

# Experiences of working with Open Data

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1. Start with what you have, improve the quality of datasets over time
2. Don't do this alone
  - Interinstitutional exchange of experiences and resources
  - Involve the public and potential beneficiaries of the datasets
  - Multilingual documentation and best practices are already available
3. The cost of opening up the data is usually not high, reusable solutions exist
4. Keep providing series of data, the end users will rely on it
  - Establish a frequency for each dataset and stick to it
5. The power of Open Data can be found in combining datasets from multiple domains
  - Use a national Open Data portal to list and categorise the datasets
6. Reward good results rather than punish lack of results

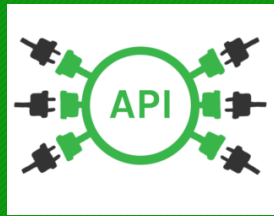
- The value of datasets not described by metadata is heavily decreased
- Several metadata standards are available, use:
  - Generic one to describe each resource (e.g. Dublin Core elements set) *and*
  - Specific standards for the specific domain
- Use multilingual glossaries to tag data
  - While the tagging is done in a national language, the datasets become widely discoverable with no extra-effort
- Classification of data from multiple perspectives
  - Using multilingual glossaries makes the tagging and finding the data easier
  - Extra-tags from the national strategy or international strategies (e.g. SDGs, Aichi Targets)
- Standardised classification allows data harmonisation and comparison
- Provide the codelists and vocabularies separately from the data

# Formats - rule of thumbs



Machine-readable

Data format that can be automatically read and processed by a computer  
Use **open formats**



Data needs to be manually extracted and processed



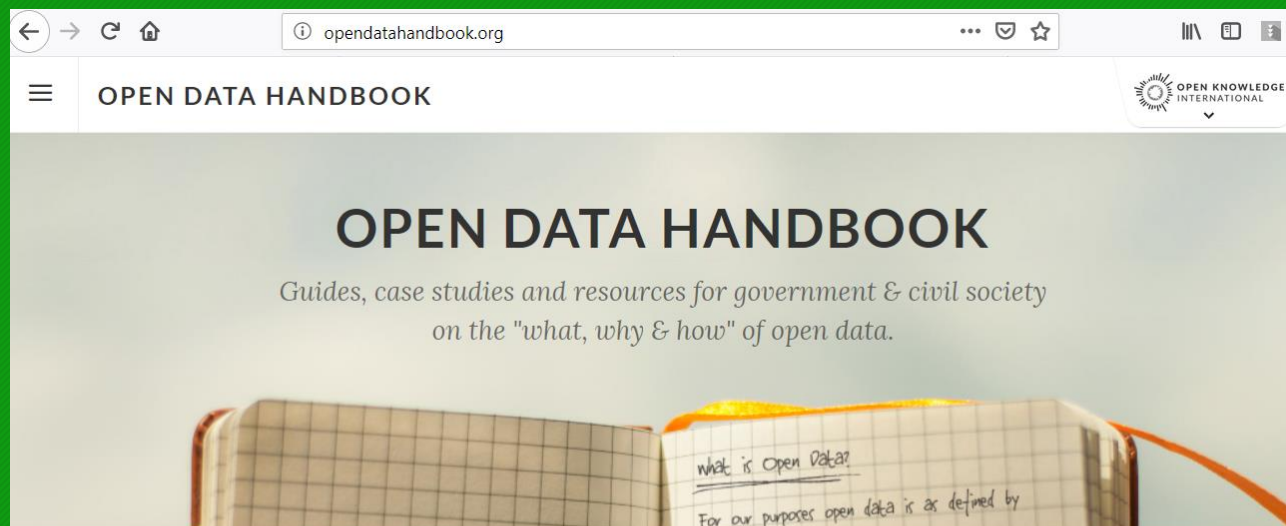
Don't make it necessary to **buy a license** to read the data

Scanned PDFs



- Open by default non-sensitive data
- Don't get stuck in data restrictions
  - Think in terms of what's reasonable and change legislation to follow
  - When a dataset contains sensitive data, try to see if you can anonymise or cut that data, rather than holding back the entire dataset
- Look into licenses to facilitate reuse <http://opendefinition.org/licenses/>, <https://opendatacommons.org/guide/>

- <http://opendatahandbook.org>



## Open Data Guide

This guide discusses the legal, social and technical aspects of open data. It can be used by anyone but is especially designed for those seeking to open up data. It discusses why to go open, what open is, and the how to 'open' data.

Start Reading

## Value Stories

Use cases, stories and case studies highlighting the social and economic value, the impact and the varied applications of open data from cities and countries across the globe.

Value Stories

## Resource Library

A curated collection of open data resources, including articles, longer publications, how to guides, presentations and videos, produced by the global open data community.

Open Data Resources

## Руководство по открытым данным

**Languages:** [de](#) [el](#) [en](#) [es](#) [fr](#) [he](#) [hr](#) [id](#) [is](#) [it](#) [ja](#) [ko](#) [lt](#) [lv](#) [my](#) [ne](#) [nl\\_BE](#) [pt\\_BR](#) [ro](#) [ru](#) [zh\\_CN](#) [zh\\_TW](#)

В настоящем руководстве обсуждают правовые, общественные и технические особенности открытых данных. Пользоваться им может каждый, но главным образом оно рассчитано на тех, кто хочет **открыть** данные. Оно отвечает на вопросы **зачем, как и что** — зачем и как «открывать» данные, и что значит открытость.

Вы можете начать со [Введения](#). Справа есть панель содержания, с её помощью можно попасть в нужное место.

Мы будем рады любым замечаниям и в будущем учтём ваши пожелания. Мы также ждём дополнений и предложений дополнительных разделов и областей изучения.

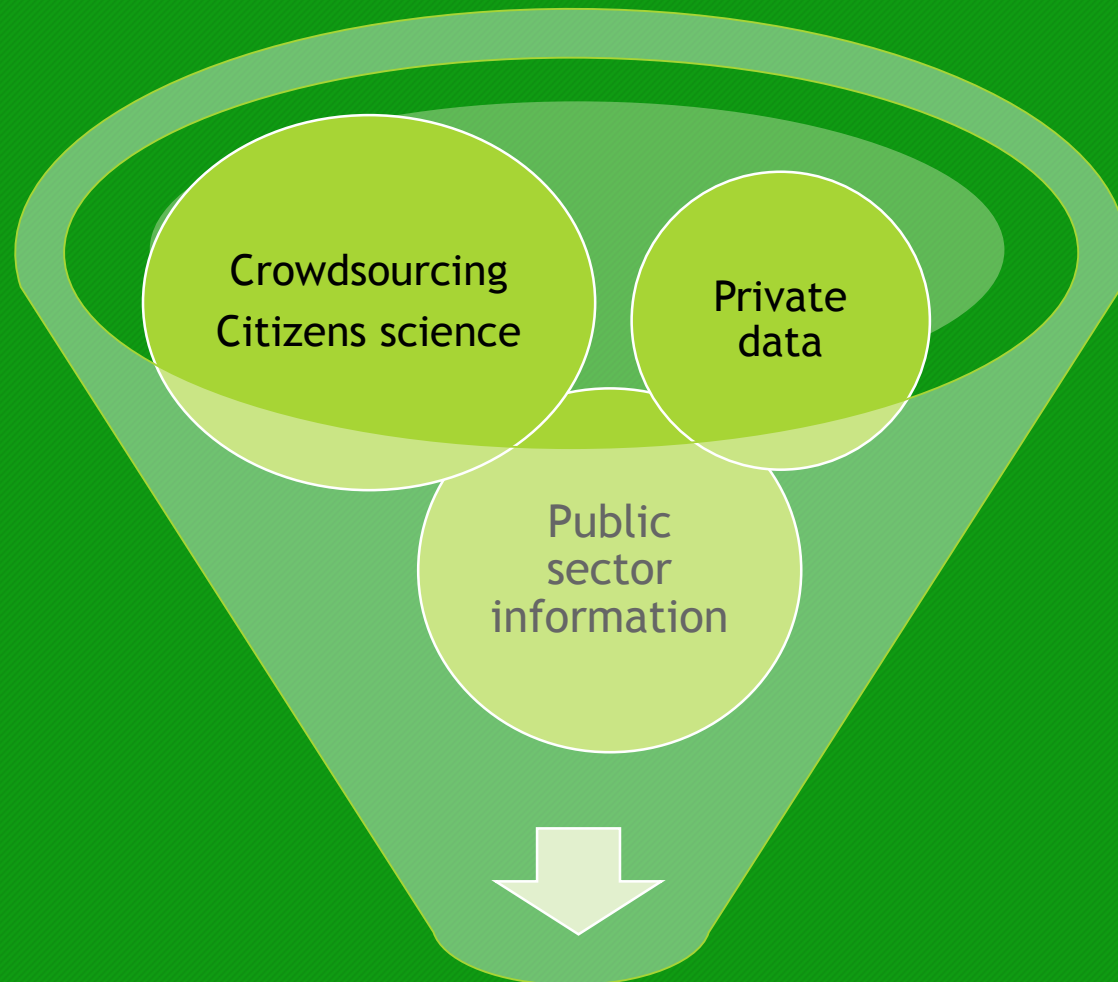
## Оглавление

- [Введение](#)
- [Почему Открытые данные?](#)
- [Что такое Открытые данные?](#)
- [Как открывать данные](#)
- [Итак, я открыл данные, что дальше?](#)
- [Глоссарий](#)
- [Приложения](#)

# Proving data and information upon request vs publishing it openly

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- Don't assume people know what to ask for
- The public might be reluctant to ask public institutions
- Asking for data is time consuming for both sides
- It is more costly for an institution **on a long run** to extract and provide customised data than to provide all non-sensitive data openly, on regular basis
- Involve citizens through research projects, involve specialised NGOs, encourage citizens science projects



Open data at national level

- Central place to find open data from all domains in a country
- Different **types of data sources** can go into an open data portal
- Public sector information is just one
- Reuse existing open source software and make publish **LinkedData**



Good practice examples

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# Digital Agenda Scoreboard

<https://digital-agenda-data.eu>

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Based on open statistical data about the European information society - meaningful interactive visualizations

Analyse one indicator and compare countries

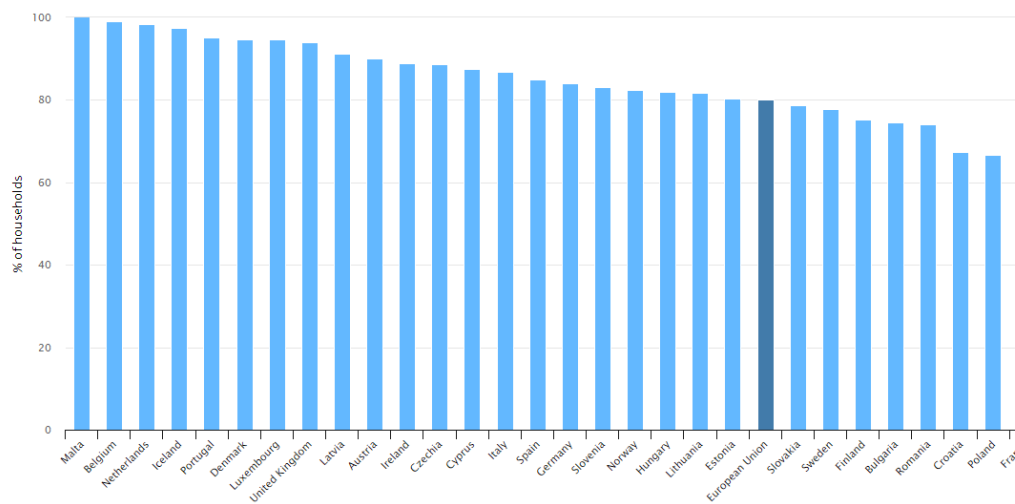
Indicator group: Broadband take-up and coverage  
Indicator: NGA broadband coverage/availability  
Breakdown: Total  
Unit of measure: % of households

Select the countries: All selected  
Add All Remove All

Play animation or select a time period: [Previous] [Next]

NGA broadband coverage/availability (as a % of households)

Year: 2017



European Commission, Digital

Data is offered for download, code lists downloadable separately, visualizations can be exported and reused

Print chart

Print page

Download image

Export CSV

Export XLS

Embedded URL

View comments

Submit comment

## Definition and scopes:

This bar-chart allows you to select one indicator, possibly one specific breakdown, and see which countries are leading the league. You can also check if the ranking of countries has changed over the last few years using the time animation bar. Countries are always ordered according to their score. You can also select or de-select countries in order to visualise only those you are interested in.

**Indicator:** NGA broadband coverage/availability (as a % of households)

**Definition:** Coverage is a supply indicator defined as the percentage of Households living in areas served by NGA. Next Generation Access includes the following technologies: FTTH, FTTB, Cable Docsis 3.0, VDSL and other superfast broadband (at least 30 Mbps download)

**Source:** Broadband coverage in Europe, studies for the EC by Point Topic (2011-2012 figures, SMART 2011/0027 and 2012/0035) and IHS and Valdani, Vicari & Associati (2013 figures, SMART 2013/0054) [More information]

**Breakdown:** Total

**Definition:** Scope: Total number of households

**Unit of measure:** Percentage of households

Consult the list of available indicators, their definition and sources.

Share this page



Data collected from Eurostat's Data portal

# Biodiversity Information System

<https://biodiversity.europa.eu>

- DG Environment thematic portal on biodiversity
- Aside from locally produced data, harvests and collects data from the **EEA's semantic database (LinkedData)**
  - Displays indicators and graphs by topic (e.g. Green Infrastructure, Ecosystem services)
- Locally-produced content is harvested by the EEA semantic database

The screenshot shows the Biodiversity Information System (BISE) website. At the top, there is a navigation bar with the BISE logo and the text "Biodiversity Information System for Europe". Below the navigation bar, there are tabs for "Topics", "Policy", "Data", "Knowledge", "Countries", and "Networks". The main content area features a large image of a mountain landscape. Below the image, there is a section titled "BISE Highlights 1/3" with a sub-section "Towards the 2020 biodiversity targets". This section includes a text box about halting biodiversity loss and a "Progress against targets" graph. To the right of the graph, there is a yellow box with the text "Our life insurance our Natural capital" and "BISE is contributing to the improvement of the knowledge and evidence base for the EU's environmental policy." Below the graph, there is a section titled "Mid-term review of the EU biodiversity strategy to 2020" with an "INTERACTIVE PRESENTATION" button. To the right of this section, there is a blue box with a calendar icon and the text "667 DAYS to meet the EU Biodiversity Strategy Targets". Below the calendar box, there is a green box with the text "BISE CATALOGUE" and "Aggregated data from EUNIS, Green Infrastructure Library, BISE and MAES." At the bottom of the page, there is a section titled "Other European information systems" with links to WISE, CLIMATE-ADAPT, and other systems. The footer contains the text "The Biodiversity Information System for Europe (BISE) is a single entry point for data and information on biodiversity supporting the implementation of the EU strategy and the Aichi targets in Europe." and logos for the European Union, EEA, and the United Nations Decade on Biodiversity.

# Climate-ADAPT portal

<https://climate-adapt.eea.europa.eu>

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- DG CLIMA's platform dealing with Climate Adaptation issues
- **Faceted search** from multiple sources

**Climate-ADAPT search**

Search term:

Current filters: [Reset filters](#)

Type of Data (Match: any)

- Indicators

Results 1 - 30 of 40

Display as:

Order:

[Download TSV](#) | [Download CSV](#)

Number of countries that have adopted a climate change adaptation strategy/plan

2018 Indicators

The Seventh Environment Action Programme (7th EAP) calls for decisive progress to be made in adapting to the impact of climate change. Climate change has had and will continue to have many impacts on the environment, human health and the economy. European society must adapt in order to address the adverse impacts of climate change, and to complement efforts to mitigate it. Such mitigation and adaptation actions will increase the resilience of the EU's economy and society, while stimulating innovation and protecting the EU's natural resources. To date, 25 EU Member States have adopted a national adaptation strategy (NAS) and 15 have developed a national adaptation plan (NAP). There has been a...

Type of Data

Count	Value	Match an
40	Adaptation options	<input type="checkbox"/>
90	Case studies	<input type="checkbox"/>
153	Guidance	<input type="checkbox"/>
40	Indicators	<input checked="" type="checkbox"/>
169	Information portals	<input type="checkbox"/>
109	Organisations	<input type="checkbox"/>
910	Publications and reports	<input type="checkbox"/>
560	Research and knowledge	<input type="checkbox"/>
81	Tools	<input type="checkbox"/>
4	Videos	<input type="checkbox"/>

Adaptation Sectors <

Climate Impacts <

Transnational regions <

Adaptation Elements <

Climate ADAPT SHARING ADAPTATION INFORMATION ACROSS EUROPE

Search all site... | Help - My Climate-ADAPT -

ABOUT - EU POLICY - COUNTRIES, TRANSNATIONAL REGIONS, CITIES - KNOWLEDGE - NETWORKS

**About Climate Change Adaptation in Europe**

The European Climate Adaptation Platform Climate-ADAPT is a partnership between the European Commission and the European Environment Agency. Climate-ADAPT aims to support Europe in adapting to climate change, helping users to access and share data and information on: Expected climate ch...

Image credits: Carmelo Fulco, Environment & Me / EEA, 2017

Getting Started | Search the Database | EU Sector Policies | Country Profiles | Case Studies | Adaptation Support Tool

**Are you new to Climate-ADAPT?**

- I want to develop a **LOCAL** adaptation strategy or action plan.
- I want to develop a **NATIONAL** or **REGIONAL** adaptation strategy or action plan.
- I want to develop a **TRANSNATIONAL** adaptation strategy or action plan.

**Share your information**

Find out how to contribute different types of information to Climate-ADAPT

**Covenant of Mayors Initiative on Climate Change Adaptation** – was set up by the European Commission to engage cities in taking action to adapt to climate change. It was launched in 2014 as a parallel adaptation initiative to the Covenant of Mayors, which focused on mitigation...

**News** | **Events**

**Newsletter** | **RSS feed**

Cities and municipalities invited to apply for the German Susta... 26 Feb 2019

More action needed to protect Europe's most vulnerable citizens... 04 Feb 2019

Since 2017 dozens of local climate action projects implemented ... 25 Jan 2019

Check the European Climate Adaptation Newsletter and register to receive it in your e-mail: [Sign me up!](#)

HOME CONTACT SITE MAP PRIVACY AND LEGAL NOTICE

The European Climate Adaptation Platform Climate-ADAPT is a partnership between the European Commission and the European Environment Agency.

Other European Information Systems:

European Commission | EEA | WISE | Climate Change Service | DRMKC

- Locally-produced content is harvested by the EEA semantic database

# European Environmental Agency Search

<http://search.apps.eea.europa.eu>

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- Searches in data created thanks to the EU's open data approach and the contribution of many organisations part of EEA's network
- All datasets are harvested from their sources and stored in a **semantic database** (LinkedData)
- Because the data was described by metadata, possible to filter by:
  - Topics
  - Countries /Regions/Places/Cities/Seas...
  - Content types
  - Organisations involved
  - Websites
  - Publishing year
  - Time coverage
  - Languages
  - Format
  - Reading time (minutes)

The screenshot displays the EEA search application interface. At the top, there is a search bar and navigation links for Subscriptions, Contact us, and EEA homepage in your language. Below the search bar, the EEA logo and a search input field are visible. The main content area is titled "Global search and catalogue" and features a search term input field. The interface is divided into several sections: "Instantly search over 20 years of environmental knowledge by EEA" with 67697 Documents and 34 Languages; "Organisations" with 716 entries; "Content types" with 31 entries; "Time coverage" from 1500 to 2109; and "Countries" with 99 entries. A "Recently added" section lists three items, each with a date of 2019-03-01T12:48:37Z. A "See all results" link is located at the bottom right. The footer contains the text: "The content of this catalogue has been created thanks to the EU's open data approach and the contribution of many organisations part of EEA's network (Eionet). Application data last refreshed 05 March 2019 04:17 AM. Version info eea/cms/es/bootsrapv2.0.20 and tag version v2.0.20 on elastic6-app-global-search-esapp-1."

# InforMEA

<https://www.informe.org>

- UNEP's platform that brings together legal data from different Multilateral Environmental Agreements
- Harvests data on Decisions, Resolutions, Documents, events, etc. from the MEAs via **APIs**
- Shows data classified by topic, Goals and Principles (SDGs, Aichi Targets, GEGs), region, period, type, country, etc.
- Faceted search with the same filters

The screenshot displays the InforMEA website interface. At the top, there is a navigation bar with the InforMEA logo and menu items: TREATIES, PARTIES, LAW AND CASES, EVENTS, GOALS, MORE, FREE ONLINE COURSES, BROWSE ALL, and EN. Below the navigation bar is a search bar with the text "Access information on Multilateral Environmental Agreements" and a search icon. The main content area features a section titled "Browse information by Environmental Topic:" with six circular icons representing different topics: Biological diversity, Chemicals and Waste, Climate and Atmosphere, Environmental Governance, Land and Agriculture, and Marine and Freshwater. Below this is a "Browse by Region:" section with a world map and a dropdown menu set to "All regions", and a "Browse by Party:" section with a dropdown menu set to "Select a party". A link "Need help searching through InforMEA? Take our tour" is located below the map. A yellow banner below the map contains the text "Meetings of the conferences of the parties to the Basel, Rotterdam and Stockholm conventions (BC COP-14, RC COP-9... Read More)". The next section is titled "Explore our FREE online courses" and features four course cards: "Introductory Course to the International Treaty on Plant Genetic Resources for Food and Agriculture" (with a plant image), "Introductory Course to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)" (with a turtle image), "Introductory Course to the Convention on Biological Diversity (CBD)" (with a wave image), and "Introductory Course to Cartagena Protocol on Biosafety" (with a biosafety symbol image). Below the course cards is a section titled "United Nations Information Portal on Multilateral Environmental Agreements" with a brief description of the platform and a link to watch a video. The footer contains a grid of navigation links under the heading "GET INFORMED" (Treaties, Parties, Law and Cases, Events, Goals, Documents and Literature, Glossary, Contacts Hub) and "BROWSE BY ENVIRONMENTAL TOPIC" (Biological diversity, Chemicals and Waste, Climate and Atmosphere, Environmental Governance, Land and Agriculture, Marine and Freshwater). To the right of the grid are links for "BROWSE BY REGIONS" (Africa, Asia and the Pacific, Europe, Latin America and the Caribbean, North America, Polar, Arctic, West Asia) and "FREE COURSES" (Explore our collection of courses on the environmental topics, FREE ONLINE COURSES button). At the bottom, there is an "ORGANIZATIONS" section with logos for UN, UN Environment, FAO, UNESCO, UNECE, ECOLAC, and ECODEX, along with the European Union logo.