The European Data Portal:
Opening up Europe's public data

data.europa.eu/europeandataportal

What we do

More and more volumes of data are published every day, every hour, every minute, every second. In every domain. Across every geography, small or big. The amount of data across the world is increasing exponentially. A substantial amount of this data is collected by governments.

The European Data Portal harvests the metadata (data about the data) of Public Sector Information available on public data and geospatial portals across European countries. Portals can be national, regional, local or domain specific. They cover the EU Member States, EFTA countries and countries involved in the EU's neighbourhood policy.

Open (Government) Data refers to the information collected, produced or paid for by the public bodies (also referred to as Public Sector Information) and made freely available for re-use for any purpose. Associated data licences specify the terms of use.

> "For the period 2016-2020, the market size for Open Data is estimated at 325 bn EUR"

> "A third of European countries are leading the way with solid policies, licensing norms, good portal traffic and many local initiatives and events"

Public Sector Information is information held by the public sector. The EU Directive on the re-use of Public Sector Information provides a common legal framework for a European market for government-held data. It is built around the key pillars of the internal market: free flow of data, transparency and fair competition. It is important to note that not all of the Public Sector Information is Open Data.

The launch of the European Data Portal is one of the key steps the European Commis-sion is taking to support the access to public data. Beyond making data across Europe accessible, the Portal addresses the whole data value chain: from data publishing to data re-use. The strategic objective of the European Data Portal project is to address the Accessibility and the Value of Open Data.

Accessibility deals with questions like how to access information about data and where to find it? How to make it available in the first place? And in what domains, or across domains and across countries? Also in what language should the data be available?

Value focuses on purpose, re-use and economic gains of Open Data. Is there a societal gain? Or perhaps a demo-cratic gain? How many new jobs are created? What is the critical mass? Value is there. The question is how big?

The Portal

The first official version of the European Data Portal is available since February 2016. Within the Portal, sections are dedicated to:

Searching data sets:
Categories have been established to structure the metadata harvested.

Providing Data:
Insights into understanding Open Data from the perspective of a data provider.

Using Data:
How Open Data is being used, as well as the economic benefits of Open Data.

Training and Library:
eLearning modules about Open Data as well as training guides and a knowledge base.
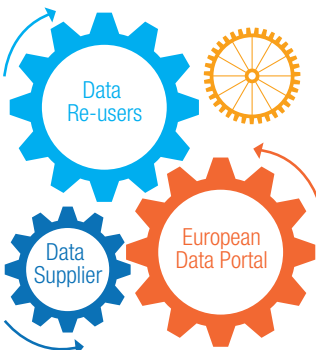
Searching data sets

The first version of the European Data Portal has over half a million metadata sets. To browse these data sets easily, categories have been established to structure the metadata.

The categorisation is based on the Data Catalogue vocabulary application profile (DCAT-AP) for describing public sector datasets in Europe. The EuroVoc multilingual multidisciplinary thesaurus, covering the activities of the European Union, is used to ensure an accurate multilingual mapping.

Providing data

The initial content of the European Data Portal has been collected by harvesting national public data and geospatial portals. Progressively, additional local and domain specific portals will be harvested.

> " The European Data Portal supports organisations in improving their publishing practices "

There are two main approaches to harvesting additional metadata. First, owners of a data portal can fill in a request to be harvested by the European Data Portal. If the data holder meets the requirements (content and technical), the metadata can be harvested and placed on the Portal.

Secondly, data holders that do not yet share data can start publishing data. To support these organisations on their path to 'open by default', the Open Data Goldbook for Data Managers was created.

The Goldbook is a summary of all what is needed to successfully implement an Open Data initiative within an organisation. The Goldbook covers basic organisational, technical and day-to-day challenges related to Open Data; from terminology to processes, implementation to execution.

Using data

The European Data Portal will provide access to data

of many European countries. However, this is only a first step. The key is to maximise the re-use. There are four important steps before Open Data can be re-used.

The use of Open Data can add value to people's activities in various ways. Therefore, the first step is to define the purpose to which someone wants to use Open Data.

When the purpose of the use of Open Data is defined and the data set that fits the users' needs is found, the openness of the data needs to be checked. Users should make sure a licence is available, allowing the re-use of the data in the intended way, e.g. commercial re-use is allowed when developing a commercial application.

After deciding that a specific data set is exactly what is needed, the next step is to select the right file format. Most data sets can be downloaded in different file formats. Based on ones' skills and needs, the most appropriate file type can be chosen.

A final step is to check the quality of the data. The data might need to be curated to avoid duplicates or to see if information is missing. It is also important to look at when the data is last updated.

By following these four steps, one can start using data to create value.

Define your purpose

Check the licence

Choose file format

Control the quality

Training and Library

Not everyone will be equally experienced in using Open Data. Some will not know what Open Data is. Others will already use Open Data on a daily basis. To bridge this gap, the European Data Portal hosts a Training and Library section. In the learning section, thirteen eLearning modules are available. In the Library, a growing archive of Open Data material, news and other interesting readings is stored and made easily available.

The Training section is an interactive online learning environment. Training has proven a vital step in providing the necessary support to increase the release of data sets.

Our eLearning programme has been designed to enable everyone to discover what Open Data is and how

it is changing the lives of everyone on our planet. The training is designed to be as practical as possible, so that trainees not only gain knowledge about the most up-to-date techniques and best practices but also learn how to best apply that knowledge in their daily activities.

The offered eLearning modules differ in depth of content. The first modules focus on general questions, such as 'what is data?' and 'how does Open Data lead to change?' Further modules deal with more advanced technical details like data networks.

The learning section is divided into the following subjects:

• What is Open Data?
• Unlocking value from Open Data
• Open Data. Agent of Change
• Why do we need to license?
• Assessing Open Data quality
• Measuring success
• Sustainability
• Open Data platforms
• Open Data formats
• How usable is my data?
• Cleaning Open Data
• Finding hidden data
• Linking up the web of data

The Library offers a central access point to material on and around Open Data. Material from many European funded projects is made available in the Library. Also, all Open Data news items posted on the Portal are archived here. This section of the Portal will grow over time, as more and more material is added.

More than a Portal

A substantial part of the European Data Portal project is the creation of the Portal. But the Portal is more than just a repository for metadata.

Beyond making data across Europe accessible, the Portal addresses the whole data value chain: from data publishing to data re-use.

A series of support activities are designed to encourage the countries in publishing more data. In addition, the re-use of public data resources is encouraged, as this will drive economic benefits and innovation.

Determining the state of play in Europe

The European Commission wants to support the publishing, the access and the re-use of public data in Europe. However, the way Open Data is published

and re-used differs across Europe.

Understanding these differences will help the European Commission to decide where to provide common support activities, and where to offer further specialised training and coaching assistance.

Therefore, part of the European Data Portal project is about determining the state of play of Open Data in Europe. To do so, a landscaping is carried out to obtain an overview of the maturity of Open Data for each of the EU28 Member States and the EFTA countries.

The 2015 landscaping showed that on average, the European countries are still mid-way into their journey towards achieving full Open Data Maturity. Portals can also be improved as, on average, EU28+ countries score 55% on Portal maturity.

The full results can be found in Open Data Maturity in Europe 2015: Insights into the current European state of play.

The Open Data Maturity study is the first assessment in a series of three annual studies. Follow-up studies are planned for March 2016 and 2017.

Creating economic value

The use of Open Data yields many benefits. Performance can be enhanced by Open Data and contribute to improving the efficiency of public services. Greater efficiency in processes and delivery of public services can be achieved thanks to cross-sector sharing of data, which can for example reveal and avoid unnecessary spending.

Social welfare can be improved as society benefits from information that is more transparent and accessible. Open Data enhances collaboration, participation and social innovation. Companies can equally benefit from Open Data and incorporate it into their processes, products and services.

The main benefit is economic value. The economy can benefit from easier access to information, content and knowledge, in turn contributing to the development of innovative services and the creation of new business models.

To quantify these benefits, a macro-economic study was conducted as part of the European Data Portal project. This study determines the economic value in terms of market size, number of jobs created, public sector cost savings, and efficiency gains.

For 2016, the direct market size of Open Data is expected to be 55.3 bn EUR for the EU 28+. Between 2016 and 2020, the market size is expected to increase with another 36.9%, to a value of 75.7 bn EUR in 2020. The number of jobs is forecasted to grow at an average rate of 7.3%, totalling just under 100,000 jobs directly related to Open Data in 2020.

The full findings are discussed in Creating value through Open Data: Study on the impact of Re-use of Public Data Resources. The report can be found on the Portal.

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For more information, please visit the European Data Portal or contact us via email.

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The European Data Portal initial content has been collected by harvesting national public data and geospatial portals. Progressively, the portal will harvest additional metadata collected from regional, local and domain specific portals. Do you want your portal or website to be harvested by the European Data Portal? Read the requirements on the website.

Share your story about how you make use of Open Data. Are you an entrepreneur? A non-governmental organisation? A civil servant responsible for publishing data? A local authority? Tell us your story! The purpose of the collection of use cases is to assemble interesting European stories about the benefits and efficiency gains that result from the use of Open Data. Contact us via the website and fill out the form.

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