Name	Description	Status	ISO Stage	Proposed action
ISO 19139-1 Metadata XML Schema implementation	This revision will include only the encoding rules for metadata		10.99	No action
ISO 19165-2 Geographic information -- Preservation of digital data and metadata -- Part 2: Content specifications for earth observation data and derived digital products		ISO/AWI 19165-2 was registered in the TC 211 program of work	20.00	No action
ISO 19111 Spatial referencing by coordinates	Metadata about/defining a coordinate reference system	INCITS/ISO 19111:2007 [R2012] was re-affirmed as INCITS/ISO 19111:2007 [R2017]. The FGDC has endorsed ISO 19111:2007. ISO/CD 19111 was registered as a DIS on 2017-09-04.	30.99	No action
ISO 19112 Spatial referencing by geographic identifiers	Metadata about/defining a reference system which uses spatial unit identifiers other than coordinates i.e. gazetteer, postal code, etc.	ISO 19112:2003 already an FGDC-endorsed standard. ISO 19112 was registed as a DIS on 2017-10-27 On 2017-11-02, INCITS issued action Item #0551, Request for position and vote on DIS 19112, for INCITS EB Ballot. The L1 due date is 2018-01-26; the TC 211 closing date is 2018-03-23.	40.00	No action

Name	Description	Status	ISO Stage	Proposed action
ISO 19165 Geographic information - Preservation of digital data and metadata	ISO 19165 defines a preservation metadata extension of ISO 19115-1 and complements standards developed by ISO/TC 211 and ISO archival standards such as ISO 14721 "Open archival information system (OAIS) – Reference model." It defines requirements for long-term preservation of digital geospatial data, including metadata, representation information, provenance, context and other content items necessary to fully understand and reuse the archived data. It also refers to characteristics of data formats that are useful for the purpose of archiving. Geospatial data are preserved as a geospatial information package (IP). ISO 19165 defines requirements for the archival IP and details of the submission IP and the dissemination IP. A geospatial archival IP shall be fully self-describing and allow future reconstruction of the dataset without external documentation.	On 2017-11-23, ISO/FDIS 19165-1 was registered for formal approval	50.00	No action
ISO 19115-1:2014, Geographic information -- Metadata -- Part 1: Fundamentals - Amendment 1	This amendment adds a party identifier attribute to ISO 19115-1 CI_Party. Increasingly, identifiers are used to identify individuals and organizations. This amendment adds a scope attribute.to ISO 19115-1 MD_SpatialRepresentation. Users of ISO 19115-1 and 19115-2 determined that it would be extremely useful to specify the level and extent of the spatial representation type used to represent geospatial information in a dataset, especially when multiple types are used.	On 2017-11-21, ISO 19115-1:2014/FDAmd 1 wass issued for FDIS ballot. The TC 211 closing data is 2018-01-17	50.20	No action
ISO 19115-2 Extensions for imagery and gridded data	Defines additional metadata elements and schema describing imagery and gridded geospatial datasets	On 2017-11-30, November 30, INCITS issued Action Item #0559, Request for position and vote on FDIS 19115-2 for INCITS EB Ballot. The L1 due data is 2017-12-12; the TC 211 closing date 2018-01-23.	50.20	No action

Name	Description	Status	ISO Stage	Proposed action
ISO 19157:2013/DAmd 1, Geographic information - Data quality – Amendment 1: Describing data quality using coverages	This document adds a method for describing the data quality of geographic information that uses a coverage geospatial type. Since the data quality model was moved to ISO 19157, QE_CoverageResult, is best moved to ISO 19157 as well.	On 2017-11-17, TC 211 submitted the proof for ISO 19157:2013/ PRF Amd 1 to the ISO Central Secretariat	50.20	No action
ISO 19157-2 Data Quality XML Schema implementation	Provides a schema for implementing ISO 19157 in XML	ISO 19157-2:2016 was published on 2016-11-28. It was subsequently registered as INCITS/ISO/TS 19157-2:2016 (2017)	60.60	pending CG review and vote
ISO 19119:2016 Services	Provides a framework and defines the metadata for services enabling users to access and process geographic information across a generic computing interface. The metadata portion of this standard has been moved to ISO 19115-1	International Standard published January 2016. The U.S. equivalent is not available through webstore.ansi.org	60.60	TBD
ISO 19109:2015 Rules for application schema	Defines the a general feature model and rules for creating and documenting application schemas for modeling features and their properties allowing physical applications to understand and share data	INCITS L1 voted to adopt the standard at its April 29 meeting. The motion passed with 10 yes, 0 abstain and 0 no. The U.S. equivalent of ISO 19109:2015 is not yet available . At its June 14, 2017 meeting, the GWG proposed to withdraw ISO 19109:2005 as it applies to internal standards registry busines practices.	60.60	TBD
ISO 19110 Feature cataloguing	ISO 19110:2016 defines the methodology for cataloguing feature types. It specifies how feature types can be organized into a feature catalogue and presented to users of a set of geographic data. Its principles can be extended to cataloguing other forms of geographic data. Feature catalogues are independent of feature concept dictionaries defined in ISO 19126 and can be specified without having to use or create a feature concept dictionary. ISO 19110:2016 is not applicable to the representation of individual instances of each feature type.	ISO 19110:2016 was published on 2016-11-28. At its January 6, 2017 meeting, INCITS L1 voted to adopt ISO 19110:2016 as an American National Standard; however, the ANS is not yet available on webstore.ansi.org	60.60	Submitted for FGDC Metadata WG consideration

Status of metadata and related standards
as of Friday, December 8, 2017

Name	Description	Status	ISO Stage	Proposed action
ISO 19157:2013 Data Quality	Defines the principles and components for describing, evaluating, and the measures used for reporting data quality. Revises and replaces ISO 19113, 19114, 19138.	The FGDC Steering Committee endorsed INCITS/ISO 19157:2013[2014], with concurrent withdrawal of ISO 19138:2006	60.60	No action
ISO 19115-3 XML schema implementation of metadata fundamentals	ISO/TS 19115-3:2016 defines an integrated XML implementation of ISO 19115 1, ISO 19115 2, and concepts from ISO/TS 19139 For more information, see https://www.iso.org/standard/32579.html.	ISO 19115-3:2016 was published on August 12, 2016 L1/U.S. TAG voted on adoption of IS/TS 19115-3:2016 as an American National Standard at its September 30,2016 meeting. The vote to register IS/TS 19115-3:2016 as an American National Standard was unanimous. The U.S. equivalent is INCITS/ISO/TS 19115-3:2016 (2017).	60.60	Pending CG review and vote
ISO 19115-1:2014 Geospatial metadata fundamentals	Revision of ISO19115 which defines metadata elements and schema describing geospatial resources i.e. datasets and services	The FGDC has endorsed INCITS/ISO 19115-1:2014[2014]	60.60	No action
ISO 19139:2007 Metadata XML Schema implementation	Provides encoding rules and a schema for implementing ISO 19115 in XML.	Resolution 770: Noting the results of the systematic review of ISO 19139-2:2005 (N 4255), ISO/TC 211 resolves to confirm this standard and to withdraw it when ISO 19115-2 is published. ISO/TC 211 instructs the secretariat to inform the ISO Central Secretariat about its decision.	90.92	No action
ISO 19111-2:2009 Spatial referencing by coordinates-Extension for parametric value	Metadata about/defining a coordinate reference system using parametric values	International standard. ISO/TC 211 resolved to abandon the NWIP 19111-2:2009/Amd. 1. The proposed amendment will be taken into consideration in the revision of ISO 19111. The FGDC has endorsed ISO 19111-2:2009	90.92	No action
ISO 19139-2:2012 Metadata - XML schema for imagery and gridded data	Provides a schema for implementing ISO 19115-2:2009 in XML	At its November 15, 2016 meeting, INCITS L1/U.S. TAG voted to recommend registration of IS/TS 19139-2:2012 as an American National Standard. ISO 19139-2 was subsequently registered as INCITS/ISO/TS 19139-2:2012 (2017)	90.93	TBD

Name	Description	Status	ISO Stage	Proposed action
ISO 19110:2005 + Amendment 1 Methodology for feature cataloguing		From the March 17, 2017 issue of ANSI Standards Action: ISO 19110:2005/AMD 1:2011, Geographic information - Methodology for feature cataloguing - Amendment 1 has been withdrawn from further consideration for identical national adoption.	95.99	no action
ISO 19113:2002 Quality principles	Defines the principles, the elements/sub-elements of data quality	Superseded by 19157 - not listed as FGDC-endorsed standard.	95.99	No action
ISO 19114:2003 Quality evaluation procedures	Defines procedures for determining data quality	Superseded by 19157 - not listed as FGDC-endorsed standard.	95.99	No action
ISO 19115:2003 Geospatial metadata	Defines metadata elements and schema describing geospatial datasets	ISO 19115:2003 will be retained as an FGDC-endorsed standard	95.99	No action
ISO 19138:2006 Data quality measures	Defines commonly used measures for reporting data quality for the sub-elements defined in ISO 19113 and a structure so they may be maintained in a register.	ISO 19138:2006 was withdrawn as an FGDC-endorsed standard with FGDC endorsement of INCITS/ISO 19115-1:2014[2014].	95.99	No action
Dublin Core lite for Geo (DClite4G)	Dublin Core lite for Geo (DClite4G), provides a mapping from Dublin Core to ISO 19115. It appears that all Dublin Core elements map to ISO 19115 elements, though the mapping may not always be 1-to-1. More information may be found on the Open Source Geospatial Foundation (OSGeo) community wiki, http://wiki.osgeo.org/wiki/Geodata_Metadata_Requirements#Information_model_for_metadata_exchange and http://wiki.osgeo.org/wiki/DCLite4G.	DClte4G dates back to 2008. No known implementations.	not applicable	No action

Name	Description	Status	ISO Stage	Proposed action
W3C Data Catalog Vocabulary (DCAT)	DCAT is an RDF vocabulary designed to facilitate interoperability between data catalogs published on the Web. This document defines the schema and provides examples for its use. By using DCAT to describe datasets in data catalogs, publishers increase discoverability and enable applications easily to consume metadata from multiple catalogs. It further enables decentralized publishing of catalogs and facilitates federated dataset search across sites. Aggregated DCAT metadata can serve as a manifest file to facilitate digital preservation.	W3C recommendation 2014-01-16. Used by Open Data community, based on DCAT. Do not recommend for endorsement – at least not now	not applicable	No action
OGC® Catalogue Services 3.0 - General Model (12-168r6)	OGC® Catalogue Services support publishing and searching metadata records for geospatial data, services, and related information. CAT 3.0 General Model (12-168r6) describes the common architecture for OGC Catalogue Services. It specifies interfaces between clients and catalogue services through abstract models. Catalogue Services 3.0 aligns better than CAT 2.0.2 with other OGC standards, provides a developer-friendly OpenSearch Geo API, supports querying via temporal extents, and improves distributed search. An OGC TC ballot to approve the CAT 3.0 Executable Test Suite opened on 2016-08-17 and closed on 2016-10-01. The voted passed. The test suite has been in beta since February 2015 and there are supporting documents and reference implementations.	CAT 3.0 was published on 2016-06-10. We will rely on the GWG Geospatial Web Services Focus Group recommendation. The GWG Geospatial Web Services Focus Group will submit a change request for adding CAT 3.0 to the DISR as an emerging standard.	not applicable	No action

Name	Description	Status	ISO Stage	Proposed action
GeoPlatform Metadata Profile	The GeoPlatform Profile of ISO 19115-1 will help improve adoption and use of ISO 19115-1:2014 metadata. It enables a more robust and interoperable exchange of metadata than ISO 19115-1:2014 and ISO 19115-3:2016. It supports the principles and constructs of the Semantic Web. For example: * Uniform Resource Identifiers (URIs) are now either explicitly specified or placed in obvious locations. * Layer and Map identification classes are added at the same level as Dataset and Service identification classes. * Classes and elements that correspond to the Simple Knowledge Organization System (SKOS) are added, making use of controlled vocabularies. SKOS is a body of specifications and standards from W3C to support the use of KOS such as thesauri, classification schemes, subject heading systems, and taxonomies within the framework of the Semantic Web.	Under review	not applicable	No action
Spatial Data on the Web best practice	Spatial Data on the Web Best Practices recommend best practices for publishing spatial data on the Web and using Web technologies. Spatial Data on the Web Best Practices reflect a paradigm shift from search and discovery through metadata catalogs to search and discovery through Web search engines (for example, Google)	The OGC TC ballot closed on July 7, 2017. The ballot passed.	not applicable	TBD

Name	Description	Status	ISO Stage	Proposed action
ISO 15836:2009 (Ed 2) The Dublin Core metadata element set	Cross domain resource descriptions – not limited to specific resources	Dublin Core is listed in the bibliography for ISO 19115-1 According to the Online Browsing Platform https://www.iso.org/obp/ui/#iso:std:iso:19115:-1:ed-1:v1:en: Although the primary purpose of this part of ISO 19115 is to describe digital information that has a geographic extent, ... it can be used to describe information resources that do not have geographic extent. Some domains have their own metadata standards, such as the Dublin Core for libraries. If necessary such standards and this part of ISO 19115 could be profiled to create a Community Schema. The EU has a mapping between Dublin Core and ISO 19115: see https://joinup.ec.europa.eu/catalogue/asset_release/mapping-between-dublin-core-and-iso-19115-geographic-information-metadata. However, I can't access the solution	not applicable	No action

Name	Description	Status	ISO Stage	Proposed action
OGC® Catalogue Services 3.0 Specification- HTTP Protocol Binding	OGC® Catalogue Services 3.0 Specification - HTTP Protocol Binding specifies the HTTP profile of CAT 3.0 and mapping of the Catalogue abstract model interface into the HTTP protocol binding. OGC® published OGC Catalogue Services (CAT) Standard version 3.0 - HTTP Protocol Binding on June 10. In HTTP protocol binding, operation requests and responses are sent between clients and servers using HTTP GET and/or HTTP POST. Two request encodings are defined in this standard. KVP is suitable for use with HTTP GET, while XML is suitable for use with HTTP POST. This standard defines operations that allow a client to get a service description document for the catalogue (GetCapabilities); interrogate the service about the kinds of data available (GetDomain); retrieve records from the catalogue (GetRecordByIdandGetRecords); and add, modify and remove records from the catalogue service (Transaction, Harvest,UnHarvest).	CAT 3.0 was published on 2016-06-10. We will rely on GWG Geospatial Web Services Focus Group recommendation. The GWG Geospatial Web Services Focus Group will submit a change request for adding CAT 3.0 to the DISR as an emerging standard. The FGDC endorsed CAT 2.0.2 HTTP binding.	not applicable	no action
GeoDCAT	GeoDCAT-AP is an extension of DCAT-AP for describing geospatial datasets, dataset series, and services. It provides an RDF syntax binding for the union of metadata elements defined in the core profile of ISO 19115:2003 and the framework of the INSPIRE Directive. Its basic use case is to make spatial datasets, data series, and services searchable on general data portals, thereby making geospatial information better searchable across borders and sectors. This can be achieved by the exchange of descriptions of data sets among data portals.	GeoDCAT-AP v1.0.1 (2016-08-02) is final.		ACTION: The FGDC should actively track and support GeoDCAT, for example, to help guide the work the POD/data.gov folk are doing. At the same time, there is a need to discuss RDF in the US context in relation to XML-based metadata schemas.

	SUBSTAGES			90 Decision Substages			
	00	**20**	**60**	**92**	**93**	**98**	**99**
STAGE	Registration	Start of main action	Completion of main action	Repeat an earlier phase	Repeat current phase	Abandon	Proceed
00 Preliminary stage	**00.00** Proposal for new project received	**00.20** Proposal for new project under review	**00.60** Close of review			**00.98** Proposal for new project abandoned	**00.99** Approval to ballot proposal for new project
10 Proposal stage	**10.00** Proposal for new project registered	**10.20** New project ballot initiated	**10.60** Close of voting	**10.92** Proposal returned to submitter for further definition		**10.98** New project rejected	**10.99** New project approved
20 Preparatory stage	**20.00** New project registered in TC/SC work programme	**20.20** Working draft (WD) study initiated	**20.60** Close of comment period			**20.98** Project deleted	**20.99** WD approved for registration as CD
30 Committee stage	**30.00** Committee draft (CD) registered	**30.20** CD study/ballot initiated	**30.60** Close of voting/ comment period	**30.92** CD referred back to Working Group		**30.98** Project deleted	**30.99** CD approved for registration as DIS
40 Enquiry stage	**40.00** DIS registered	**40.20** DIS ballot initiated: 5 months	**40.60** Close of voting	**40.92** Full report circulated: DIS referred back to TC or SC	**40.93** Full report circulated: decision for new DIS ballot	**40.98** Project deleted	**40.99** Full report circulated: DIS approved for registration as FDIS
50 Approval stage	**50.00** FDIS registered for formal approval	**50.20** FDIS ballot initiated:2 months. Proof sent to secretariat	**50.60** Close of voting. Proof returned by secretariat	**50.92** FDIS referred back to TC or SC		**50.98** Project deleted	**50.99** FDIS approved for publication
60 Publication stage	**60.00** International Standard under publication		**60.60** International Standard published				
90 Review stage		**90.20** International Standard under periodical review	**90.60** Close of review	**90.92** International Standard to be revised	**90.93** International Standard confirmed		**90.99** Withdrawal of International Standard proposed by TC or SC
95 Withdrawal stage		**95.20** Withdrawal ballot initiated	**95.60** Close of voting	**95.92** Decision not to withdraw International Standard			**95.99** Withdrawal of International Standard