

## *Presentation metadata*

Open Data Support is funded by the European Commission under SMART 2012/0107 'Lot 2: Provision of services for the Publication, Access and Reuse of Open Public Data across the European Union, through existing open data portals' (Contract No. 30-CE-0530965/00-17).

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# OPEN DATA SUPPORT

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.

Tags

View all tags

population local-government **care** disclosure school Environment  
**health** children health-and-social-care  
**transparency** communities Spending Data  
health-well-being-and-care **child finance** education Health  
NERC\_DDC nhs spend-transactions

Source:[<http://data.gov.uk/data>]

## Search Europe's Public Data

Find datasets  🔍

Finance and Budgeting (436) View

Social Questions (226) View Environment (215) View

Transportation (196) View

Education and Communication (188) View

Agriculture, Fisheries, Forestry (176) View

Population (145) View

Economy and Industry (114) View Health (79) View

Source:[<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 facilitate 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



★ make your stuff available on the Web (whatever format) under an open license<sup>1</sup>

★★ make it available as structured data (e.g., Excel instead of image scan of a table)<sup>2</sup>



★★★ use non-proprietary formats (e.g., CSV instead of Excel)<sup>3</sup>



★★★★ use URIs to denote things, so that people can point at your stuff<sup>4</sup>



★★★★★ link your data to other data to provide context<sup>5</sup>

```
<h1 property="dcterms:title">Temperature forecast for Galway, Ireland</h1>
<div id="data" about="#Galway" typeof="meteo:Place">
<span rel="owl:sameAs" resource="http://dbpedia.org/resource/Galway"></span>
<table border="1px">
<tr>
<th>Day</th>
<th>
<div about="#temp">
Lowest
<a rel="rdfs:seeAlso" href="http://en.wikipedia.org/wiki/Temperature"
resource="http://dbpedia.org/resource/Temperature">Temperature</a>
<span rel="owl:sameAs"
resource="http://dbpedia.org/resource/Celsius">°C</span>
</div>
</th>
</tr>
```

### Temperature forecast for Galway, Ireland

Day	Lowest Temperature (°C)
Saturday, 13 November 2010	2
Sunday, 14 November 2010	4
Monday, 15 November 2010	7

A	B
1	Temperature forecast for Galway, Ireland
2	
3	Day
4	Saturday, 13 November
5	2010
6	Sunday, 14 November 2010
7	Monday, 15 November 2010

```
"Temperature forecast for Galway, Ireland", "Day", "Lowest Temperature (C)" "Saturday, 13 November 2010", 2, "Sunday, 14 November 2010", 4, "Monday, 15 November 2010", 7
```

```
<h1 property="dcterms:title">Temperature forecast for Galway, Ireland</h1>
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<div about="#temp">
Lowest
<a rel="rdfs:seeAlso" href="http://en.wikipedia.org/wiki/Temperature"
resource="http://dbpedia.org/resource/Temperature">Temperature</a>
<span property="meteo:predicted" content="2010-11-13T00:00:00Z"
datatype="xsd:dateTime">Saturday, 13 November 2010</span>
</div>
<td>
<div about="#forecast20101113">
<span property="meteo:temperature" content="2">2</span>
</div>
<td>
<div about="#temp20101113">
<span property="meteo:celsius" datatype="xsd:decimal">2</span>
</div>
</td>
</tr>
```

### 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**

<https://joinup.ec.europa.eu/community/semic/document/study-business-models-linked-open-government-data-bm4logd>

## *Group questions*



<http://www.visualpharm.com>

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?



<http://www.visualpharm.com>

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



<http://www.visualpharm.com>

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-o>

# **UK Open Data White Paper: Unleashing the Potential**

## 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%3Dresource%20tid%3D11279](http://data.gov.uk/search/apachesolr_search?filters=type%3Dresource%20tid%3D11279)

Open Data  
White Paper  
Unleashing the Potential

#opendata

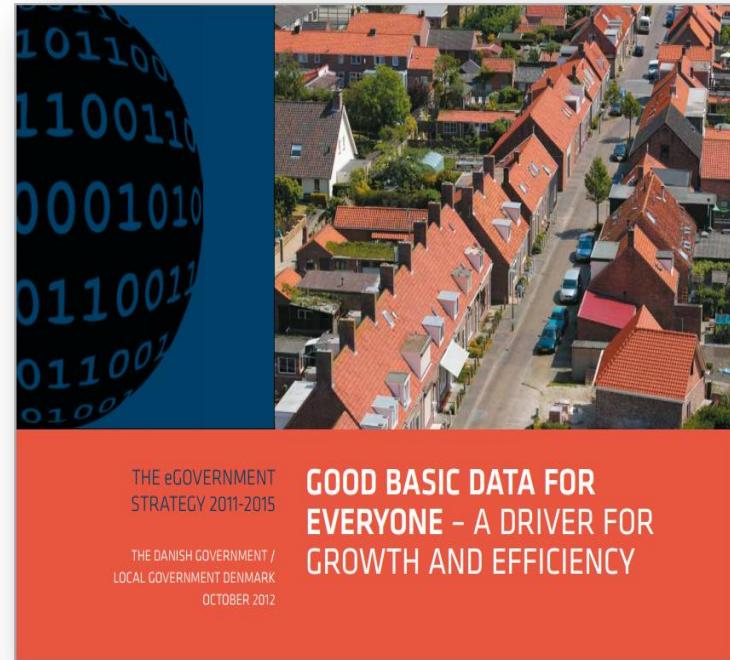
@uktransparency  
@cabinetofficeuk

HM Government

# *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.



THE eGOVERNMENT  
STRATEGY 2011-2015

THE DANISH GOVERNMENT /  
LOCAL GOVERNMENT DENMARK  
OCTOBER 2012

**GOOD BASIC DATA FOR  
EVERYONE - A DRIVER FOR  
GROWTH AND EFFICIENCY**

# ***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 öppnadata.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 (öppnadata.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.



Näringsdepartementet

Regeringsbeslut II 3  
2012-07-26 N2012/3599/ITCP  
Verket för innovationssystem  
101 58 Stockholm

Uppdrag att utveckla och vidareutveckla den tekniska plattformen öppnadata.se – en portal för innovation

#### Regeringens beslut

Regeringen uppdrar åt Verket för innovationssystem (Vinnova) att under 2012 utveckla en teknisk plattform för förmedling av data som tillgängliggjorts för vidareutnyttjande samt under 2013 och 2014 vidareutveckla denna. Plattformen ska kallas öppnadata.se – en portal för innovation. Uppdraget ska utföras i samverkan med för uppdraget relevanta aktörer.

För ändamålet får Vinnova rekvisera högst 3 miljoner kronor senast den 30 augusti 2012 samt högst 3 miljoner kronor senast den 15 mars 2013 respektive den 15 mars 2014 från Kammarkollegiet. I rekvisitionerna ska hävnisning göras till diarienumret i detta beslut. Utgifterna ska belastas det under utgiftsområde 24 Näringsliv uppförda anslaget 1:5 Näringslivsutveckling m.m., anslagspost 1 Näringslivsutveckling – del till Kammarkollegiet. Kammarkollegiet ska utan vidare prövning betala ut medlen.

Ej förbrukade medel ska återbetalas till Kammarkollegiet senast den 15 mars 2015 på bankgirokonto 950655-1, alternativt bankgirokonto 5052-5781, med angivande av detta besluts diarienummer.

Plattformen, inklusive alla rättigheter och övriga resultat från utvecklingen samt redovisning av hur medlen används ska lämnas till Regeringskansliet (Näringsdepartementet) senast den 1 juli 2015. Delrapportering av uppdragets genomförande och resultat ska lämnas senast den 15 mars 2013 respektive 15 mars 2014. Vinnova ska i slutleveransen, om skäl till det bedöms föreliggande, föreslå hur

Förteckning  
101 55 Stockholm  
Postadress  
Kléber Segmentsgränd 10

Tel/faxnr  
08-405 18 00  
Telefax  
08-411 38 10

E-post  
regelit@regeringskansliet.se

# 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)

Vabariigi Valitsus

Eesti avaliku teabe masinloetav avalikustamise  
roheline raamat

Versioon 0.9  
2014-03-15

Rohelise raamatu koostamise aluseks on Valitsuse tegevusprogramm 2011-2015 (muundatud 25.05.2013).



# France open data strategy

The French government agency Etabal, 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;

The screenshot shows the homepage of etablab.gouv.fr. At the top right is the logo "etalab.gouv.fr". Below it is a sub-headline: "Service du Premier Ministre chargé de l'ouverture des données publiques et du développement de la plateforme française Open Data." The main navigation bar includes links for "Qui sommes-nous ?" (About us), "Actualités" (News), "Licence" (License), "data.gouv.fr", and "Dataconnexions". A search bar labeled "Inscription à la newsletter" (Newsletter registration) with a placeholder "Votre eMail" is present. Below the search bar is a date "Jeudi 28 février 2013". A red link "La feuille de route du Gouvernement en matière d'ouverture et de partage des données publiques" (The government's road map for opening and sharing public data) is highlighted. A section titled "L'ouverture des données publiques, liberté publique et levier d'innovation" (Opening up public data, public freedom and innovation lever) discusses the legal basis and history of data openness in France, mentioning the 1978 law, the 1997 decree, the 2003 directive, and the 2011 decree.

# *G8 Charter on Open Data...*

*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.

Policy paper

## **G8 Open Data Charter and Technical Annex**

Published 18 June 2013

### Contents

1. Principle 1: Open Data by Default
2. Principle 2: Quality and Quantity
3. Principle 3: Usable by All
4. Principle 4: Releasing Data for Improved Governance
5. Principle 5: Releasing Data for Innovation
6. Technical annex

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](#)
- [UK – G8 Open Data Charter: UK Action Plan 2013](#)

and the European Commission:

- [EU – Implementation of the G8 Open Data Charter](#)  [OPEN DATA SUPPORT](#)

Slide 21

## *Group questions*



<http://www.visualpharm.com>

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



<http://www.visualpharm.com>

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.*



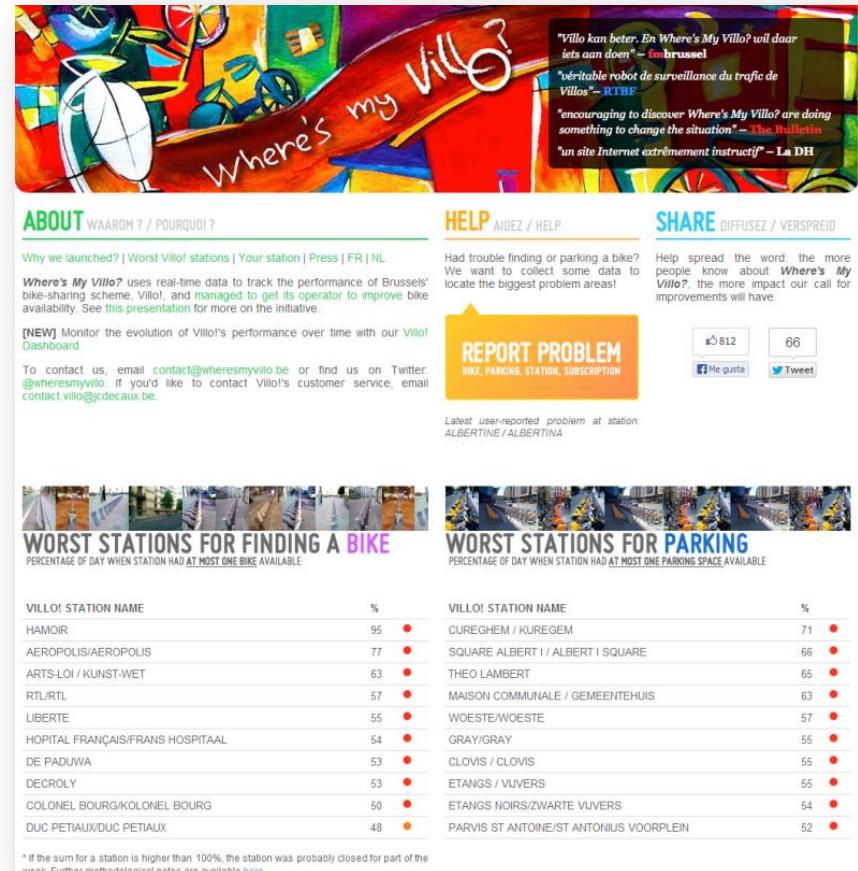
# Belgium: Where's my Villo

## 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.



<http://blog.okfn.org/2010/10/29/open-data-in-public-private-partnerships-how-citizens-can-become-true-watchdogs/>

## ***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 .

The screenshot shows a product page for "Confiture extra Goyave". At the top right are social sharing icons for Twitter, Facebook, and Google+ with counts of 0, 0, and 0 respectively. Below that is a "Edit the page" link. The main title is "Confiture extra Goyave" with a barcode. The barcode number is 3328382512322. The product characteristics section includes: Quantity: 325 g; Packaging: Bocal; Brands: m'amour; Categories: Spreads, Sweet spreads, Jams, Breakfasts; Origin: Antilles, Guadeloupe; Labels, certifications, awards: fr.Production locale. A small image of the jam jar is shown on the right. On the left, there's a sidebar with the Open Food Facts logo and a search bar set to "France". Below the search bar are links for "Français - English", "Brands", and "Categories". A note states that food product information is collected in a collaborative way and is made available to everyone and for all uses in a free and open database.

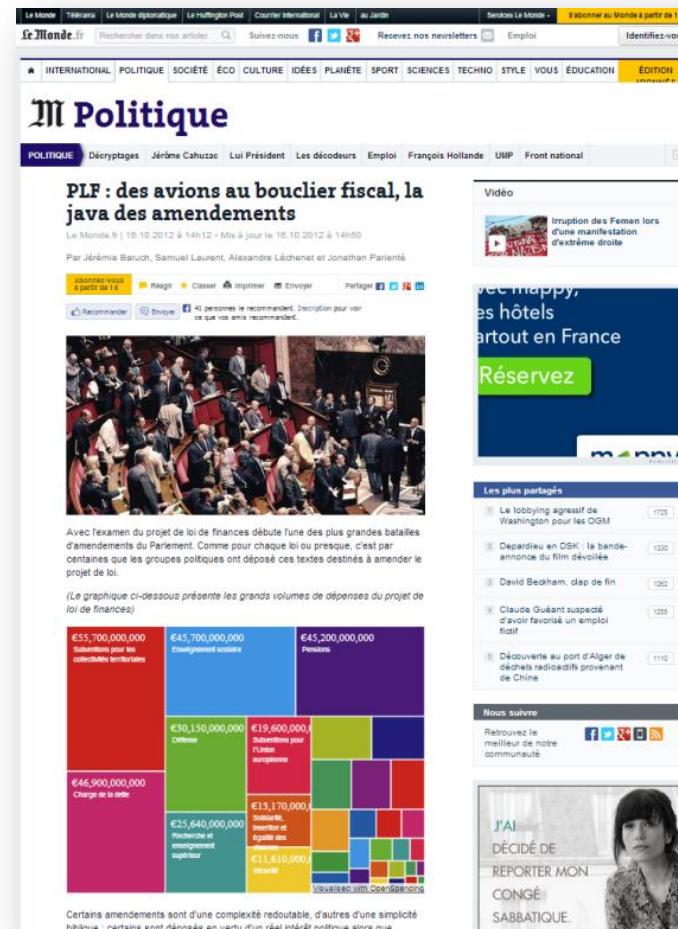
# France: PLF (Projet de loi de finances pour 2013)

## Data journalism

The French news paper 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.

[http://www.lemonde.fr/politique/article/2012/10/16/plf-des-avions-au-bouclier-fiscal-la-java-des-amendements\\_1776093\\_823448.html](http://www.lemonde.fr/politique/article/2012/10/16/plf-des-avions-au-bouclier-fiscal-la-java-des-amendements_1776093_823448.html)



# 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 from the UK Ordnance Service.

The screenshot shows the FixMyStreet homepage with a dark header bar containing links for 'Report a problem', 'Your reports', 'All reports', 'Local alerts', 'Help', 'mysociety', 'DONATE', and 'OUR SITES'. Below the header is a yellow banner with the 'FixMyStreet' logo and the text 'Report, view, or discuss local problems (like graffiti, fly tipping, broken paving slabs, or street lighting)'. A search bar is present with placeholder text 'e.g. 'B2 4QA' or 'Tib St, Manchester' and a 'GO' button. Below the search bar is a link '... or locate me automatically'. The main content area is divided into two sections: 'How to report a problem' (with four steps: enter postcode, locate on map, enter details, send to council) and 'Recently reported problems' (a list of five recent reports with thumbnail images). At the bottom are sections for 'Mobile apps' (with OVI logo and 'New iPhone and Android apps coming soon'), 'Are you a developer?' (with information about contributing code), and 'Are you from a council?' (with information about better integration).

<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.

The screenshot shows the DATA.GOV.UK (beta) website with a green header. The main content area is titled "UK Pharmacy". It features a summary card for the app, including its developer (Elbatrop Ltd.), creation date (21/01/2010), average rating (3.3), and download link ("Get App"). Below this, there's a brief description of the app's functionality: "Find your nearest pharmacy quickly and easily on your Android, iPhone or iPod Touch! Search for a pharmacy/chemist around your current location using the GPS built in to your phone, or look for one in another area (whilst out, or for a distant relative) via a simple place name or postcode search." It also mentions the dataset URL (<http://www.neighbourhood.statistics.gov.uk/dissemination/datasetList.do?...>) and the dataset provider: Health and Social Care Information Centre. A note states: "Apps submitted to data.gov.uk are currently approved for publication on the general level of their context and appropriateness. Whilst we review these on a periodical basis, we do not own responsibility for the regular update and maintenance of these apps. Any queries about individual apps or tools published need to be directed to the originator." At the bottom, there are three screenshots of the app interface on different devices, showing maps and search results for pharmacies like Boots The Chemist, Superdrug, and Lloyds Pharmacy. To the right, there's a sidebar titled "Related apps" with links to "MRS Action UK" and "Forest finder", along with a "Have you used our data to create an application?" section and a "More like this" section featuring "UK Dentists".

<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".

The screenshot shows the homepage of [ItsYourParliament.eu](http://www.itsyourparliament.eu/). The top navigation bar includes links for 'YOUR PAGE >>', 'COUNTRIES >>', 'POLITICAL GROUPS >>', 'VOTES >>', and 'POLICY AREAS >>'. Below the navigation is a search bar labeled 'Members of Parliament' with 'MEP search...'. A central column features the heading 'It's Your Parliament' with a brief description of the site's purpose. To the right is a sidebar titled 'New at the site' containing a list of recent news items. At the bottom are two data tables: one for 'Most popular MEPs' and another for 'Most popular votes'.

MEP	Likes/dislikes
Christian Engström, Sweden	526/362
George Lyon, United Kingdom	74/12
Jaroslav Paška, Slovakia	43/7
Jill Evans, United Kingdom	39/13
Isabella Lövin, Sweden	40/16

Title of vote	For/against
Resolution on the transparency and state of play of the Anti-Counterfeiting Trade Agreement ACTA negotiations	26/4
Future of the CAP after 2013	7/2
Resolution on Burma	5/0
2008 discharge: EU general budget, Council	4/0
Equality between women and men in the European Union – 2009	3/0
Combating illegal fishing at the global level - the role of the EU	3/0

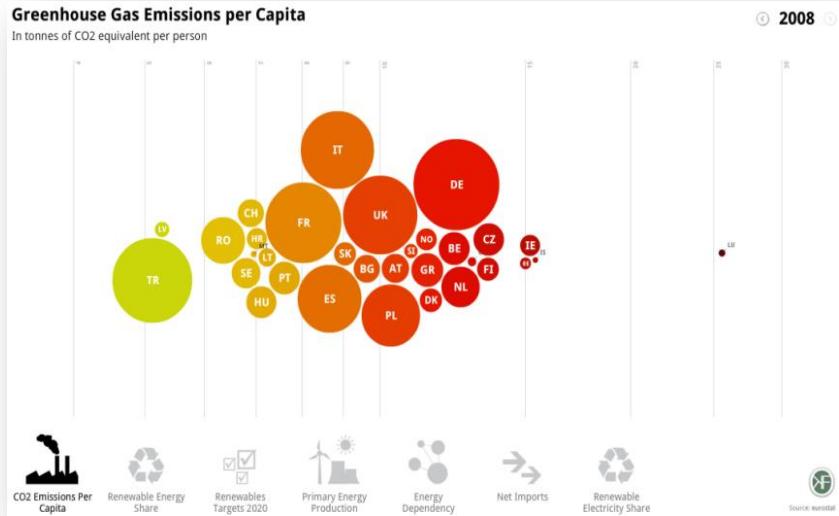
<http://www.itsyourparliament.eu/>

# *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 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 screenshot shows the main page of the OpenCorporates website. At the top, it says "We have information on 54,090,549 companies". Below this is a search bar with options to search for companies or officers. A sidebar on the right lists "Just released: OpenCorporates API" and "Use Google Refine to match companies in your data". The central part of the page features a large table titled "2267 rows" showing company data grouped by jurisdiction. The table includes columns for "Name", "Jurisdiction", and "Count". Some entries are collapsed, indicated by a "..." icon. At the bottom of the page, there's a section for "Recently updated corporate groupings" and a link to "http://opencorporates.com/".

<http://opencorporates.com/>

# ***The Linked Government Data Pilots of ISA***

# Linking data about applications and decisions for authorisation of plant protection products

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

Governments use local, regional, and national access portals to give businesses, citizens, and public administrations basic information about their public services. Unfortunately, this basic information often duplicated, unstructured, and not machine-readable. This fragmentation makes it difficult for citizens, businesses, and public administrations to find information about the public service that they need. It also leads to situations where basically the same information about a public service is re-created in different applications or by different governments.

The **Core Public Service Vocabulary** allows public administrations to describe their service only once using a standard, extensible, and machine-readable vocabulary and make these descriptions re-used on many governmental access portals. This pilot implementation shows how this can be done using a Linked Data infrastructure for a small sample of public service descriptions originated from various European public administrations.

## Sample public service descriptions

From the [SPDCS large-scale pilot](#):

- <http://csv.testproject.eu/dmrt/PublicService/RealEstateAgencyLicence>
- <http://csv.testproject.eu/dmrt/PublicService/CateningEstablishmentLicence>
- <http://csv.testproject.eu/dlru/PublicService/ArchitectRegistration>
- <http://csv.testproject.eu/dprn/PublicService/TravelAgentRegistration>
- <http://csv.testproject.eu/dprn/PublicService/TCRegistration>
- <http://csv.testproject.eu/dsrmv/PublicService/ArchitectRegistration>

From the Flemish [Intergovernmental Product and Service Catalogue](#):

- <http://csv.testproject.eu/dbel/PublicService/04>
- <http://csv.testproject.eu/dbel/PublicService/117>
- <http://csv.testproject.eu/dbel/PublicService/159>
- <http://csv.testproject.eu/dbel/PublicService/279>
- <http://csv.testproject.eu/dbel/PublicService/301>
- <http://csv.testproject.eu/dbel/PublicService/346>
- <http://csv.testproject.eu/dbel/PublicService/347>
- <http://csv.testproject.eu/dbel/PublicService/415>
- <http://csv.testproject.eu/dbel/PublicService/566>
- <http://csv.testproject.eu/dbel/PublicService/632>

From the Irish [Citizens Information](#) portal:

- <http://csv.testproject.eu/dlri/PublicService/DrivingTest>
- <http://csv.testproject.eu/dlri/PublicService/EuropeanHealthInsuranceCard>
- <http://csv.testproject.eu/dlri/PublicService/PublicServicesCard>

From the [e-CODEX](#) large scale pilot:

- <http://csv.testproject.eu/dleur/PublicService/SmallClaims>

<http://cpsi.testproject.eu>

<http://cpsi.testproject.eu/CPSV/>

**Linked maritime surveillance data**

Type a keyword:

[Search]

**SPARQL Query:**

```

PREFIX lms: <http://maritime-testproject.eu/FishingVessel/Vocabulary/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX rdfs: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
SELECT ?fishingVesselURI ?fishingVessel ?countryCodeURI Substr(str(?countryCodeURI), 5 , strlen(?countryCodeURI) - 5)
FROM <http://maritime-testproject.eu/rise>
WHERE {
  ?fishingVesselURI a lms:FishingVessel;
  lms:hasSpecies ?species;
  lms:hasCountry ?countryCodeURI;
  lms:hasTitle ?title;
  FILTER(regex(str(?fishingVessel), 'stanic', 'i'));
}
LIMIT 100

```

Run Query



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e.testproject.eu/CISE/

# The PSI Directive

*2013/37/EU of the European Parliament and of the Council of  
26 June 2013 amending Directive 2003/98/EC on the reuse of  
Public Sector Information*

## *PSI Directive: history and status*

- Directive 2003/98/EC on the reuse of Public Sector Information.
- By 2008, all Member States had reported implementation of the obligations under the Directive in national legislation.  
<https://ec.europa.eu/digital-agenda/en/implementation-public-sector-information-directive-member-states>
- Revision of Directive: Proposal COM(2011)877 and public consultation in 2010.
- Endorsement and publication of Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending 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*

Revised PSI Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC **on the reuse of public sector information.**

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.

# *Opening up Public Sector Information*

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?



# *This presentation has been created by Open Data Support*

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Authors:

Makx Dekkers, Nikolaos Loutas, Michiel De Keyzer and Stijn Goedertier

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- 5 ★ Open Data. <http://5stardata.info/>
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- Europa. Press releases RAPID. Digital Agenda: Commission's Open Data Strategy, Questions & answers. [http://europa.eu/rapid/press-release\\_MEMO-11-891\\_en.htm?locale=europa-commission-launches-open-data-strategy-for-europe/](http://europa.eu/rapid/press-release_MEMO-11-891_en.htm?locale=europa-commission-launches-open-data-strategy-for-europe/)
- European Commission. Digital Agenda for Europe. Open Data. <https://ec.europa.eu/digital-agenda/en/open-data-o>
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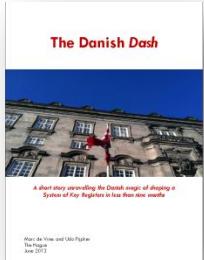
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- G8 Open Data Charter and Technical Annex. <https://www.gov.uk/government/publications/open-data-charter/g8-open-data-charter-and-technical-annex>

Slides 34-39:

- EPSIplatform. Quick Guide to the PSI Directive. Fact sheet Version May 2010. [http://epsiplatform.eu/sites/default/files/Quick%20Guide%20to%20the%20PSI%20Directive\\_MdV\\_2.pdf](http://epsiplatform.eu/sites/default/files/Quick%20Guide%20to%20the%20PSI%20Directive_MdV_2.pdf)
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## *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

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/198905/bis-13-743-market-assessment-of-public-sector-information.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/198905/bis-13-743-market-assessment-of-public-sector-information.pdf)



UK Government, Shakespeare Review - An Independent Review of Public Sector Information

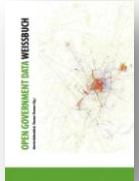
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/198905/bis-13-743-market-assessment-of-public-sector-information.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/198905/bis-13-743-market-assessment-of-public-sector-information.pdf)

## *Further reading (2/2)*



UK Cabinet Office, G8 Open Data Charter and Technical Annex

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Semantic Web Company, Open Government Data Weissbuch

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Spending Data Handbook, OpenSpending

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The Open Data Handbook, Open Knowledge Foundation

<http://opendatahandbook.org/>

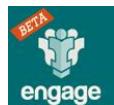
## *Related projects and initiatives*



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](http://www.w3.org/egov/wiki/Main_Page)



HOMER project, <http://www.homerproject.eu/>



World Wide Web Foundation, <http://www.webfoundation.org/>



The World Bank Open Data, <http://data.worldbank.org/>

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