Towards metadata interoperability

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Outline

• Metadata – why we need them?

• GeoDCAT-AP

😊 Thanks for all the work and contribution of the OGC/W3C, open data and INSPIRE metadata communities
Metadata

• … we ‘hate’ metadata (a bit) … but we need metadata …

• … metadata are everywhere
Metadata

• Different functions
  o Discover
  o Evaluate
  o Use
Metadata

- Different communities have different metadata standards
  - Dublin Core
  - ADMS (Assets Descriptor Metadata Schema)
  - DCAT(-AP)
  - ISO 19115 (3 parts) and related standards (different versions !)
Metadata

• Different worlds, different solutions …
GeoDCAT-AP

DCAT
Data Catalogue Vocabulary

W3C Recommendation

DCAT-AP
Data Catalogue Vocabulary Application Profile

ISA (EU)

GeoDCAT-AP
Geospatial Data Catalogue Vocabulary Application Profile

JRC (EU)

StatDCAT-AP
Statistical Data Catalogue Vocabulary Application Profile

Eurostat (EU)

_New*_DCAT-AP
_New* Data Catalogue Vocabulary Application Profile

* New DCAT-AP based Data Catalogue Vocabularies
GeoDCAT-AP

- Towards OGC Best Practice document
  - 7 examples of GeoDCAT-AP implementations

KML visualization of INSPIRE metadata for Sentinel-1 dataset series, originally published in the GeoDCAT/RDF (DataBio)
GeoDCAT-AP

• Towards OGC Best Practice document
  o Integrated metadata management and publication

- 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

- OGC Metadata & Catalogue DWG being set-up
- Current version of document is accepted by OGC community as a Discussion Paper

1. Introduction
2. Overview of relevant metadata standards and related initiatives
3. GeoDCAT-AP best practices implementations
4. GeoDCAT-AP alignment (INSPIRE) and future integration
5. Annexes (details on the 7 cases)

Extending the document towards BP
GeoDCAT-AP

- Examples of implementations (guidance & recomm.)
  - Short narrative on the example implementation
  - The type of implementation and technical environment used
    - CSW implementation
    - CKAN implementation
  - The use of XSLT and API
    - XSLT: reference implementations of the mappings defined in the GeoDCAT-AP specification used to transform ISO 19139 encodings
    - API: implementation of GeoDCAT-AP in an OGC CSW (Catalog Service for the Web), re-using the standard CSW interface, and supporting multiple RDF serialisations (including HTML+RDFa) and HTTP content negotiation
  - Testing and showing results of transformed metadata
  - Issues encountered and recommendations
GeoDCAT-AP

- Experiments with the Orléans OGC/TC INSPIRE Hackathon
  - Visualisation of metadata
  - Linked data approaches for MD
  - Sensor based concepts
  - Link GI & EO portals
  - Use of Schema.org for discovery
  - ...

Some of the results shown in this session
GeoDCAT-AP

• Ongoing work in different places
  o Metadata & Catalogue DWG – charter in preparation
  o Close collaboration with W3C DXWG
    • Work on DCAT 1.1
  o New metadata study by Information Flanders
  o New work as part of the H2020 POLIVISU project
  o New testing of harvesting in the European portal landscape (IGN-BE)
    o …
  ➥ Inform us about ongoing or new work!
  ➥ Possibly making GeoDCAT-AP an OGC community standard
    …
Thank you!
Questions?
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