Open Geospatial Consortium

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OGC GeoDCAT SWG Charter

To: OGC members & interested parties

A new OGC Standards Working Group (SWG) is being formed. The OGC members listed below have proposed the OGC GeoDCAT SWG. The SWG proposal provided in this document meets the requirements of the OGC Technical Committee (TC) Policies and Procedures.

The SWG name, statement of purpose, scope, list of deliverables, audience, and language specified in the proposal will constitute the SWG's official charter. Technical discussions may occur no sooner than the SWG's first meeting.

This SWG will operate under the OGC IPR Policy. The eligibility requirements for becoming a participant in the SWG at the first meeting (see details below) are that:

- You must be an employee of an OGC member organization or an individual member of OGC;
- The OGC member must have signed the OGC Membership agreement;
- You must notify the SWG chair of your intent to participate to the first meeting. Members may do so by logging onto the OGC Portal and navigating to the Observer page and clicking on the link for the SWG they wish to join and;
- You must attend meetings of the SWG. The first meeting of this SWG is at the time and date fixed below. Attendance may be by teleconference.

Of course, participants also may join the SWG at any time. The OGC and the SWG welcomes all interested parties.

Non-OGC members who wish to participate may contact us about joining the OGC. In addition, the public may access some of the resources maintained for each SWG: the SWG public description, the SWG Charter, Change Requests, and public comments, which will be linked from the SWG's page.

Please feel free to forward this announcement to any other appropriate lists. The OGC is an open standards organization; we encourage your feedback.

Chapter 1. Purpose of the Standards Working Group

The purpose of this SWG is to revise, publish, and maintain GeoDCAT, a spatio-temporal profile of the W3C DCAT Recommendation [DCAT] , and provide guidance about its use and further specialization.

The GeoDCAT profile of DCAT will be implemented as both human and machine-actionable resources.

Chapter 2. Business Value Proposition

DCAT is a widely used W3C vocabulary for describing datasets and data access services, typically within a spatio-temporal context. Some basic temporal and geographic properties have been adopted within the DCAT v2 [DCAT] and are planned for v3 [DCAT3], however these properties do not address the full range of requirements identified in the [GeoDCAT-AP] Discussion paper.

The EU references GeoDCAT-AP as a "Good Practice" [at https://inspire.ec.europa.eu/good-practice/geodcat-ap] and notes "A draft for an OGC (Open Geospatial Consortium) Best Practice document is currently under development, and there are discussions to endorse GeoDCAT-AP as an OGC Community Standard."

This charter provides the framework for realization of this goal through development of a GeoDCAT Standard and further refinement of the concept outside the particular constraints of [DCAT-AP]. I.e., the work aims to separate a general geospatial profile of DCAT, called "GeoDCAT," out from GeoDCAT-AP; the Europe-specific Application Profile (AP) will not be part of the OGC standardization work.

GeoDCAT will provide a standardized vocabulary and encoding for spatial dataset descriptions and service descriptions (metadata records), based on general Web standards as are described in the Spatial Data on the Web Best Practices. GeoDCAT could in future be used as encoding in catalog API standards such as OGC API Records and STAC.

2.1. Value to the OGC

To maintain its place as the provider of standards for description and access to spatio-temporal data, the OGC should provide guidance on representation of spatio-temporal concepts in data catalogues. [GeoDCAT-AP] is already referenced in the Spatial Data on the Web Best Practice [SDWBP]. The SWG will support publishing this as a set of normative resources, with a general profile of DCAT (GeoDCAT) which can be the basis for specialized profiles that are developed outside the SWG (such as GeoDCAT-AP), meeting the specific requirements of the original DCAT-AP context.

In addition, the management of a family of sub-profiles of GeoDCAT may be defined to standardize the description of OGC API usage in such catalogues.

2.2. Value to the OGC Membership

Normative publication of GeoDCAT and API-centric implementation profiles provides a simplified pathway to assimilation of OGC standards into deployed systems. In addition, formalized publication and identification supports the publication and access via FAIR principles of supporting human and machine-readable resources to facilitate and validate implementations.

2.3. Value to the geospatial community

The larger geospatial community will benefit from the standardization of description of geospatial data and access services in DCAT based data catalogs. Portals that describe their data catalogs using

either GeoDCAT or GeoDCAT-AP will be interoperable with each other as well as with general data catalog that use DCAT.

2.4. Value to the wider IT community

The publication of a formal profile of DCAT will present a best practice for the domain specialization of general data model standards, and a pattern for further specialization as required.

Chapter 3. Scope of Work

The initial activities will be to:

- describe new best practices and examples of use, which have emerged since publication of the OGC discussion paper about GeoDCAT-AP (OGC 18-001r1);
- assess the need for a geospatial extension of DCAT, separate from specific application profiles;
- separate DCAT-AP from GeoDCAT;
- update GeoDCAT as required to meet the DCAT v3 candidate and final recommendation status;
- update as required to use current GeoSPARQL Standard version;
- formalize machine readable versions of GeoDCAT profile;
- prepare and validate illustrative examples using the machine-readable description;
- define a mechanism for describing specialized profiles of GeoDCAT; and
- publish using current OGC Standard document methodology.

The SWG will assess, based on the review of best practices and examples of use, if there is sufficient motivation to create GeoDCAT as an OGC Standard.

The primary goal of this SWG's work is to define GeoDCAT as a set of modules or building blocks.

The SWG will look into the relationships with other relevant standards and possibly provide conceptual mappings. Part of the GeoDCAT vocabulary deliverable will be the relationship with other relevant standards, e.g., GeoDCAT-AP, ISO 19115, OGC API Records, STAC, GeoSPARQL, Dublin Core, schema.org, and others.

NOTE: *Each of the standards mentioned above has its own lifecycle and governance. It is up to the SWG to decide whether mappings created between GeoDCAT and these standards will be kept up to date.*

Future activities will include definition of additional specialized profiles as required and requested by specific applications domains (via OGC Domain Working Group inputs).

3.1. Statement of relationship of planned work to the current OGC standards baseline

This scope is primarily intended to progress the concept of GeoDCAT from an informative discussion paper into a normative and supported resource.

Further specializations will provide transparent, interoperable, and validatable patterns for the inclusion of OGC Standards-conformant resources into DCAT based catalogue implementations.

3.2. What is Out of Scope?

Revision to DCAT itself is out of scope. Definition of new vocabularies or ontologies to extend DCAT

should be strictly limited to defining concepts needed to describe aspects of OGC Standards and would be progressed in conjunction with the relevant OGC SWG. Technical implementations of any conceptual mappings with other relevant Standards created by the SWG are also out of scope.

3.3. Specific Existing Work Used as Starting Point

- GeoDCAT-AP Discussion Paper [GeoDCAT-AP]
- DCAT v2 [DCAT]
- DCAT v3 draft [DCAT3]
- W3C Profiles Vocabulary [PROF]
- ISO 19115 [ISO19115]
- OGC API Records [OAR]
- Spatio Temporal Asset Catalogs (STAC) [STAC]

3.4. Is This a Persistent SWG

[x] YES

[ ] NO

3.5. When can the SWG be Inactivated

The SWG can be inactivated once a registration mechanism (policies, technical standards, and infrastructure support) for further application domain specialized profiles of DCAT allows use of the GeoDCAT profile without the need for additional modification.

Chapter 4. Description of deliverables

Initial goals of the working group are to decouple the DCAT-AP concerns from the DCAT core concerns and publish these as normative profiles of the most recent versions of the DCAT Recommendation and DCAT-AP profile of this.

To organize the working group, the organizers propose the following preliminary schedule.

- 1st meeting: Review and prioritization of issues submitted to the OGC Standards Tracker.
- Next months: Work towards a candidate standard for public review.
- Release of the candidate standard for public review.
- Iterative approach to improve the candidate standard by considering comments and further upcoming issues.
- Final revision of the standard.
- Recommendation of the final standard to the OGC.

4.1. Initial Deliverables

The initial deliverables are based on the initial selection and prioritization of issues from the OGC Standards Tracker. This selection will be determined in the first meetings of the working group and subsequently updated in this working group charter.

After deciding on the initial issues to be worked on, this SWG will publish a roadmap to be used to manage scope and timeframes for delivery of a modular revision of the GeoDCAT profile standard.

4.2. Additional SWG Tasks

Additional SWG tasks will be added iteratively when new change requests and issues become apparent or gain priority. The SWG is planned as a long term working group so that new change requests may arise during the development of the initial deliverables. These will be prioritized and periodically classified as additional SWG tasks.

Chapter 5. IPR Policy for this SWG

[x] RAND-Royalty Free

[ ] RAND for fee

Chapter 6. Anticipated Audience / Participants

The anticipated audience is:

- publishers of specialized application profiles of DCAT with geographic requirements;
- implementors of Semantic Web systems that support, or plan to support, cataloguing of spatial data resources using DCAT; and
- application domains that require a best practice mechanism to further specialize DCAT for particular resource types.

Chapter 7. Domain Working Group Endorsement

This SWG scope addresses requirements for interoperable best practices in both geosemantics and metadata catalogs, and hence will report to both the Geosemantics and Metadata and Catalogs Domain Working Groups (DWGs).

The Chairs of the Geosemantics DWG, Joseph Abhayaratna and Linda van den Brink, and the chairs of the MetaCat DWG, Danny Vandenbrouke and Byron Cochrane, do formally endorse the formation of the GeoDCAT Standards Working Group (SWG).

Chapter 8. Other informative information about the work of this SWG

8.1. Collaboration

The GeoDCAT SWG will use

- Project Related Documentation;
- Creation and management of outstanding work items, using Standards Tracker as the authoritative register;
- Prioritization of work items into iterations of work; and
- The Standard Document itself.

It is proposed that the work of this SWG be conducted openly on GitHub, as the work of the motivating GeoSemantics DWG is already on GitHub.

8.2. Similar or Applicable Standards Work (OGC and Elsewhere)

8.2.1. DCAT-AP

8.2.2. W3C Linked Building Data Community Group

Scope of Activity

The European Union publishes [DCAT-AP] — a profile of DCAT to meet administrative requirements for data publication in EU context.

This application profile is a specification for metadata records to meet the specific application needs of data portals in Europe while providing semantic interoperability with other applications on the basis of reuse of established controlled vocabularies (e.g., EuroVoc) and mappings to existing metadata vocabularies (e.g., Dublin Core, SDMX, INSPIRE metadata).

GeoDCAT is expected to be combined with DCAT-AP to realize a normative implementation of [GeoDCAT-AP]

Web Site(s)

- https://joinup.ec.europa.eu/solution/dcat-application-profile-data-portals-europe

Source Repositories

- https://github.com/SEMICeu/DCAT-AP

Liaisons

- Andrea Perego
- Antoine Isaac

8.2.3. W3C/OGC Spatial Data on the Web Working Group

Scope of Activity

This group operates within the W3C as well as the OGC in order to develop and maintain vocabularies and best practices that encourage better sharing of spatial data on the Web; and identify areas where Standards should be developed jointly by both W3C and the Open Geospatial Consortium (OGC). It allows members of both organizations to collaborate in the creation of standards an best practices related to both Web and spatial data.

Web Site(s)

- https://www.w3.org/2017/sdwwg/

Source Repositories

- https://github.com/w3c/sdw

Liaisons

- Linda van den Brink
- Jeremy Tandy

8.3. Other Related Work

8.4. Details of first meeting

The first meeting of the SWG will be held by telephone conference call at 6AM ET on the first Thursday immediately following the week of Technical Committee approval of this Charter. Call-in information will be provided to the SWG's e-mail list and on the portal calendar in advance of the meeting.

8.5. Projected on-going meeting schedule

The work of the SWG will be carried out primarily by email and conference calls, possibly every two weeks, with face-to-face meetings perhaps at each of the OGC Member Meetings.

8.6. Supporters of this Charter

The following people support this proposal and are committed to the Charter and projected meeting schedule. These members are known as SWG Founding or Charter Members. The Charter Members agree to the SoW and IPR terms as defined in this charter. The Charter Members have

voting rights beginning the day the SWG is officially formed. Charter Members are shown on the public SWG page.

L.E. van den Brink	Geonovum
N.J. Car	SURROUND Australia Pty Ltd
J. Maso Pau	CREAF
L. Alemany Gómez	Centro Nacional de Información Geográfica
B. de Lathouwer	Gemeente Rotterdam
R. Atkinson	OGC Innovation Program
J. Escriu	European Commission Joint Research Centre
U. Voges	contTerra GmbH
F. Vinci	Epsilon Italia
D. Vandenbroucke	KU Leuven

8.7. Conveners

Name	Organization
L.E. van den Brink	Geonovum
J. Maso Pau	CREAF

Chapter 9. References

[DCAT] Web: W3C: Data Catalog Vocabulary (DCAT) — Version 2, https://www.w3.org/TR/vocab-dcat-2/ (2020)

[DCAT3] Web: W3C: Data Catalog Vocabulary (DCAT) — Version 3, https://www.w3.org/TR/vocab-dcat-3/

[SDWBP] Web: OGC & W3C: Spatial Data on the Web Best Practices, https://www.w3.org/TR/sdw-bp/

[GeoDCAT-AP] Web: OGC : GeoDCAT-AP Discussion Paper, http://www.opengis.net/doc/dp/GeoDCAT-AP

[GeoDCAT-APv2] GeoDCAT-AP — Version 2.0.0 : SEMIC Editor's Draft 23 December 2020, https://semiceu.github.io/GeoDCAT-AP/drafts/latest/

[PROF] Web: W3C: Profiles Vocabulary (DCAT), https://www.w3.org/TR/dx-prof/

[GeoDCAT-AP_IT] This is the issue tracker for the maintenance of GeoDCAT-AP. https://github.com/semiceu/geodcat-ap/

[DCAT-AP] Web: EU: DCAT Application Profile for data portals in Europe, https://joinup.ec.europa.eu/collection/semantic-interoperability-community-semic/solution/dcat-application-profile-data-portals-europe

[ISO19115]: ISO 19115-1:2014. Geographic information — Metadata — Part 1: Fundamentals, https://www.iso.org/standard/53798.html

[OAR]: DRAFT OGC API - Records - Part 1: Core, http://docs.ogc.org/DRAFTS/20-004.html

[STAC]: Spatio Temporal Asset Catalogs (STAC), https://stacspec.org/en