GeoDCAT-AP 3.0.0 Pilot

Evaluating the adequacy of GeoDCAT Application Profile 3.0.0

Introduction and purpose

Policy context

As part of the GreenDataForAll initiative[1], aimed at modernising the rules governing European environmental geospatial data sharing under the INSPIRE Directive[2] and the Directive on public access to environmental information[3], their implementation is being aligned to the one of the Commission Implementing Regulation (EU) 2023/138 on Open Data High-Value Datasets[4].

This alignment is purposed for facilitating the integration of reporting obligations into a common data flow in the scope of the Open Data community, centralised on the European Data Portal[5].

Ultimately, the process is expected to minimise the implementation burden on Member States' data providers, while assuring compliance to the provisions set by these Directives and to the legal framework deploying the European Strategy for Data[6].

GeoDCAT Application Profile 3.0.0 for geospatial portals in Europe

To this purpose, the GeoDCAT-AP 3.0.0[7] specification has been publicly released.

It facilitates the transformation of metadata managed by national geospatial data catalogues and their integration within the above-mentioned common reporting flow, by establishing an updated mapping between geospatial/INSPIRE metadata (in ISO 19139 / 19115 format) and DCAT metadata (in GeoDCAT format) used by the Open Data community. Furthermore, it incorporates additional provisions to comply with the High-Value Datasets Implementing Regulation.

The new GeoDCAT-AP 3.0.0 specification and its related XSLT transformation[8] (implementing the specification mapping) were open to public review until the end of September 2024.

GeoDCAT-AP 3.0.0 Pilot

This concept note defines at high-level a Pilot to test both resources, improve them and provide a mechanism to identify and report related issues beyond the mentioned public review period.

Objective

Evaluating the adequacy of the GeoDCAT-AP 3.0.0 specification and its accompanying XSLT transformation regarding the following aspects:

- Quality of the transformation, quantification and evaluation of potential information losses.
- Degree of compliance of the transformed geospatial metadata (in GeoDCAT format) to the provisions set by the INSPIRE Directive and the High-Value Datasets Implementing Regulation.
- Potential implementation issues identified in the pilot to be reported.

Outputs and results

- General feedback on the tested specification and transformation, including a detailed set of issues reported in the GeoDCAT-AP repository[9] and the XSLT transformation repository[10], from each participant in the pilot.
- Final report summarising the process and results achieved in the pilot, including an evaluation on the how the transformation help data providers in keeping compliance to the applicable legal framework.

These outputs will support the SEMIC community to release an improved GeoDCAT-AP 3.0.0 specification and XSLT transformation, based on pragmatic outcomes from this pilot sandboxing activity. This will deliver benefits to involved stakeholders, as summarised below.

Expected benefits

- Implementers in the Member States will have at their fingertips an improved quality tested tool to channel their geospatial metadata descriptions through the Open Data reporting flow, easing them the reporting of High-Value Datasets.
- The Publication Office of the European Union (OP), responsible for the European Data Portal[5], will be able to harvest metadata with increased quality, minimising information losses and potential issues in extracting the results of High-Value Datasets reporting process.
- The DG DIGIT SEMIC group and underlying community will achieve a more solid release of the specification and XSLT transformation, based on the outcomes of a real testing case scenario.
- The European Commission DG Environment (ENV) and the Joint Research Centre (JRC), main stakeholders driving INSPIRE and the GreenDataForAll, will attain a streamlined reporting mechanism aligned with the Open Data flows.

Pilot participants

- Contact points responsible for national geospatial catalogues in the Member States, as main users of the GeoDCAT-AP to transform current geospatial metadata.

  Initial candidates: Belgium (Flanders), Czech Republic, Denmark, Italy, Finland, the Netherlands, Spain, Slovakia.
- Publication Office of the European Union (OP) / European Data Portal (data.europa.eu), as main future receptor of GeoDCAT-AP metadata and re-user of the transformation.
- The DG DIGIT SEMIC group, as point of contact for resolving and contributing to solutions in case potential issues are discovered during the pilot.
- European Commission Joint Research Centre (JRC), as organiser of the pilot and provider of scientific knowledge on the applicable legal framework.

Timeline

2nd October 2024 – 31st January 2025.

Technical note

GeoDCAT 3.0.0 metadata is compliant to the most updated versions of the European and global DCAT profiles (DCAT-AP 3.0.0[11] and DCAT 3.0 specification[12], respectively), while also allowing to satisfy the additional provisions set for High-Value Datasets (DCAT-AP for HVDs Profile[13]).

References

[1] GreenDataForAll. https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13170-GreenData4All-updated-rules-on-geospatial-environmental-data-and-access-to-environmental-information_en

[2] Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE). Consolidated text. 26 June 2019. http://data.europa.eu/eli/dir/2007/2/2019-06-26

[3] Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC. 14 February 2003. http://data.europa.eu/eli/dir/2003/4/oj

[4] Commission Implementing Regulation (EU) 2023/138 of 21 December 2022 laying down a list of specific high-value datasets and the arrangements for their publication and re-use. 20 January 2023. https://eur-lex.europa.eu/eli/reg_impl/2023/138/oj

[5] European Data Portal. https://data.europa.eu

[6] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A European strategy for data - COM(2020) 66 final. 19 February 2020. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0066&from=EN

[7] GeoDCAT-AP 3.0.0 specification. https://semiceu.github.io/GeoDCAT-AP/releases/3.0.0/

[8] XSLT transformation. https://github.com/SEMICeu/iso-19139-to-dcat-ap

[9] GeoDCAT-AP repository. https://github.com/SEMICeu/GeoDCAT-AP/issues

[10] XSLT transformation repository. https://github.com/SEMICeu/iso-19139-to-dcat-ap/issues

[11] DCAT-AP 3.0.0. https://semiceu.github.io/DCAT-AP/releases/3.0.0/

[12] DCAT 3.0 specification. https://www.w3.org/TR/vocab-dcat-3/

[13] DCAT-AP for HVDs Profile. https://semiceu.github.io/DCAT-AP/releases/2.2.0-hvd