



Geospatial Data on data.europa.eu

28 April 2022

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data.europa.eu The official portal
for European data





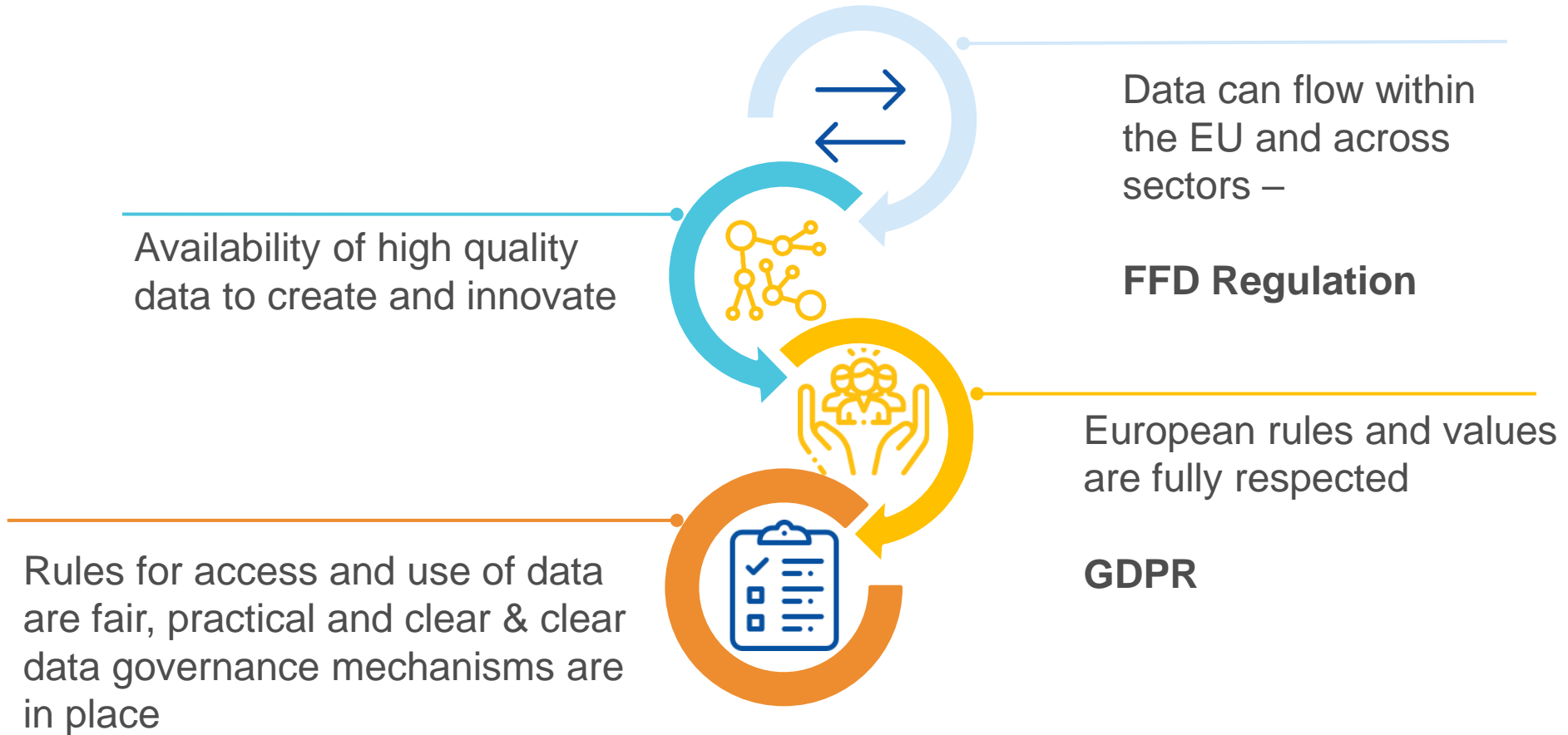
The EU's Data policy and Geospatial Data

Workshop on Geodata Discoverability
28 April 2022

Jiri PILAR, European Commission
DG for Communications Networks, Content and Technology, unit G1

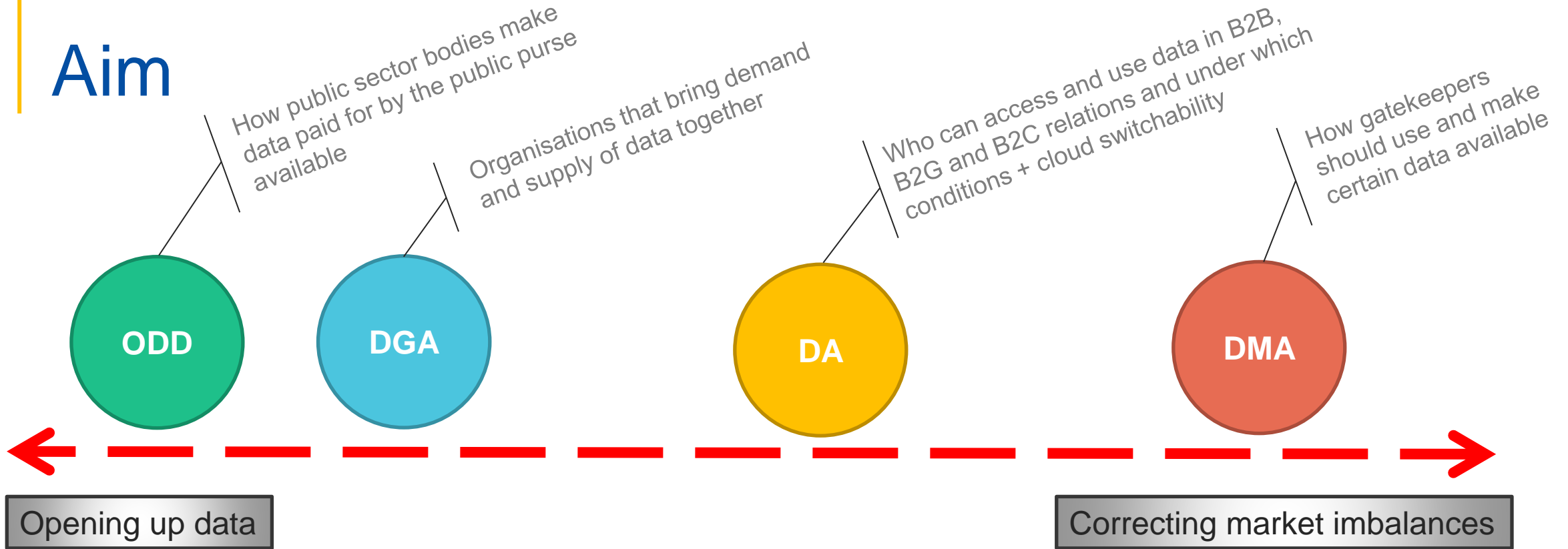
European Strategy for Data

A common European data space, a single market for data



Benefitting from the second wave of industrial data

Aim



- DA Data Act
- DMA Digital Markets Act
- DGA Data Governance Act
- ODD Open Data Directive
- FFoD Free Flow of Data Regulation
- GDPR General Data Protection Regulation

Legend

GDPR and FFoD ensure data protection and free flow of data across the board

For the processing of personal data, GDPR *always* applies

Data localisation requirements in the Union, introduces basis of CoC for cloud service providers

The Data Governance Act: some intervention areas will concern public sector data Re-use of categories of protected public data

- **Complementary to Open Data Directive** (last revised 2019):
Shall cover data that can only be **used under certain conditions**, because others have rights on that data (personal data, trade secrets, confidential business information, IP)
- Building on national access regimes: where re-use happens, it should do so in a harmonised manner, **subject to conditions**
- Leaves room for MS, but aims to **create at least one contact point (single information point)** for liaison between re-users and public sector bodies/competent bodies

EVIDENCE:

More than 75% of stakeholders considered that public authorities should make a broader range of sensitive data available for R&I purposes for the public interest

European Data Innovation Board

- **Advising and assisting** the Commission in developing a consistent practice for re-use, data intermediaries and data altruism entities;
- **Governance of technical standardisation** to enhance interoperability;
- **Facilitating the cooperation of the work of national competent authorities** for enhanced data use.

EVIDENCE:

91% of respondents consider that standardisation is necessary to improve interoperability and ultimately data re-use across sectors.
83,3% consider public authorities should play a role in standardisation (funding to open standards and for testing, prioritisation and coordination of standardisation).

Data Act: Scope of rights and obligations

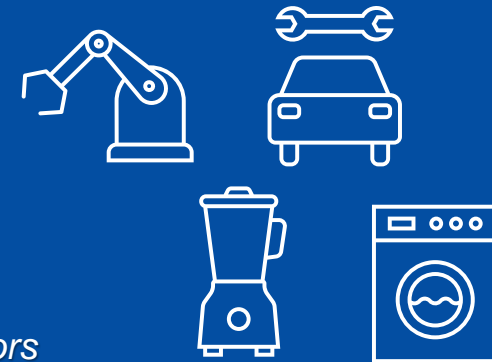
Better access to IoT data

Manufacturers of IoT objects need to allow access & can use the data

Users of IoT objects get right to access and port data

3rd parties can use the data to offer services (SMEs get special conditions)

Rules for IoT data also frame data sharing in other sectors



Tackle contractual unfairness



Companies are prohibited from unilaterally imposing unfair contractual clauses related to data sharing on SMEs

Make business available for the common good



Companies must make data available to public sector bodies in case of emergencies and other exceptional needs

Easier switching between services



Cloud service providers must ensure easy switching conditions for customers



Facilitate data flows through technical standards and interoperability

The European Commission may adopt technical specifications if necessary to ensure interoperability

Proportionate, limited and predictable business-to-government rules

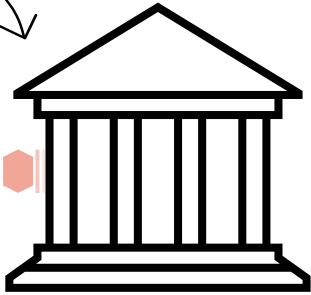
Data is requested based on an exceptional need:

- a) to respond to a public emergency (*free*)
- b) to prevent or to address the aftermath of a public emergency (*cost + margin*)
- c) for other exceptional needs (*cost + margin*)

Public sector body must demonstrate the exceptional need

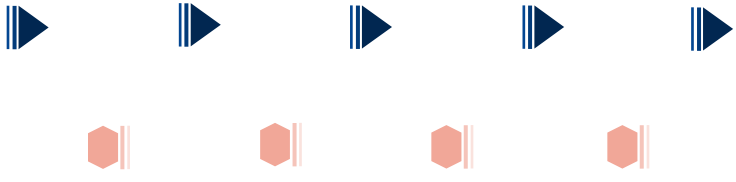
Private sector will benefit from streamlined procedures and from the "once-only principle"

Data is destroyed after use

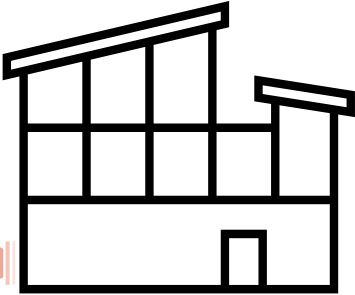


Public sector body

Public sector body requests data based on an exceptional need



Private sector body makes data available



Private sector

Public sector body or Union institution, agency or body

If request is valid, data must be made available

Existing and future [compliance, reporting] sectoral obligations (incl. for law enforcement purposes) continue to apply

Open Data directive (2019/1024 of 20/6/2019)

Implementing Act : list of high value datasets

Geospatial

*Earth observation
and environment*

Meteorological

Statistics

*Companies and
company ownership*

Mobility

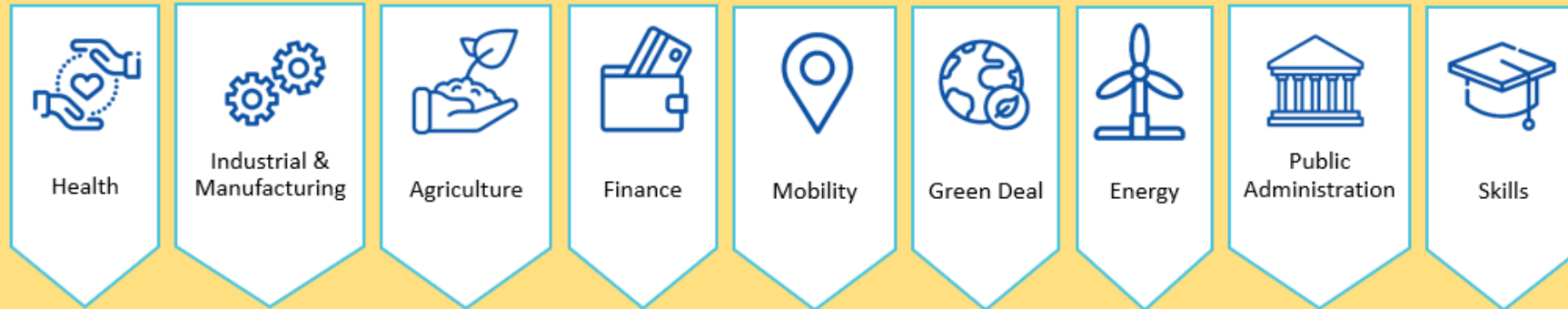
- Datasets listed in the implementing act to be made available:
 - for free
 - in machine-readable formats
 - via APIs and (where relevant) as bulk downloads
- [Impact Assessment](#) positive opinion
- Expected adoption: Q3/2022

Geospatial – preliminary draft Implementing Regulation

Datasets	Administrative units	Geographical Names	Addresses	Buildings	Cadastral parcels	Agricultural parcels and livestock
Granularity	All generalisation levels available up to the level of scale 1:5000. From municipalities to countries; sea-frontiers.	N/A	N/A	All generalisation levels available up to the level of scale 1:5000.	All generalisation levels available up to the level of scale 1:5000.	Equivalent to 1:5000 as referred to in Article 70(1) of the Regulation (EU) 1306/2013
Geographical coverage	National or partial (i.e. covering the entire country when combined).	National or partial (i.e. covering the entire country when combined).	National or partial (i.e. covering the entire country when combined).	National or partial (i.e. covering the entire country when combined).	National or partial (i.e. covering the entire country when combined).	National (if regional design is applied, the addition of regions should cover the entire country).
Key attributes	Unique identifier; Geometry; Latitude and longitude; Boundary; National identification code; identification code of the upper administrative level; official name; country code; name in multiple languages (only for countries with more than one official language).	Unique identifier; Geometry; Name; name in multiple languages (only for countries with more than one official language); category; latitude and longitude (as per INSPIRE specifications)	Unique identifier; Geometry; Latitude and longitude; address locator (e.g. house number); thoroughfare (street); name; administrative units (e.g. municipality; province, country; postal descriptor (e.g. post code); date of last update.	Unique identifier; Geometry/Footprint of the building; floors; type of use.	Unique identifier; Geometry (boundary) of cadastral parcels; type of parcel; parcel code; references to the administrative area to which the parcel belongs.	Reference parcels as defined by Commission Delegated Regulation (EU) 640/2014; Agricultural area ('land cover') as referred to in article 4(1)(e) of Regulation (EU) No 1307/2013; Agricultural parcels ('land use') as referred to in Article 67(4)(a) of Regulation (EU) 1306/2013 and Article 5(2) of Commission Delegated Regulation (EU) 640/2014; Geometry and land use of agricultural parcels as referred to in Article 14(d) of Commission Delegated Regulation (EU) 809/2014; crop groups associated as referred to in Article 17 of Commission Delegated Regulation (EU) 640/2014; Landscape features and trees as referred to in Article 9(1) of Commission delegated Regulation (EU) 640/2014; Type of animals and number of each type of animals (Article 21c of Commission Delegated Regulation (EU) 809/2014

High Value Datasets and Data Spaces

Common European data spaces



- Driven by stakeholders
- Rich pool of data of varying degree of openness
- Sectoral data governance (contracts, licenses, access rights, usage rights)
- Technical tools for data pooling and sharing

Data Spaces Support Centre

- Coordinating the development of data spaces
- Assuring common standards and interoperability

Technical infrastructure for data spaces



Edge & cloud Services

Smart Middleware solutions

Marketplace

High-Performance Computing

AI on demand platform

AI Testing and Experimentation Facilities

Digital Europe Programme call 2 is pending: Public Sector Open Data for AI

- Grants will support increasing semantic, technical and legal interoperability and data portability of the free high-value datasets;
- Targeted stakeholders: Public Administrations addressed by the Open Data Directive as data providers;
- Simple grants: 50% funding rate;
- Indicative budget: EUR 20 million in total, for 24-36 months. Between EUR 4 million and EUR 6 million per project.
- Deadline: 17 May 2022 17:00



**Thank you very much for
your attention**

For further questions:

email: CNECT-G1@ec.europa.eu

Unit G1 of DG CONNECT

**Websites with more
information:**

<https://eur-lex.europa.eu/legal-content/EN/LSU/?uri=celex:32019L1024>

https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en

<https://ec.europa.eu/digital-single-market/en/open-data>

data.europa.eu

- The official portal for data in Europe
 - “European Union Open Data Portal” and “European Data Portal” were combined in April 2021
- Single access point to open data from Europe
- Strategic objective is to improve accessibility of open data



data.europa.eu
@EU_opendata

...

Today is our birthday! 🎂👏 One year ago, data.europa.eu went live giving access to open data from portals across Europe. Discover us and read more about us bit.ly/3rJ6dEm



3:00 nachm. · 21. Apr. 2022 · Emplifi

https://twitter.com/EU_opendata/status/1517126010482790400

data.europa.eu - data sharing

- Search across countries and thematic domains, multi-lingual
- Access to metadata
 - from 173 catalogues
 - from 36 countries
 - Descriptions of more than 1 Mio. datasets

data.europa.eu



The official portal for European data

173 Catalogues 36 Countries 1 438 497 Datasets

Trending datasets ?

- Consolidated list of persons, groups and entities subject to EU financial sanctions
- Taxpayer Identification Number (TIN)
- The European Commission's Oil Bulletin
- Number of COVID-19 people killed by age
- CORDIS - EU research projects under Horizon 2020 (2014-2020)

Search datasets

Search datasets

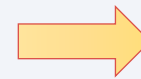


> DATA CATALOGUES

> ALL DATASETS

> EU INSTITUTIONS DATAS

data.europa.eu
The official portal for European data



Harvesting

- Metadata is harvested from
 - Open Data Catalogues
 - Geo-catalogues
- Catalogue providers
 - EU Institutions
 - European Countries
 - International institutions

The screenshot shows the 'data.europa.eu' website interface. At the top, there is a navigation bar with the logo, a language selector set to 'English (en)', a search bar for datasets, and a search icon. Below the navigation bar, there are tabs for 'Data', 'Studies', 'data.europa academy', 'News', and 'Contact'. The main content area is titled 'Catalogues' and features a search bar for catalogues, tabs for 'Datasets', 'Catalogues', and 'Editorial Content', and buttons for 'Last Modified', 'Relevance', and 'More'. A table on the left shows the 'Provenance' of catalogues, and the main content area displays a list of catalogues, including 'HELCOM Metadata catalogue' and 'Latvian Geospatial Metadata Catalogue'.

Filter setting	
Operator	<input checked="" type="radio"/> AND <input type="radio"/> OR

Provenance	
EU institutions	96
Poland	6
Czechia	5
Spain	5
Austria	3
Germany	3
France	3
Croatia	3
International organisations	3
Latvia	3

173 catalogues found

- HELCOM Metadata catalogue**
HELCOM Metadata catalogue contains descriptions of datasets collected under HELCOM, Baltic Marine En...
- Latvian Geospatial Metadata Catalogue**
Geospatial Information Latvia

Harvesting of Geo-Catalogues

- Harvesting of metadata via CSW endpoints
- dataset and service metadata (ISO 19139)
- Mapping ISO 19139 to GeoDCAT-AP

- After harvesting:
 - Translation of title and description (eTranslation)



The screenshot shows the data.europa.eu website interface. At the top right, there is a language selector for 'English (en)'. The main navigation bar includes a home icon, 'Data', 'Studies', and 'data.europa academy'. Below the navigation bar, there are links for 'Dataset', 'Categories', 'Similar Datasets', 'Quality', 'Feedback', and 'Sh'. The main content area displays the title 'Cycling routes Free State of Saxony' with a German flag icon and 'GDI-DE' next to it. An 'Updated:' label is visible on the right. A grey information box at the bottom contains the text: 'The title and description of this dataset are machine translated. Original language: de. Click here to see the dataset in the original language'.

Display in data.europa.eu

- Description of the data source
- Preview in map
 - Web Map Service (WMS)
 - GeoJSON

The screenshot displays the data.europa.eu website interface. At the top, the URL is `data.europa.eu/data/data/`. The page title is "data.europa.eu" with the subtitle "The official portal for European data" and "WMS". The main content area shows a map of a region with various cycling routes overlaid. A legend overlay is visible on the map, listing several categories with checkboxes:

- Sonstige Radverkehrsflächen
- To extent**
 - Zustand unbekannt
 - Zustand gut
 - Zustand mittel
 - Zustand schlecht
- Radwege abseits von Straßen
- Radwege an Straßen
- Touristische Infrastruktur
- Sonstige Strecken
- Regionale Hauptradrouten
- Radfernwege

Buttons for "Legend" and "Feature Info" are located below the legend. At the bottom of the page, there are buttons for "Options", "Download", and "Linked Data". A red box highlights the "Options" button, and a yellow arrow points to it from the bottom left. Below the "Options" button, there is a link "Open Geo-Visualization" with a globe icon.

Discoverability by Search Engines

- schema.org JSON-LD included in html
- for indexing by mainstream search engines

```
<script data-vue-meta="1" type="application/ld+json">
  {
    "@context": "http://schema.org",
    "@type": "Dataset",
    "name": "Radwege Freistaat Sachsen",
    "description": "Dieser Dienst stellt ausgewählte Daten aus der Radwegedatenbank des Freistaates Sachsen mit dem touristischen Netz (SachsenNetzRad) sowie den straßenbegleitenden Radwegen zur Verfügung. Der Dienst erhalten Sie im GeoMIS.Sachsen oder über die Metadatenanzeige, welche über folgende URL direkt aufrufbar ist: https://geoportal.sachsen.de/cps/metadaten_portal.html?id=af6da6a8-7fbb-4dab-9312-495b4e494d77.",
    "license": null,
    "keywords": ["Radverkehr", "Radwegedatenbank", "Radtourismus", "touristische Radwege", "SN", "Radverkehrsanlagen", "Radverkehrsplanung", "Freistaat Sachsen", "Straßenbegleitende Radwege"],
    "catalog": {
      "@type": "DataCatalog",
      "name": "GDI-DE",
      "description": "Bundesamt für Kartographie und Geodäsie",
      "type": "Agent",
      "email": "mailto:support@geoportal.de",
      "homepage": "http://www.bkg.bund.de",
      "inLanguage": {
        "resource": "http://publications.europa.eu/resource/authority/language/DEU",
        "id": "de",
        "label": "Deutsch",
        "distribution": []
      }
    },
    [{"@type": "DataDownload", "name": "WMS", "encodingFormat": "WMS", "license": null, "contentUrl": "https://geodienste.sachsen.de/wms_list_radwege", "contactPoint": [{"@type": "ContactPoint", "name": "GDI-Servicezentrum", "email": "mailto:servicedesk@geosn.sachsen.de", "address": "01099, Deutschland"}], "identifier": []} == $0
  }
</script>
```

Google Dataset Search

The screenshot shows the Google Dataset Search interface. The search query is "Radwege sachsen". The results section shows two datasets found. The first dataset is "Radwege Freistaat Sachsen" from data.europa.eu, updated on Jan 29, 2014. The second dataset is "Trasy rowerowe Wolny kraj Saksonii" from data.europa.eu, updated on Feb 13, 2022. The main result for "Radwege Freistaat Sachsen" is expanded, showing a "wms" icon and a description: "Dieser Dienst stellt ausgewählte Daten aus der Radwegedatenbank des Freistaates Sachsen mit dem touristischen Netz (SachsenNetzRad) sowie den straßenbegleitenden Radwegen zur Verfügung. Der Dienst erhalten Sie im GeoMIS.Sachsen oder über die Metadatenanzeige, welche über folgende URL direkt aufrufbar ist: https://geoportal.sachsen.de/cps/metadaten_portal.html?id=af6da6a8-7fbb-4dab-9312-495b4e494d77." There are two buttons: "Mehr unter data.europa.eu" and "Mehr unter www.europeandataportal.eu".

Google

The screenshot shows a standard Google search result for the query "Radwege Freistaat Sachsen" wms. The search bar shows the query and the search button. Below the search bar, there are navigation options: "Alle", "Bilder", "Maps", "News", "Shopping", and "Suchfilter". The results section shows "Ungefähr 4 Ergebnisse (0,37 Sekunden)". The first result is "Radwege Freistaat Sachsen" from "WMS Radwege Freistaat Sachsen". The description says: "Dieser Dienst stellt ausgewählte Daten aus der Radwegedatenbank des Freistaates Sachsen mit dem touristischen Netz (SachsenNetzRad) sowie den straßenbegleitenden Radwegen zur Verfügung. Der Dienst erhalten Sie im GeoMIS.Sachsen oder über die Metadatenanzeige, welche über folgende URL direkt aufrufbar ist: https://geoportal.sachsen.de/cps/metadaten_portal.html?id=af6da6a8-7fbb-4dab-9312-495b4e494d77." The second result is "Metadaten Portal - Geoportal Sachsen" from "Radwege Freistaat Sachsen [zur Karte]". The description says: "Kurztitel. Vorschau bild. preview-image. Kurzbeschreibung. Dieser Dienst stellt ausgewählte Daten aus der Radwegedatenbank des Freistaates Sachsen mit dem touristischen Netz (SachsenNetzRad) sowie den straßenbegleitenden Radwegen zur Verfügung. Der Dienst erhalten Sie im GeoMIS.Sachsen oder über die Metadatenanzeige, welche über folgende URL direkt aufrufbar ist: https://geoportal.sachsen.de/cps/metadaten_portal.html?id=af6da6a8-7fbb-4dab-9312-495b4e494d77." There is a yellow arrow pointing to the first result.

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