_Letter](http://wiki.osgeo.org/wiki/LIDAR_Format_Letter)). The open letter states,

*"We, the undersigned, are concerned that the current interoperability between LiDAR applications, through use of the open "LAS" format, is being threatened by ESRI's introduction and promotion of an alternative "Optimized LAS" proprietary format. This is of grave concern given that fragmentation of the LAS format will reduce interoperability between applications and organisations, and introduce vendor lock-in."*

Esri has issued a reply to the open letter:

*Esri has long understood the importance of interoperability between systems and users of geographic information and services. Esri has participated in the development of national, information community, OGC, and ISO TC 211 standards from the development of the US Spatial Data Transfer Standard in*

*the 1980s through the development of OGC Geopackage today. As a sustaining member of ASPRS and a Principle member of OGC, Esri would gladly participate in efforts to further the development of open LIDAR and point cloud standards. Keep in mind that ASPRS owns and maintains LAS, along with other spatial information standards, and would have the lead in moving it into OGC or ISO TC211 for further work if they so desired. Esri will continue to support and use the ASPRS LAS standard; the Optimized LAS (see FAQ at <https://github.com/Esri/esri-zlas-io-library>) is not intended to replace LAS but to enhance access to remotely stored LIDAR information for our users.*

OGC will hold an *ad hoc* session at its June meeting in Boulder, CO, USA to bring together all interested parties from all sectors (government, industry, academia) for this and plan next steps.

## **Other**

- Please refer to the standards tracking log, <http://www.fgdc.gov/standards/monthlyStandardsUpdate/index>, for progress on FGDC, INCITS, ISO, OGC, and GWG standards.
- The FGDC Secretariat has built a database of Federal participation in the FGDC Standards WG, INCITS L1/U.S. TAG, and OGC.