Leaflet title: DCAT Application Profile for Data Portals in Europe (DCAT-AP)

Key message: DCAT-AP enables the exchange of dataset descriptions between portals, improves the quality of metadata, and increases the accessibility and reusability of datasets.

Business need:
Due to the increasing number of data portals and the multitude of available datasets, data users find it difficult to find and access the right data, even when openly available. It is especially difficult if datasets are provided by another Member State, if language barriers apply and if the structures of government are unfamiliar.

Data providers have to comply with the description format used by data portals. As this format can be different from one portal to another, it hinders the interoperable exchange of data descriptions and makes it more difficult for data providers to publish their data.

Solutions:
The DCAT Application Profile for data portals (DCAT-AP) provides a common specification for describing public sector datasets in Europe to enable the exchange of descriptions of datasets (metadata) among data portals.

The DCAT-AP makes the following possible:

- **Data catalogues** can describe their dataset collections using a standardised description format, while keeping their own system for documenting and storing them.
- **Content aggregators**, such as the European Data Portal, can easily aggregate such descriptions into a single point of access.
- **Data consumers** can more easily search and find datasets by using the same parameters on different portals thanks to a harmonised vocabulary.

The current version of DCAT-AP has been implemented by 12 countries in Europe.

The Change and Release Management Policy of the DCAT-AP ensures the reliability of DCAT-AP’s current versions and subsequent ones, in addition to providing stakeholders with a guarantee that any implementation investments are well protected. The Change and Release Management Policy has been recently updated and is available on [Joinup](https://joinup.ec.europa.eu/).

Extensions:
**GeoDCAT-AP** is an extension of DCAT-AP for describing geospatial datasets, dataset series, and services. It provides an RDF syntax binding for the metadata elements defined in the core profile of ISO 19115:2003 and those defined in the framework of the INSPIRE Directive. Furthermore, the extension is fully compatible with DCAT-
AP, allowing general data portals to better describe geospatial data and services and improve their discoverability.

**StatDCAT-AP** is a specification of DCAT-AP for describing datasets within the statistical domain published on open data portals. It provides a description of statistical datasets with specific fields such as dimensions, attributes, number of data series and unit of measurement. Moreover, it improves the discoverability of statistical datasets on data portals by allowing users to search on StatDCAT-AP specific fields.

**National extensions:** several Member States have opted to extend DCAT-AP to meet their specific requirements. The ISA² Programme of the EU has published a number of guidelines for implementing DCAT-AP on Joinup, including on how the specification can be extended.

### Benefits

- **More efficient and less costly exchanges** of dataset descriptions thanks to harmonised, machine-readable and reusable descriptions of data catalogues and datasets
- **Easily searchable and accessible** open data through the provision of cross-data portals and cross-lingual search for datasets
- **The specification is actively maintained** by a community of implementers supported by the ISA² Programme, following an open process.

### Users about DCAT-AP

- **European Data Portal:** "The European Data Portal makes data available and re-usable across Europe. This is done by harvesting metadata from the Member States’ data portals and making them available and searchable through the European Data Portal. Unfortunately, the format and structure of metadata differ from portal to portal. This problem can be addressed by making use of a single, harmonised model, the DCAT-AP specification, which has been developed by the European Commission."
- **Joint Research Centre:** "The GeoDCAT-AP extends DCAT-AP to enable the representation of geospatial metadata, in particular those available from the infrastructure of the EU INSPIRE Directive, thus facilitating the sharing, discovery and re-use of geographic information across data catalogues." DG JRC – Growth and Innovation
- **Norway:** "DCAT-AP is the core model for describing and exchanging descriptions of public sector datasets in Norway. It ensures interoperability between data portals and a common ground for describing datasets across public sector domains. It’s also a useful tool for information governance purposes within public sector organisations. Norway is building a national common data catalogue based on DCAT-AP"
AP including public, restricted and non-public datasets. The project is one of the actions taken to increase government-to-government reuse and to achieve the once only principle. DCAT-AP with its linked data approach, has been vital for this project.” Agency for Public Management and eGovernment (Difi)

- **Publications Office of the EU:** "The use of an international standard for metadata publishing is crucial for interoperability of data portals and harmonisation of data coming from different sources. DCAT-AP is not overcomplicated, allows sufficient flexibility but at the same time covers most essential metadata requirements. It also corresponds to the modern technological challenges and is an indispensable element for moving towards trustful linked open data."

**Links**

**Want to know more?**

Get started


DCAT-AP implementation guidelines:


Join the Semantic interoperability community

semic.eu

GitHub

github.com/SEMICEu

The DCAT-AP is a joint initiative of two Directorates-General of the European Commission (DG CONNECT and DG Informatics) and the Publications Office of the EU.

This action is supported by the European Commission’s ISA² programme. ISA² is a EUR 131 million programme supporting the modernisation of public administrations in Europe through the development of eGovernment solutions. More than 20 solutions are already available, with more to come soon. All solutions are open source and available free of charge to any interested public administration in Europe.
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