

High-value datasets: open data and their linkages

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Policy goal - Creating a single European market for data

Legal instruments from the perspective of the type of data

Open Data Directive
More public data for innovation.
High Value Datasets for SMEs.

Without prejudice to the GDPR

Data Governance Act

Increasing trust in voluntary data sharing, strengthening mechanisms to promote data availability.

Data Act

Unlocking a wealth of industrial data in Europe, creating a solid and fair data-driven economy.



The beginning: public sector data open for re-use Open Data Directive

Open Data Directive

of 2019
(its predecessor in place since 2003)

- The <u>Directive</u>: all publicly accessible data from the public sector should be easier and cheaper to re-use for innovation.
- Access to information rules are mostly set by the MS.
- Application of the Directive must fully respect the data protection rules, confidentiality, security, IPRs etc.

Public sector bodies' obligations:

- be transparent on conditions for re-use;
- avoid any form of discrimination between re-users, including a re-use by the public sector body itself;
- deal with applications for re-use within a time limit;
- not enter into exclusive arrangements other than in exceptional circumstances;
- limit charges (Free re-use by default; covering marginal cost of reproduction is possible; narrowly defined exceptions that allow full recovery of costs of data).

Way forward: public sector data to be made really open Open Data Directive => high-value datasets

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 - **Next level:** Commission Implementing Regulation starting to apply from 9 June 2024.
 - <u>List of public sector datasets</u> with a high reuse potential for the society and economy that **have to be made** available:
 - for free, in machine-readable formats, via APIs and (where relevant) as bulk downloads.

Geospatial

Earth observation and environment

Meteorological

Statistics

Companies and company ownership

Mobility

Main Act

- Subject matter
- Definitions
- Arrangements for publication (e.g. details on APIs)
- Arrangements for reuse (e.g. charging exception, time series, licences, personal data issues)
- Reporting by Member States: from February 2025 every 2 years
- Applicability: 16 months after entry into force, i.e. 9 June 2024

Annex

 Datasets or their description and arrangements for the publication and re-use for individual categories



Statistics – Annex to the Implementing Regulation 1/2

Datasets	Legal acts laying down the key variables of the datasets in scope and their breakdowns
Industrial production	Regulation (EU) 2019/2152 of the European Parliament and of the Council (44)
	Table 26 of the Annex to Commission Implementing Regulation (EU) 2020/1197 (45)
Industrial producer price index breakdowns by activity	Table 5 of Annex I to Implementing Regulation (EU) 2020/1197
Volume of sales by activity	Table 7 of Annex I of Implementing Regulation (EU) 2020/1197
EU International trade in goods statistics – exports and imports breakdowns simultaneously by partner, product and flow	Regulation (EU) 2019/2152
Tourism flows in Europe (see Tables 1 and 2 below for variables in scope)	Section 2 of Annex I to Regulation (EU) No 692/2011 of the European Parliament and of the Council (46) Article 1 of Commission Delegated Regulation (EU) 2019/1681 (47)
Harmonised Indices of consumer prices	Article 3 of Regulation (EU) 2016/792 of the European Parliament and of the Council (48)
National accounts – GDP main aggregates (see Tables 6-7 below for variables in scope)	Regulation (EU) No 549/2013 of the European Parliament and of the Council (49), in particular Annex B
National accounts – key indicators on corporations (see Table 8 below for variables scope)	in Regulation (EU) No 549/2013, in particular Annex B
National accounts – key indicators on households (see Table 9 below for variables in scope)	Regulation (EU) No 549/2013, in particular Annex B
Government expenditure and revenue (see Table 10 below for variables in scope)	Regulation (EU) No 549/2013, in particular Annex B
Consolidated government gross debt (see Tables 11 and 12 below for variables in	Chapter I of Council Regulation (EC) No 479/2009 (50)
scope)	Regulation (EU) No 549/2013
Environmental accounts and statistics	Annex I to Regulation (EU) No 691/2011 of the European Parliament and of the Council (51) Annex I and II to Regulation (EC) No 2150/2002 of the European Parliament and of the Council (52) European
Population, Fertility, Mortality	Regulation (EU) No 1260/2013 of the European Parliament and of the Council (53) Commission

Statistics – Annex to the Implementing Regulation 2/2

Datasets

Current healthcare expenditure

Poverty (see Table 13 below for variables in scope)

Inequality (see Table 14 below for variables in scope)

Employment (see Tables 15-16 below for variables in scope)

Unemployment (see Table 17 below for variables in scope)

Potential labour force (see Table 18 below for variables in scope)

Legal acts laying down the key variables of the datasets in scope and their breakdowns

Annex II to Regulation (EC) No 1338/2008

Annex II to Commission Regulation (EU) 2015/359 (61)

Regulation (EU) 2019/1700 of the European Parliament and of the Council (62)

Commission Implementing Regulation (EU) 2019/2180 (63)

Commission Implementing Regulation (EU) 2019/2181 (64)

Commission Implementing Regulation (EU) 2019/2242 (65)

Regulation (EU) 2019/1700

Implementing Regulation (EU) 2019/2180

Implementing Regulation (EU) 2019/2181

Implementing Regulation (EU) 2019/2242

Regulation (EU) 2019/1700

Commission Implementing Regulation (EU) 2019/2240 (66)

Regulation (EU) 2019/1700

Implementing Regulation (EU) 2019/2240

Regulation (EU) 2019/1700

Implementing Regulation (EU) 2019/2240



Arrangements for the publication and re-use (example of statistical data)

- The statistics thematic category includes statistical datasets **except microdata** related to reporting obligations as defined in the legal acts listed in the table.
- **Time series** shall begin no later than at the date of application of the respective legal act listed in the table below.
- a) The datasets shall be made available for re-use:
- as frequently as required by the corresponding legislation (e.g. monthly, quarterly, yearly);
- under the conditions of the **Creative Commons BY 4.0 licence** or any equivalent or less restrictive open licence;
- in CSV, XML (SDMX), JSON or another publicly documented, Union or internationally recognised open, machine-readable format;
- through APIs and bulk download;
- b) The **metadata** describing the data set shall be available as a well-developed structured file containing at least a description of the statistical data, the statistical concepts, methodologies and information on data quality.
- c) The datasets shall be described in a complete and publicly available online documentation describing at least the data structure and semantics.
- d) Datasets shall use Union or internationally recognised and publicly documented controlled vocabularies and taxonomies, where available.



DCAT-AP for HVDs: metadata in key role

- DCAT-AP metadata standard
- Useful for: (i) <u>findability</u>, (ii) <u>reporting</u>: from <u>February 2025</u>.
- https://semiceu.github.io/DCAT-AP/releases/2.2.0-hvd/ Guidelines on how to use DCAT-AP for a dataset that is subject to the requirements imposed by the implementing regulation.
- Ongoing: guidance to Member States on how to automate their reporting thanks to metadata

DCAT-AP High Value Datasets

14 December 2023

More details about this document

Latest published version:

https://semiceu.github.io/DCAT-AP/releases/2.2.0-hvd

Latest editor's draft:

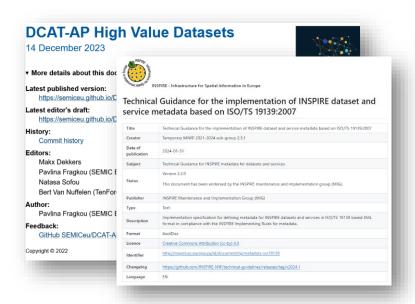
https://semiceu.github.io/DCAT-AP/releases/2.2.0-hvd

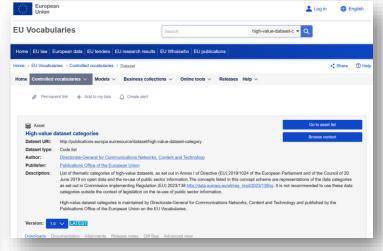


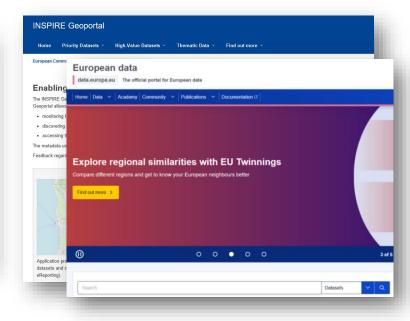


Reporting: builds on existing (improved) common practices

Use existing metadata **standards** and metadata **sharing networks** of data portals







Metadata standards such as DCAT-AP HVD, INSPIRE HVD guidelines

Shared code lists such as HVD categories, licences, ...

Harvesting networks and data portals such as data.europa.eu and INSPIRE data portal.

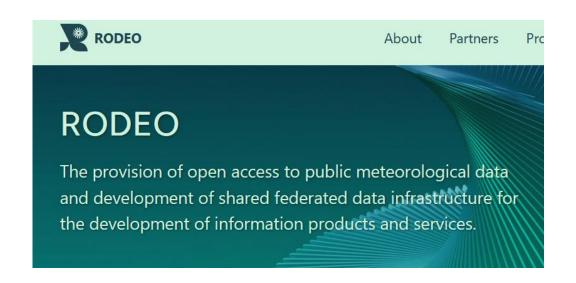


Extension of thematic categories of HVDs

- Final <u>study published</u> in 2023
- Potentially for the next Commission.
- Candidates:
 - Climate loss;
 - Energy;
 - Financial;
 - Government and public administration;
 - Health;
 - Justice and Legal;
 - Language.



Projects under Digital Europe Programme









Mare Graph
Towards an Interoperable
Marine Knowledge Graph



Data Governance Act Regulation (EU) 2022/868 of the European Parliament

and of the Council of 30 May 2022, applicable since 24 September 2023)

Leveraging the potential of non-public data for the economy and society

Pillar 1:

Re-use of **closed data** held by **public sector bodies**

 European single access point to public sector's nonopen data



European register
for protected data
held by public
sector
(ERPD)

Pillar 2:

Framework for new data intermediaries in the Single Market: Data broker

EU register of recognised data intermediation services

Pillar 3:

Corporate and Individual data altruism for purposes of general interest

EU register of recognised data altruism organisations

Pillar 4:

Co-ordination and interoperability: **European Data Innovation Board**

- First meeting in December 2023
- Subgroup of the DGA for competent authorities (2 meetings)

Horizontal framework for the creation of a single market for data



Thank you very much for your attention

For further questions:

email: <u>CNECT-G1@ec.europa.eu</u>
Unit G1 of DG CONNECT

Websites with more information:

http://data.europa.eu/eli/dir/2019/1024/oj

http://data.europa.eu/eli/reg_impl/2023/138/oj

https://digital-strategy.ec.europa.eu/en/policies/open-data

https://digital-strategy.ec.europa.eu/en/factpages/open-data-and-high-value-datasets-step-step-access-guide