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Presentation metadata

Training Module 1.1

Open Government Data & the PSI Directive
Learning objectives

By the end of this training module you should have an understanding of:

• Open Data, Open Government Data, Linked Data and how these concepts relate;

• Open Government Data, related policies and initiatives;

• The role of the PSI Directive in opening up Government Data.
Content

This module contains ...

• An introduction to Open Data, Open Government Data and Linked Data;

• Open Government Data policies;

• Case studies with examples of apps and services based on Open Government Data;

• The history, objectives and obligations of the PSI Directive.
Open Data, Open Government Data & Linked Data

What do these terms mean and how do they relate?
What is Open Data?

“A piece of data or content is open if anyone is free to use, reuse, and redistribute it — subject only, at most, to the requirement to attribute and/or share-alike.”
--opendefinition.org

In summary, this means the following:

- **Availability and Access**: the data must be available as a whole and at no more than a reasonable reproduction cost, preferably by downloading over the internet. The data must also be available in a convenient and modifiable form.

- **Reuse and Redistribution**: the data must be provided under terms that permit reuse and redistribution including the intermixing with other datasets.

- **Universal Participation**: everyone must be able to use, reuse and redistribute - there should be no discrimination against fields of endeavour or against persons or groups. For example, ‘non-commercial’ restrictions that would prevent ‘commercial’ use, or restrictions of use for certain purposes (e.g. only in education), are not allowed.
What is Open Government Data?

Open government data means:

- Data produced or commissioned by government or government controlled entities.
- Data which is open as defined in the Open Definition – that is, it can be freely used, reused and redistributed by anyone.
- Data that is not sensitive or private.

Source: [http://data.gov.uk/data](http://data.gov.uk/data)
Source: [http://publicdata.eu/](http://publicdata.eu/)
What is a dataset

“A collection of data, published or curated by a single agent, and available for access or download in one or more formats.”
--Data Catalogue Vocabulary (DCAT) - W3C

For instance:

• **Credit Institutions Register** of the European Banking Authority;
• **% of persons employed with ICT user skills**;
• …
Expected benefits of Open Government Data

- **Transparency.** Citizens need to know what their government is doing. They need to be able freely to access government data and information and to share that information with other citizens. Sharing and reuse allows analysing and visualising to create more understanding.

- **Releasing social and commercial value.** Data is a key resource for social and commercial activities. Government creates or holds a large amount of information. Open government data can help drive the creation of innovative business and services that deliver social and commercial value.

- **Participatory governance.** Open Data enables citizens to be much more directly informed and involved in decision-making and facilitation their contribution to the process of governance.

- **Reducing government costs.** Open Data enables the sharing of information within governments in machine-readable interoperable formats, hence reducing costs of information exchange and data integration. Governments themselves are the biggest reusers of Open Government Data.
What is Linked Data?

“Linked Data is about publishing and connecting structured data on the Web, using standard Web technologies to make the connections readable by computers, enabling data from different sources to be connected and queried allowing for better interpretation and analysis.”

Tim Berners-Lee outlined four principles of Linked Data:

• Use URIs as names for things.
• Use HTTP URIs so that people can look up those names.
• When someone looks up a URI, provide useful information, using the standards (RDF*, SPARQL).
• Include links to other URIs, so that they can discover more things.
Open Government Data and Linked Data

The five stars of Linked Open Data

1. make your stuff available on the Web (whatever format) under an open license
2. make it available as structured data (e.g., Excel instead of image scan of a table)
3. use non-proprietary formats (e.g., CSV instead of Excel)
4. use URLs to denote things, so that people can point at your stuff
5. link your data to other data to provide context

See also: http://www.slideshare.net/OpenDataSupport/introduction-to-linked-data-23402165
Linked (open) government data – value proposition

- **Flexible data integration:** LOGD facilitates data integration and enables the interconnection of previously disparate government datasets.

- **Increase in data quality:** The increased (re)use of LOGD triggers a growing demand to improve data quality. Through crowd-sourcing and self-service mechanisms, errors are progressively corrected.

- **New services:** The availability of LOGD gives rise to new services offered by the public and/or private sector.

- **Cost reduction:** The reuse of LOGD in e-Government applications leads to considerable cost reductions.

See also: ISA Study on Business Models for LOGD
Group questions

Some public agencies are sceptical towards Open Government Data, because opening-up data results in a loss of revenue. How would you deal with this in your country?

What are, in your opinion, the expected benefits and pitfalls of Open Government Data?

Can you think of possible value-added applications and services based on Open Government Data?

Take also the online test here!
Open Government Data Policies
European Commission Open Data policy

Focus on generating value through reuse of a specific type of data – public sector information, sometimes also referred to as government data

- Significant potential for reuse in new products and services;
- Addressing societal challenges – discover new and innovative solutions;
- Achieving efficiency gains inside and between public administrations;
- Fostering participation of citizens and increasing transparency of government.

Concrete measures:

- Legal rules, e.g. revised PSI Directive (Directive 2013/37/EU) and national legislation, and rules on reuse of the Commission's own data (Commission Decision 2011/833/EU);
- Non-legislative measures such as: economic studies, discussion in Member States’ expert group, thematic networks and stakeholder outreach activities;
- National/regional/sectoral Open Data Portals.

See also: https://ec.europa.eu/digital-agenda/en/open-data-0
Main goals:

• Building a transparent society
• Enhanced access
  - More open data, engaging developers and users, changing culture in the public sector, regulating data, strengthening usability.
• Building trust
  - Open policy making, privacy impact assessment.
• Making smarter use of data
  - Anonymised data, breaking down barriers.

Case studies at: http://data.gov.uk/search/apachesolr_search?filters=type:resource%20tid:11279
Denmark: Good basic data for everyone

Public authorities in Denmark register various core information about individuals, businesses, real properties, buildings, addresses, and more. This information, called basic data, is reused throughout the public sector.

- Public and businesses are provided a better and more efficient service, when data that has already been recorded is shared across institutions and is included directly in case processing.
- Employees in the public sector will be less burdened by repetitive and routine tasks, and this, in turn, will release more resources for increased welfare in e.g. the healthcare and education sectors.
- Open and homogenous reuse of basic data also has great value for the private sector, partly because businesses use this data in their internal processes and, partly, because the information contained in public-sector data can be exploited for entirely new products and solutions, in particular digital ones.
US Executive Order - Open and Machine Readable Government Information

General principles:

• Openness strengthens democracy, promotes good services to citizens and contributes to economic growth; fuels entrepreneurship, innovation and scientific discovery and contributes to job creation

• Default state for government information resources to be open and machine-readable, managed through life-cycle, promoting interoperability and openness

• Release data in such way that it is easy to find, accessible, and usable

• Ensure safeguarding individual privacy, confidentiality, and national security
Swedish mission for the further development of öppndata.se

The Swedish Agency for Innovation Systems (Vinnova) was commissioned in 2012 to develop a technology platform for the dissemination of data that is made available for re-use (öppndata.se) - a portal for innovation.

In order to achieve this objective the platform will provide citizens and businesses with:

• A common service directory for published open data sources;

• An open directory of the services and applications that have been developed using resources from the above catalogue of services; and

• A common development environment for developers.
Estonian Open Data Green Book

- Green Paper on the **disclosure** of Public Sector Information in Estonia in a **machine-readable format**.
- The Green Paper is based on the Government’s Action Programme 2011 - 2015
- (In Estonian)
France open data strategy

The French government agency Etalab, responsible for open government data, published an overview of priorities and activities for the French government concerning open government data.

The actions are grouped in the following areas:

• Working on opening up strategic data sets;
• Facilitating and improving the process of opening up public data in ministries, public institutions and local authorities;
• Supporting innovative reuse;
• Evaluation of existing charging practices;
• Changes in the administrative and legal framework;
• International actions;
In the charter, the G8 agreed that open data are an untapped resource with huge potential to encourage the building of stronger, more interconnected societies that better meet the needs of our citizens and allow innovation and prosperity to flourish.

The G8 agreed on the following set of principles:

- Open Data by Default;
- Quality and Quantity;
- Useable by All;
- Releasing Data for Improved Governance; and
- Releasing Data for Innovation.

The G8 Open Data Charter has been transposed in the Open Data Action Plans of the following EU MSs:

- FR – Open Data Action Plan
- IT – Open Data Action Plan

and the European Commission:

- EU – Implementation of the G8 Open Data Charter
Group questions

Do you have an Open Data policy in your country? If so, what does it foresee?

Some national and local administrations, like the city of New York, are adopting “Open by Default” policies. What is your stand towards this approach?

Take also the online test here!
Case studies

The examples that follow are a small selection of indicative applications built, products offered and services provided on the basis of Open Data.
Belgium: Where’s my Villo
Crowd-sourced service monitoring

Where's My Villo? uses real-time data to track the performance of Brussels' bike-sharing scheme, Villo!, a public-private partnership.

The site allows users to report on availability of bikes. The site then presents the empirical evidence that leads to improved services.

It uses open government data (location of bike stations) and adds crowd-sourcing for quality monitoring and feedback to the city council.

Denmark: Danish Enterprise and Construction Authority

Growth and increased revenue from opening up government data

The Danish Enterprise and Construction Authority (DECA) opened up its data in 2002. The number of reusers went up by 10,000% leading to a reuse market growth of 1,000% over eight years. The additional tax revenue for the government was estimated to be 4 times the reduction in income from fees.

http://dba.erhvervsstyrelsen.dk/
France: **Open Food Facts**
Opening up nutritional food information

**Open Food Facts France** collects data about nutritional products sold all over the world in a collaborative way, for instance by enabling the users to scan a product with an app on their smart phone.

All information collected is subsequently made openly and freely available.
France: PLF (Projet de loi de finances pour 2013)

Data journalism

The French newspaper Le Monde analyses open government data to collect information for its news articles.

The newspaper article illustrated in the figure visualises the main areas of public spending based on the budget proposal from government.

**UK: FixMyStreet**
Crowd-sourced problem reporting

FixMyStreet is a site to help people report, view, or discuss local problems they have found to their local council by simply locating them on a map.

The site was built by mySociety, a project of a registered charity which has grown out of a community of volunteers, and uses maps form the UK Ordnance Service.

http://www.fixmystreet.com/
UK: UK Pharmacy
User-driven services from government

**UK Pharmacy** helps people in the UK find their nearest pharmacy via their Smartphone.

They can search for a pharmacy/chemist using their phone's built-in GPS or via a place name or postcode search.

http://www.data.gov.uk/apps/uk-pharmacy
Europe: It's Your Parliament
Open democracy

It’s your parliament gives citizens a unique overview of the votes cast in the European Parliament.

Citizens can find and compare voting records of members of the European Parliament (MEPs) and political groups, make your own comments and cast their own "votes".

http://www.itsyourparliament.eu/
Europe: Europe's energy
Community-driven visualisations

Europe’s energy combines data from Eurostat and other agencies to produce graphics which visualise Europe's commitments to reduce energy consumption by 20% and increase the share of renewables in the energy mix to 20% by 2020.

The app puts these targets into context and helps users to compare how progress is being made towards them in different countries.

http://energy.publicdata.eu/ee/vis.html
Global: OpenCorporates
Non-profit business information

OpenCorporates is a database of companies. It aims to have a unique identifier in the form a HTTP URI for every company in the world.

OpenCorporates has grown from 3 territories and a few million companies to over 30 territories and over 54 million companies, and is working with the open data community to add more each week.
The Linked Government Data Pilots of ISA

The Linked Government Data Pilots of ISA

http://health.testproject.eu/PPP/

http://maritime.testproject.eu/CISE/

http://cpsv.testproject.eu/CPSV/
The PSI Directive

PSI Directive: history and status

• Directive 2003/98/EC on the reuse of Public Sector Information.
• Member States are obliged to implement the new Directive in two years – there will be a gradual adoption of the new obligations.
**PSI Directive: objectives**


Main objectives:

- to **stimulate** the further **development** of a European market for services based on Public Sector Information;
- to **enhance** the cross-border **use** and **application** of PSI in business processes, including publishing;
- to **strengthen competition** in the internal market;
- to **address divergence** as to reuse rules between Member States.

The Directive allows Member States to implement measures going beyond its minimum standards, thus allowing for more extensive reuse.
PSI Directive: obligations

**Public sector bodies have to:**

- Make information re-usable for commercial or non-commercial purposes under non-discriminatory conditions.
- Process requests and provide access within 20 days (or 40 if request is complex); justify negative decision and inform about how to appeal.
- Charge no more than cost of reproduction, provision and dissemination; publicise charges and indicate calculation basis on request.
- Publish licences in digital format.
- Facilitate search for information preferably online (e.g. portal).

**Public sector bodies may not:**

- Unnecessarily restrict reuse.
- Grant exclusive rights, unless necessary, subject to review every 3 years.

**Public sector bodies do not have to:**

- Make information available that is excluded by virtue of access regimes in the Member States
- Adapt formats or provide translations.

**Note:**

While libraries, museums and archives are included in the revised Directive, they will be subject to a different regime for reuse and charging.
How does the revised PSI Directive encourage openness?

• Sets minimum rules across the EU for availability of information produced by public sector and government agencies.

• Specifies rights for people and organisations that want to reuse the information.

• Recommends distribution by electronic means.

But:

• Does not mandate information to be available free of charge (marginal cost of reproduction, provision and dissemination may be charged).

• Allows some public sector organisations to charge in order to cover cost (e.g. special arrangements for cultural heritage organisations).
Conclusions

• Open Government Data can:
  - improve government transparency and accountability;
  - release social and commercial value;
  - enable participatory governance; and
  - reduce government costs.

• The revised PSI directive requires:
  - information to be made openly available at (max) marginal costs as a default rule;
  - information and metadata to be made available in machine-readable and interoperable data formats (wherever possible); and
  - all legally public documents to be re-usable for commercial or non-commercial purposes.
Thank you!
...and now YOUR questions?
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Slide 6:

Slide 7:

Slide 9:

Slide 10:
- EPSIplatform. What is Linked Open Government Data? http://epsiplatform.eu/content/what-linked-open-government-data

Slide 11:

Slide 14:

Slide 15:

Slide 16:

Slide 17:

Slide 18:

Slide 21:

Slide 22:

Slides 34–39:
Further reading (1/2)

The Danish Dash - A short story unravelling the Danish magic of shaping a System of Key Registers in less than nine months
http://thegreenland.eu/2013/07/danis-dash/

UK Government, Market assessment of public sector information

UK Government, Shakespeare Review - An Independent Review of Public Sector Information
Further reading (2/2)

- UK Cabinet Office, G8 Open Data Charter and Technical Annex
  

- Semantic Web Company, Open Government Data Weissbuch
  
  http://issuu.com/semwebcomp/docs/ogd_weissbuch_2011_web

- Spending Data Handbook, OpenSpending
  

- The Open Data Handbook, Open Knowledge Foundation
  
  http://opendatahandbook.org/
Related projects and initiatives

The Open Data Institute, http://www.theodi.org/
The Open Knowledge Foundation, http://okfn.org/
Engage FP7 ICT project, http://www.engagedata.eu/
The European Public Sector Information Platform, http://epsiplatform.eu/
W3C eGov IG, http://www.w3.org/egov/wiki/Main_Page
HOMER project, http://www.homerproject.eu/
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http://goo.gl/y9ZZI

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