



“GeoDCAT-AP & standard bodies – Open Geospatial Consortium”

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Different worlds

Bring them together ...

... Logic 'marriage'

ISA, OGC, W3C ...

👉 Prepare OGC Discussion Paper

	FORMATS (standards)	TOOLS
 GEO-WORLD	Geo-metadata <ul style="list-style-type: none">- Inspire (Europe)- Geo-DCAT (JRC)- ISO 19115- ISO 19139- ...	Geo-portals (meta data) <ul style="list-style-type: none">- GeoNetwork- Micka- ...
 Open-data & E-GOV WORLD	(Open)meta data <ul style="list-style-type: none">- DCAT (W3C)- Dublin core (ISO 15836)- ...	(open)-data portals <ul style="list-style-type: none">- CKAN- ...
 Developers WORLD	API descriptions <ul style="list-style-type: none">- API description frameworks- Open API 3.0- Swagger- Hypermedia- ...	Developer portals <ul style="list-style-type: none">- Github- ...
 Archive WORLD	Archive standards <ul style="list-style-type: none">- Dublin core (ISO 15836)- E-GMS (E-GOV)- ISO 23081- ...	Document management & Archive systems <ul style="list-style-type: none">- Open archive- ...



OGC Discussion Paper

- Content
 1. Introduction
 2. Overview of relevant metadata standards
 3. GeoDCAT-AP implementation examples
 4. GeoDCAT-AP alignment and future integration
 5. Annexes
 - ESA FedEO/OBEOS GeoDCAT-AP implementation
 - OGC Testbed-12 Metadata Crosswalk
 - Open Transport NET - GeoDCAT-AP implementation best practice
 - Databio project metadata visualisation in Google Earth (GeoDCAT2KML)
 - Czech National Inspire Geoportal GeoDCAT support
 - Spatial data on the web using the Dutch GDP
 - Flanders integrated metadata portal proof of concept

Open Geospatial Consortium

Submission Date: 2018-0

Approval Date: 2018-0

Publication Date: 2019-0

External identifier of this OGC® document: <http://www.opengis.net/doc/dp/GeoDCAT>

Internal reference number of this OGC® document: 18-0

Category: OGC® Discussion P

Editors: Lieven Raes, Danny Vandembroucke, Tomas Re

GeoDCAT-AP

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Warning

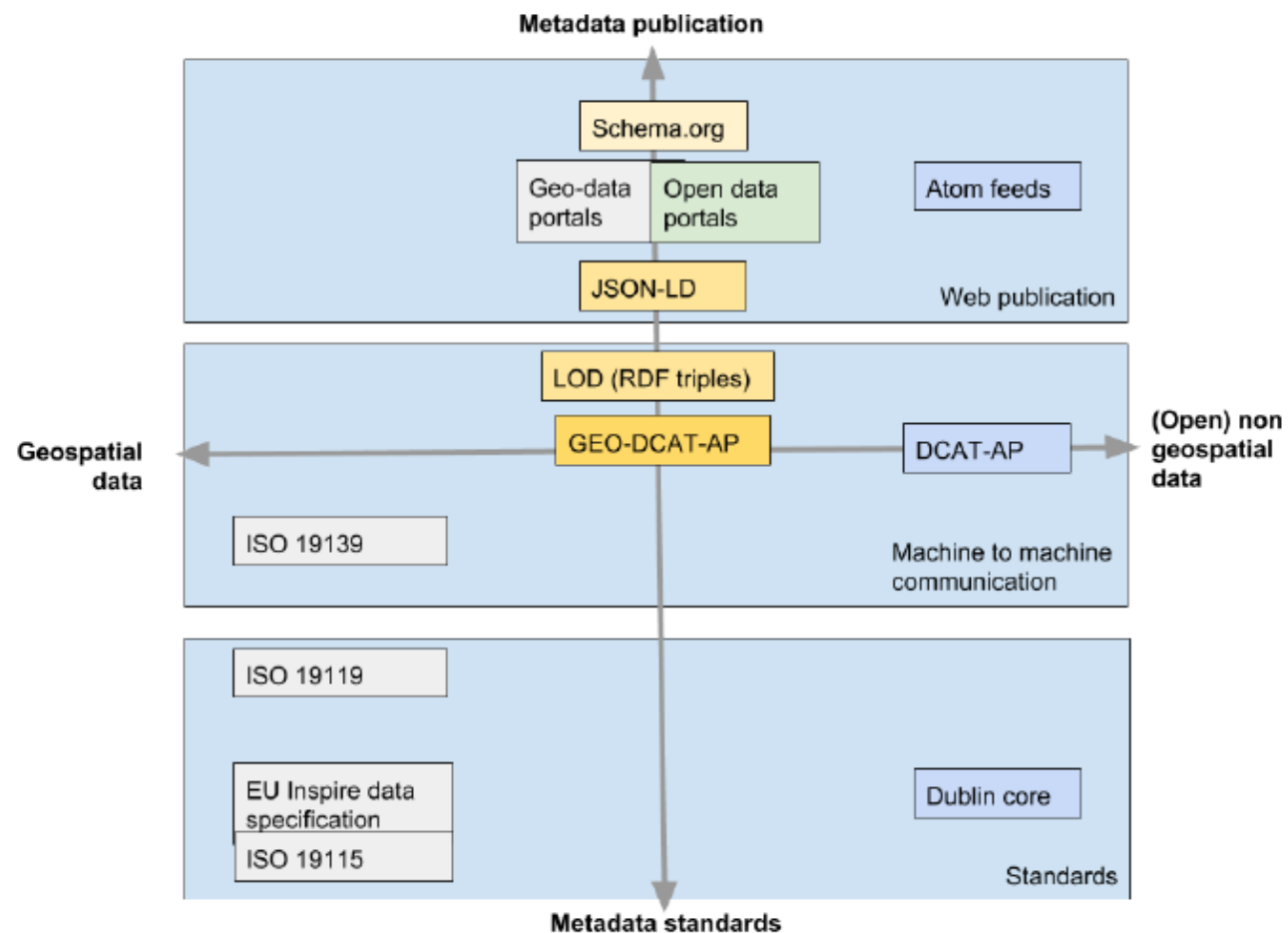
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Document type: OGC® Discussion Paper
Document subtype:
Document stage: Approved for Public Release
Document language: English

Overview of the relevant standards and initiatives

- ISO 19100 series
- DCAT 'family'
- Other standards
 - Dublin Core
 - Schema.org



Documenting and discussing cases

- GeoDCAT-AP implementations
 - Successful GeoDCAT initiatives
 - Test, POC, pre production or production (no theoretical cases)
 - General focus:
 - **Integrated metadata management:** Management of open data- and geo-metadata via one interface (harvesting and/or manual input);
 - **Integrated publication:** Publication of open data- and geo-metadata via one interface (data portal or publication on the web).
 - 4 Focus areas:
 - Metadata input (manually or automatically harvested);
 - Metadata publication into an integrated geo/open data portal;
 - Publication of metadata as Linked Open Data (LOD);
 - Information mapping (ISO 19115, INSPIRE, DCAT,...).

GeoDCAT-AP implementations: 7 cases

- Template (1/2)
 - Title
 - Details
 - Implementation place
 - Organisations involved
 - Status (Production – Test)
 - Contact person
 - URL
 - Focus area
 - General introduction about the initiative or project

GeoDCAT-AP Best practice template

Guidelines:

- Maximum 4-5 pages for each best practice case
- Technical implementation details must be in annex
- Overwrite the blue text

Title

Best practice title	Title
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Details

Place of implementation:	Country/Region
Organisation(s) involved:	Name organisation, name organisation
Status:	Production/Pré-production/Test
Contact person	Name, email, organisation
URL	URL Link

Focus area

Focus: Only one item can be selected. A best practice must focus on at least one focus area.

Metadata input (manually or automatically harvested)	Primary / Secondary / None
Metadata publication into an integrated geo/open data portal	Primary / Secondary / None
Publication of metadata as Linked Open Data (LOD)	Primary / Secondary / None
Information mapping (ISO 19115, Inspire, DCAT,...)	Primary / Secondary / None

Intro

Intro: (Max 4 paragraphs)

General introduction about the initiative, project,... (Focus on only general goals and the pure business story). More specific GeoDCAT-AP related goals must be integrated into the "Goals" section below.

GeoDCAT-AP implementations: 7 cases

- Template (2/2)
 - Goals: Description of the main goals
 - Approach: Description of the approach followed to achieve the pilot goals (reasoning behind).
 - Results: Achieved results, Importance, Pros & cons
 - Conclusion: Overall conclusion, ease of implementation, ease of use, repeatability
- Technical annexes

Description

Goal

Goal: Description of the best practice goal(s) (max 3 lines or a 5 point bullet list).

Description

Approach

Approach: (Max 2 pages)

- Description of the approach followed to achieve the pilot goals.
- Description of the implementation and reasoning why decisions were taken.
- The implementation details like detailed code lists or extensive data model descriptions can be integrated into the annexes.

Description

Results

Results: (Max 1 page)

Description of the achieved results. Description of the importance. Pros and cons (Because this is a best practice it is important that the *pros are more prominent than the cons*).

Description

Conclusions

Conclusions: (Max 5 lines)

A brief description of the overall conclusion of the test. Conclusions about the ease of implementation, ease of use, repeatability.

Description

7 cases described

1. ESA FedEO/OBEOS - GeoDCAT-AP implementation

- The ESA OBEOS (Ontology Based Earth Observation Search) project aimed to extend the operational ESA FedEO (Federated Earth Observation) Gateway with Linked Data interfaces compliant with W3C LDP 1.0 and W3C DCAT and GeoDCAT-AP interfaces to facilitate discovery of Earth Observation Collection Metadata.

2. OGC Testbed 12

- The OGC Testbed-12 metadata crosswalk was developed within a work package focusing on Catalogue and SPARQL services with 3 main goals:
 - Semantic enablement of OGC catalogue services;
 - Interoperability between OGC catalogue standards and open search standards;
 - Increase awareness of registry capabilities such as change control management.



7 cases described



3. OTN Open Transport Net - GeoDCAT-AP implementation

- To integrate (metadata) of INSPIRE compatible transport related geospatial datasets with open transport related datasets. OTN has built a so-called OTN hub that allows cities to manage and display their open and geospatial transport related datasets in one single catalogue.

4. Databio metadata visualisation

- Aims for working in a more user-friendly way with metadata in a commonly used application, Google Earth (in the KML format). Specific goals were:
 - Define transformations from GeoDCAT into the KML;
 - Develop mechanisms for user-friendly visualizations of (Sentinel-1, Deimos and Cryosat-2) dataset series in the Google Earth application;
 - Make the converter for GeoDCAT to KML publicly accessible for further re-use;
 - In general, user-friendly visualization of satellite images collections (dataset series).

7 cases described

5. Czech National Inspire Geoportal

- The Czech National INSPIRE Geoportal is a single access point for INSPIRE based spatial data and makes use of GeoDCAT-AP. Beside INSPIRE related datasets the portal can also handle metadata coming from other open- and geo-related datasets.

6. Spatial data on the web using the Dutch GDP best practice

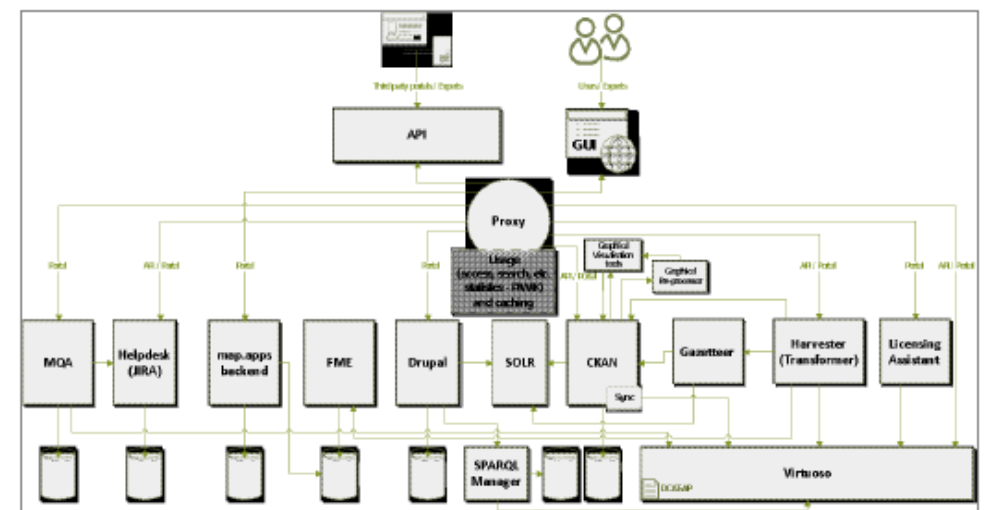
- How to use the power of the WWW to make geo-information more accessible? A testbed was organised in 2015-2016.
 - Starting with some relevant research questions, commercial parties began to experiment with publishing geodata on the web.
- GeoDCAT-AP was tested as one of the tools/techniques to translate INSPIRE, ISO 19139 metadata records to a format that can be picked up by the most commonly used search engines on the web.

7 cases described

7. Flanders integrated metadata portal proof of concept

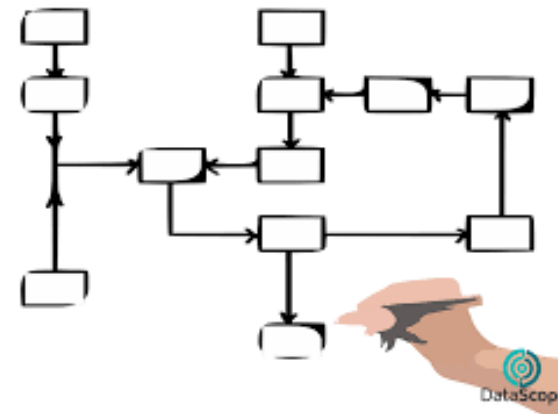
- Integrating open-data metadata and geo-metadata in one single end-user portal and one integrated metadata management system.
- As EU member, Belgium and Information Flanders as one of the regional public agencies, must apply the INSPIRE metadata profiles. This means different metadata standards (DCAT-AP) for open data and (GeoDCAT-AP, ISO19115) for Geodata.
- Two approaches were tested:
 - DCAT-AP support based on the ISO19139 Scheme;
 - DCAT-AP support DCAT based on a new scheme.

Study Metadata Flanders, 2017



Towards an OGC Best Practice document

- Need to describe examples in the form of Best Practices
 - Use Case abstract – what has been done and why
 - The workflow
 - Technical environment
 - The results
 - Issues encountered (by example)
 - Recommendations
 - Conclusions





GeoDCAT-AP as community standard?

- From ISA 'de facto' standard to OGC community standard ?
 - GeoDCAT-AP endorsed 'as-is' within OGC ?
 - Need for more implementations (broad application)
 - Look into the IPR (ISA / OGC) – seems not to be a problem
- Maintenance process
 - Alignment with W3C DCAT 1.1 (W3C Dataset exchange working group)
 - After adoption 'as-is' possible work on improvements and resolving 'issues'
- Support from EU (and other) projects
 - POLIVISU
 - EuroGEOSS / NextGEOSS



Thank you

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