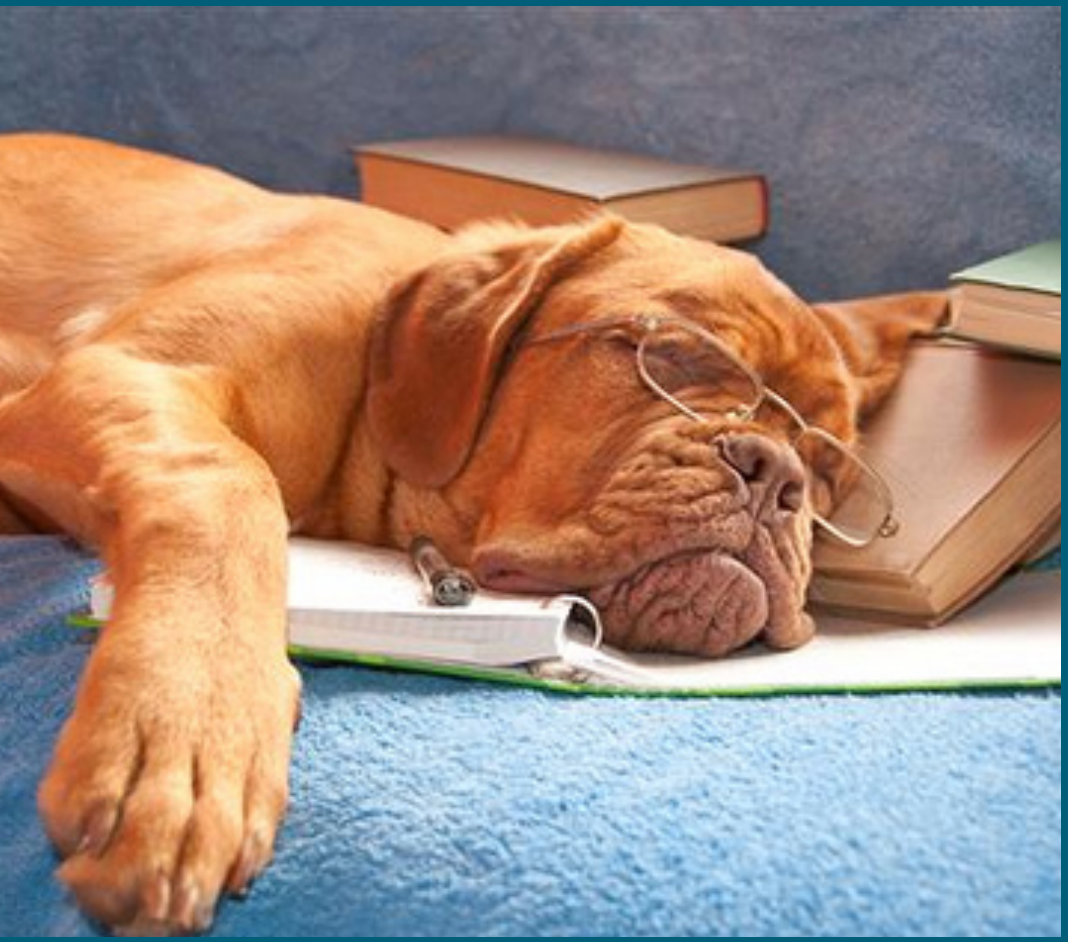
Presented by:

Irina Bolychevsky



Presented by:

Paulo Rupino da Cunha

IPN INSTITUTO PEDRO NUNES

Open Data 101

WHAT IS OPEN DATA?

> ***Open*** *means* ***anyone*** *can* ***freely access***, ***use***, ***modify***, *and* ***share*** *for* ***any purpose*** *(subject, at most, to requirements that preserve provenance and openness).*

> ***Open data*** *and content can be* ***freely used***, ***modified***, *and* ***shared*** *by* ***anyone*** *for any* ***purpose***

http://opendefinition.org

WHAT IS OPEN DATA?

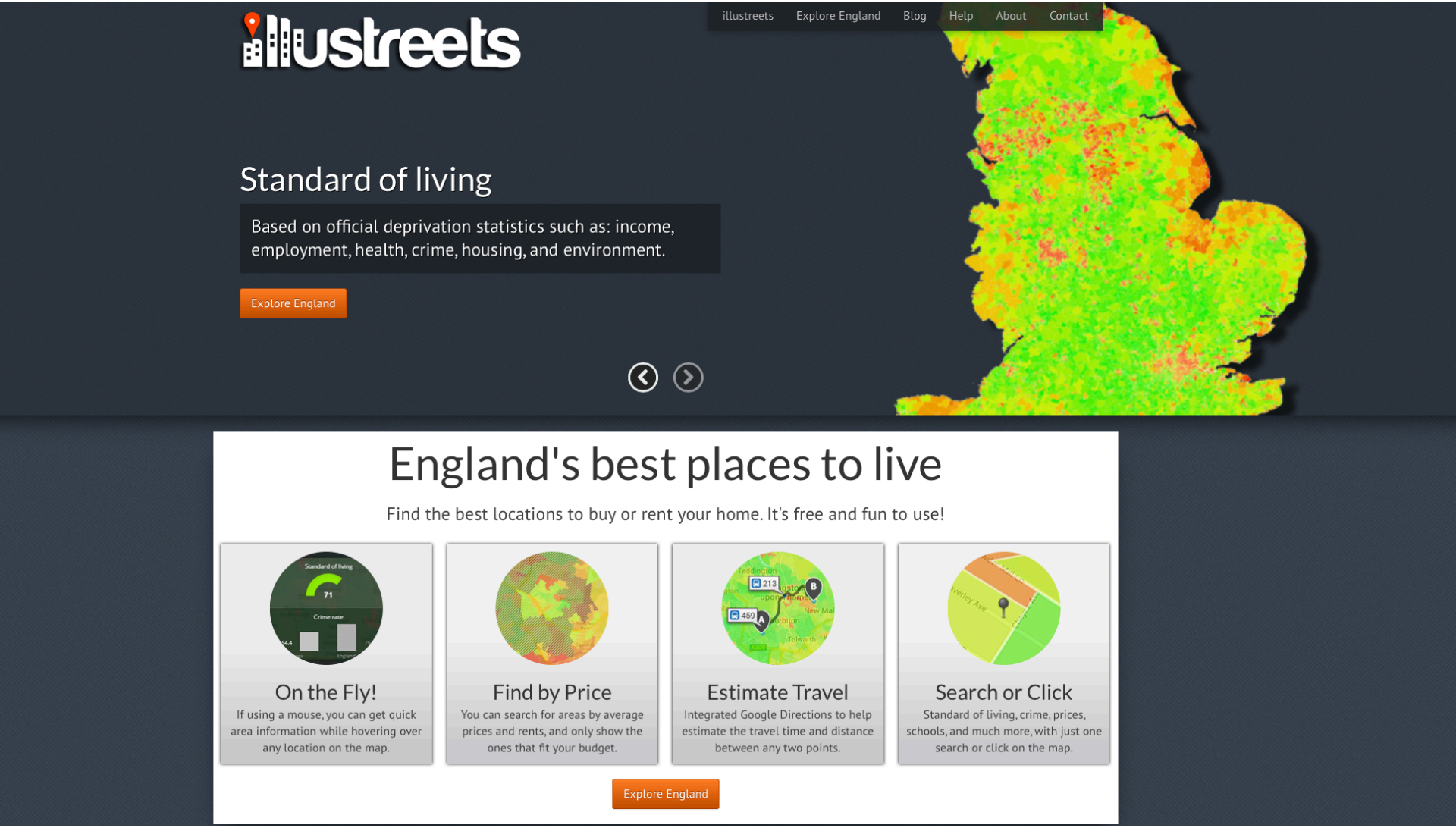
Multimodal trip planning & analysis

OpenTripPlanner provides a range of passenger information and transportation network analysis features using our infrastructure for finding itineraries combining transit, pedestrian, bike, and car segments.

Blog </> Code i Docs ? Support

OpenTripPlanner OTP **Analyst**

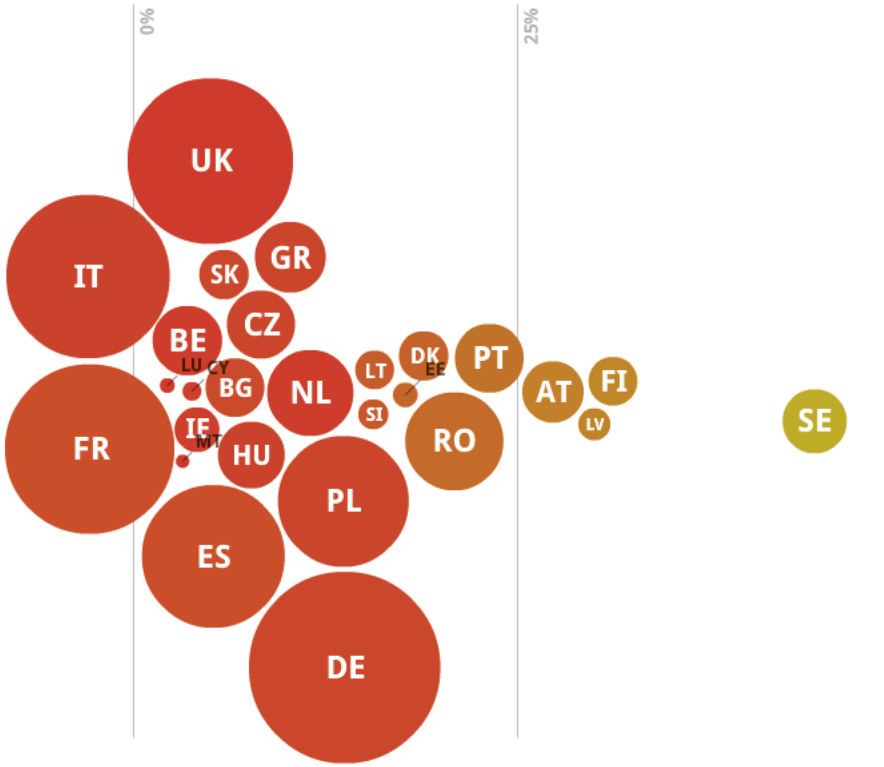
WHAT IS OPEN DATA?



Share of Renewable Energy in Gross Final Energy Consumption

Percent of total gross consumption

2008



CO2 Emissions Per Capita

Renewable Energy Share

Renewables Targets 2020

Primary Energy Production

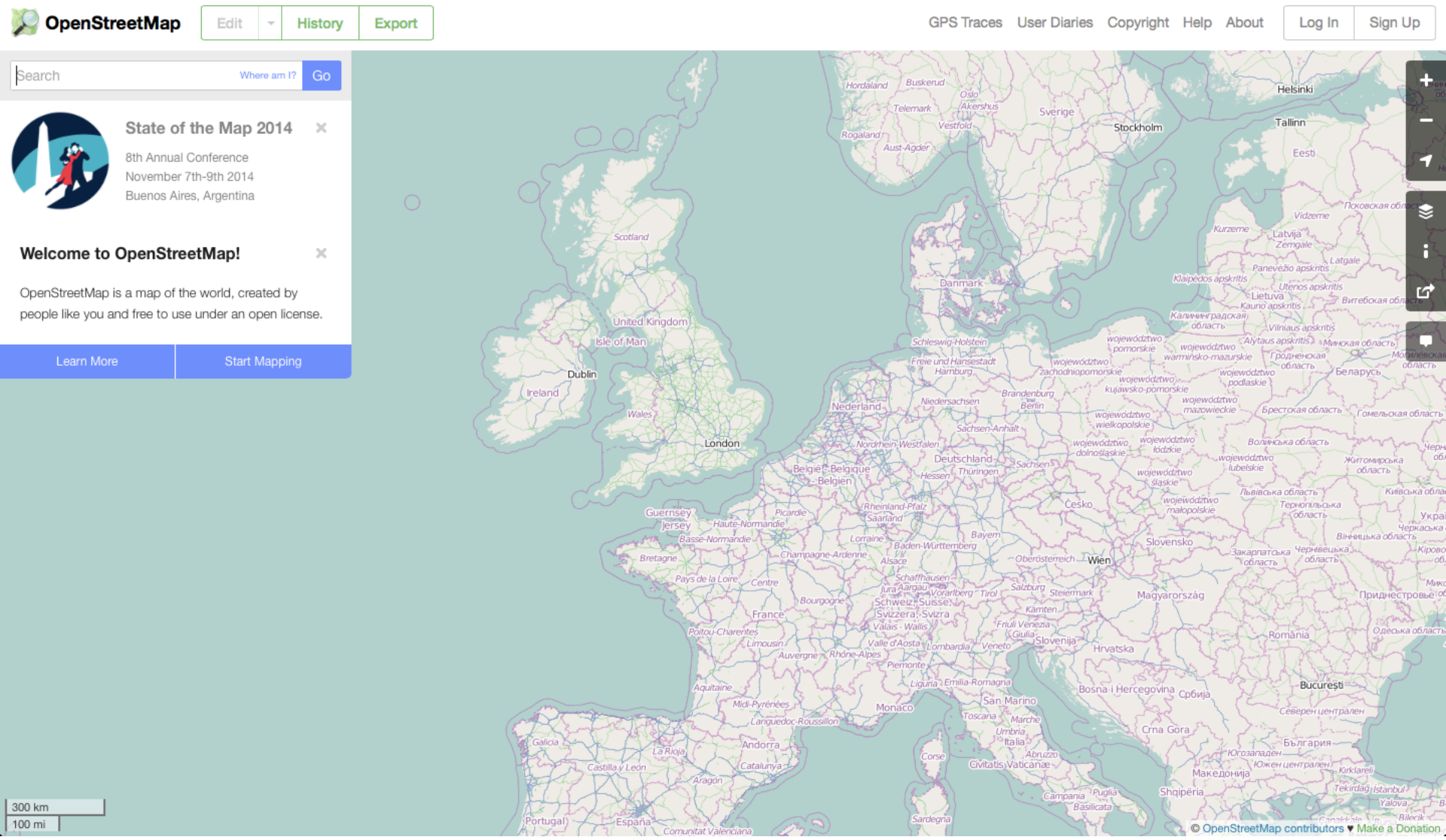
Energy Dependency

Net Imports

Renewable Electricity Share

Source: eurostat

WHAT IS OPEN DATA?



WHAT IS OPEN DATA?

WHY OPEN DATA?

IMPROVED PRODUCTS AND SERVICES

CIVIC ENGAGEMENT AND PARTICIPATION

BUSINESS OPPORTUNITIES

TRANSPARENCY

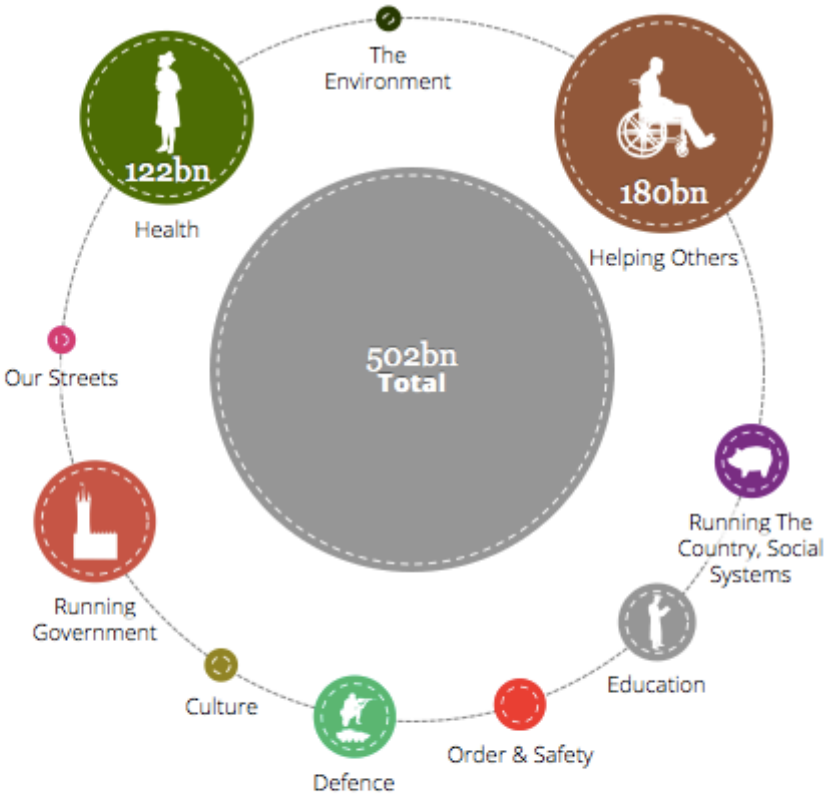
ACCOUNTABILITY

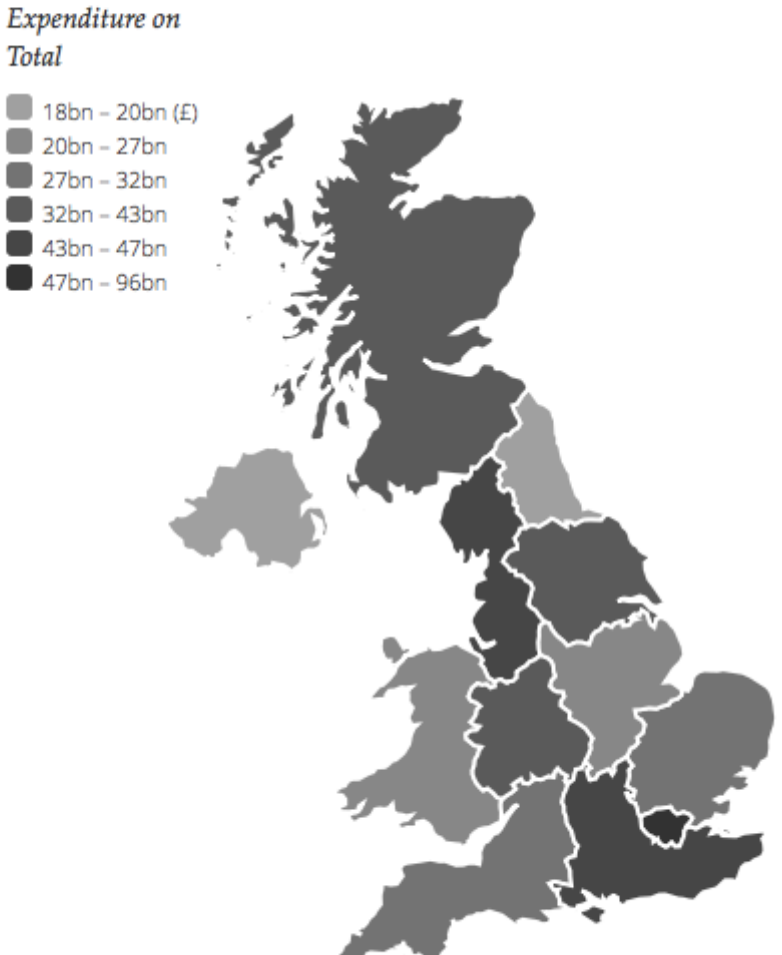
SELF-EMPOWERMENT

...

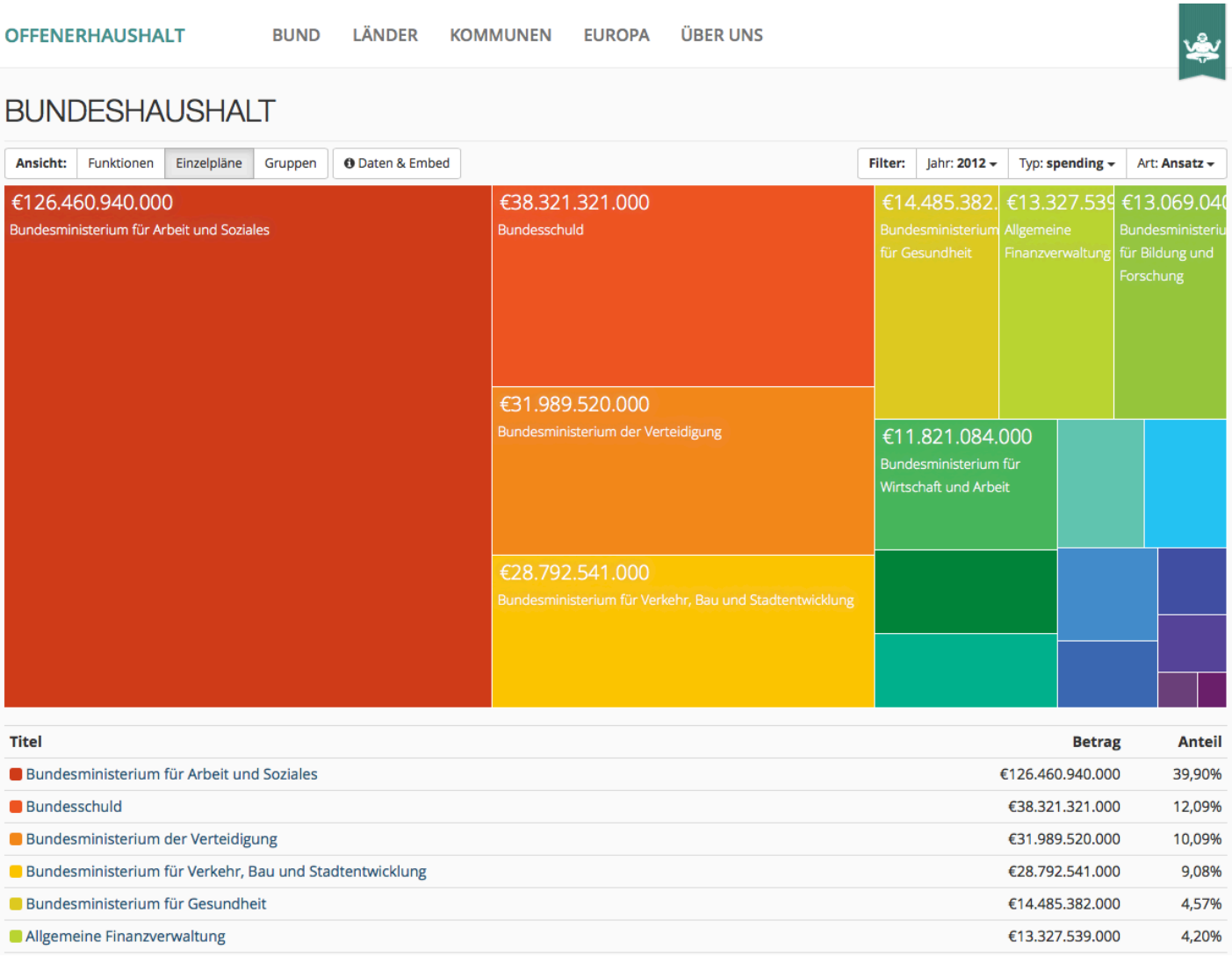
WHERE DOES MY MONEY GO?

Showing you where your taxes get spent



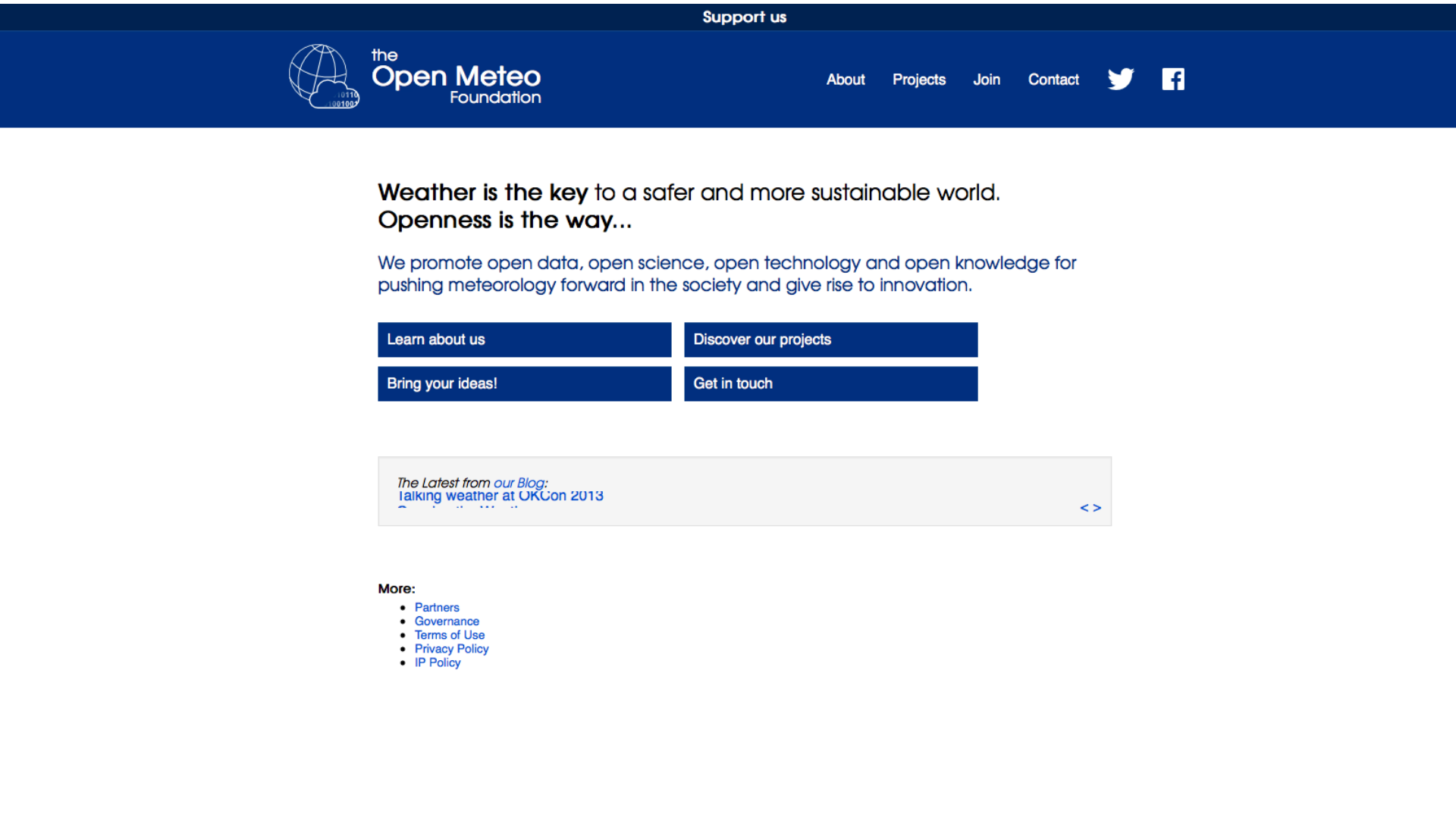


WHAT IS OPEN DATA?



Titel	Betrag	Anteil
Bundesministerium für Arbeit und Soziales	€126.460.940.000	39,90%
Bundesschuld	€38.321.321.000	12,09%
Bundesministerium der Verteidigung	€31.989.520.000	10,09%
Bundesministerium für Verkehr, Bau und Stadtentwicklung	€28.792.541.000	9,08%
Bundesministerium für Gesundheit	€14.485.382.000	4,57%
Allgemeine Finanzverwaltung	€13.327.539.000	4,20%

WHAT IS OPEN DATA?



WHAT IS OPEN DATA?

Data Journalism Handbook 1.0 BETA

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Home | Chapter: Introduction | Next: Why Journalists Should Use Data

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What Is Data Journalism?

Investigate your MP's expenses

Join us in digging through the documents of MPs' expenses to identify individual claims, or documents that you think merit further investigation. You can work through your own MP's expenses, or just hit the button below to start reviewing. (Update, Fri pm: we now have a virtually complete set of expenses documents so you should be able to find your MP's) Already created an account? Log in here.

We have **458,832** pages of documents. **32,755** of you have reviewed **225,443** of them. Only **233,389** to go...

Start reviewing

Please read our privacy policy to find out how we use your data. You must also read our terms of service. By reviewing pages, you are agreeing that you have read the terms of service, and that you agree to them.

Figure 3. *Investigate your MP's Expenses* (The Guardian)

What is data journalism? I could answer, simply, that it is journalism done with data. But

WHAT IS OPEN DATA?

News Front Page

Africa
Americas
Asia-Pacific
Europe
Middle East
South Asia
UK
Business
Health
Medical notes
Science & Environment
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Entertainment
Also in the news

Video and Audio

Page last updated at 21:32 GMT, Wednesday, 29 July 2009 22:32 UK

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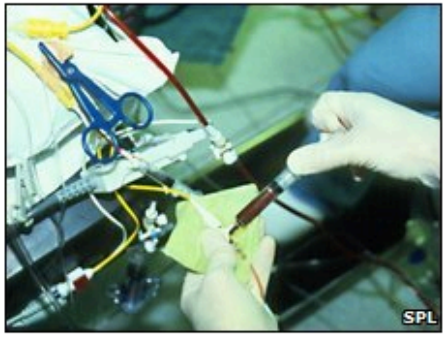
Heart surgery 'more successful'

Outcomes for adult cardiac patients in the UK have improved significantly since publication of information on death rates, research suggests.

The study also found more elderly and high-risk patients were now being treated, despite fears surgeons would not want to take them on.



Heart surgery can be extremely complicated

It is based on analysis of more than 400,000 operations by the Society for Cardiothoracic Surgery.

Experts said all surgical specialties should now publish data on death rates.

SEE ALSO
- Death data 'cuts risky surgery'
  14 Jan 05 | Health

RELATED INTERNET LINKS
- Royal College of Surgeons of England
- Society for Cardiothoracic Surgery of GB and Ireland

The BBC is not responsible for the content of external internet sites

TOP HEALTH STORIES
- Stem cell method put to the test
- Hospitals 'eyeing private market'
- Low vitamin D 'Parkinson's link'

| News feeds

PUBLIC SECTOR INFORMATION

Image: http://addurl.xyz/Government/

The White House

Office of the Press Secretary

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For Immediate Release

May 09, 2013

Executive Order -- Making Open and Machine Readable the New Default for Government Information

EXECUTIVE ORDER

- - - - - - -

MAKING OPEN AND MACHINE READABLE THE NEW DEFAULT
FOR GOVERNMENT INFORMATION

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. General Principles. Openness in government strengthens our democracy, promotes the delivery of efficient and effective services to the public, and contributes to economic growth. As one vital benefit of open government, making information resources easy to find, accessible, and usable can fuel entrepreneurship, innovation, and scientific discovery that improves Americans' lives and contributes significantly to job creation.

Decades ago, the U.S. Government made both weather data and the Global Positioning System freely available. Since that time, American entrepreneurs and innovators have utilized these resources to create navigation systems, weather newscasts and warning systems, location-based applications, precision farming tools, and much more, improving Americans' lives in countless ways and leading to economic growth and job creation. In recent years, thousands of Government data resources across fields such as health and medicine, education, energy, public safety, global development, and finance have been posted in machine-readable form for free public use on Data.gov. Entrepreneurs and innovators have continued to develop a vast range of useful new products and businesses using these public information resources, creating good jobs in the process.

27.6.2013 EN Official Journal of the European Union L 175/1

I

(Legislative acts)

DIRECTIVES

DIRECTIVE 2013/37/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 26 June 2013

amending Directive 2003/98/EC on the re-use of public sector information

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

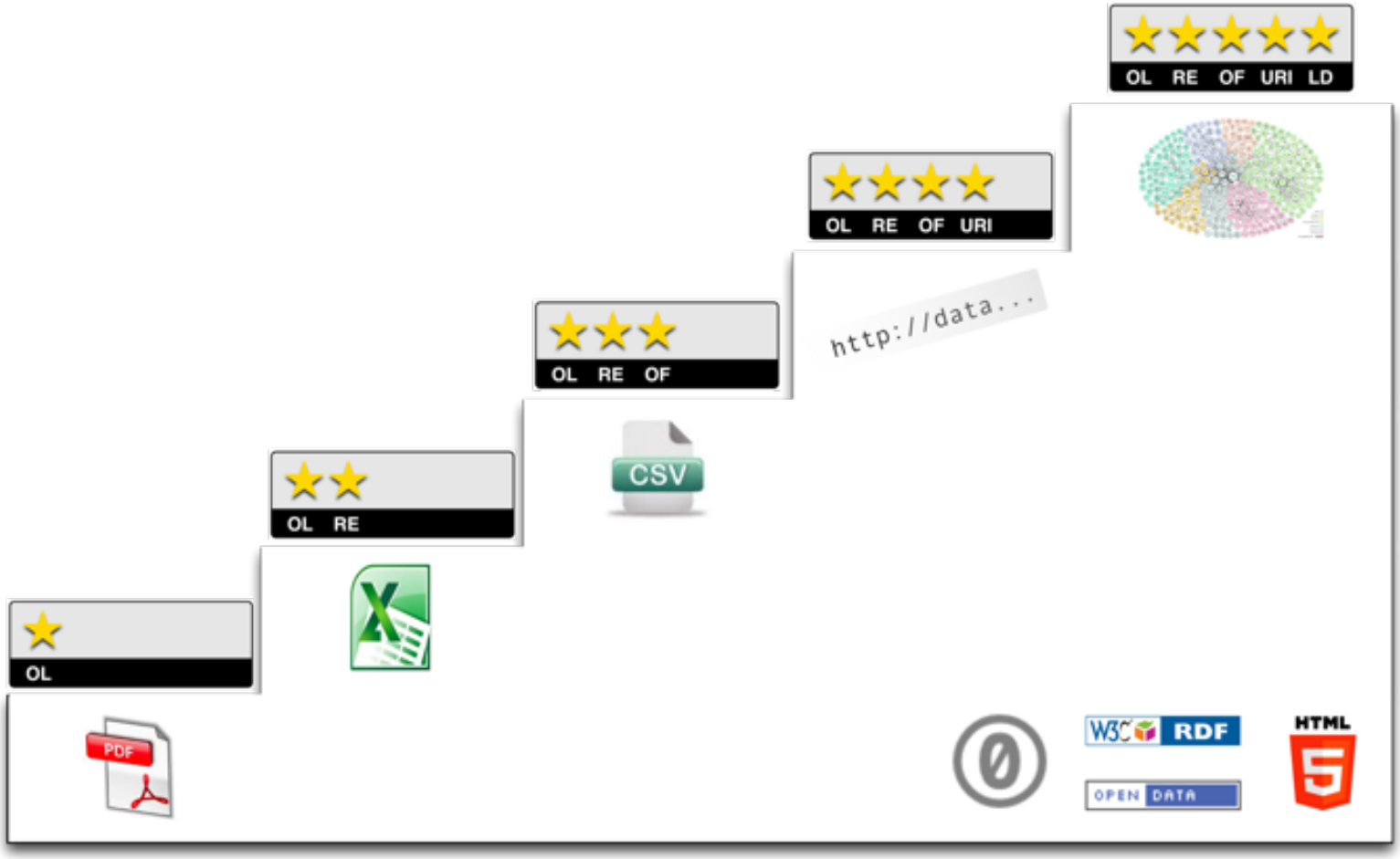
After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and

technical or financial constraints, and which promote the circulation of information not only for economic operators but also for the public, can play an important role in kick-starting the development of new services based on novel ways to combine and make use of such information, stimulate economic growth and promote social engagement. However, this requires a level playing field at Union level in terms of whether or not the re-use of documents is authorised, which cannot be achieved by leaving it subject to the different rules and practices of the Member States or the public sector bodies concerned.

(4) Allowing re-use of documents held by a public sector

HOW TO OPEN DATA?



http://5stardata.info

★ make your stuff available on the Web (whatever format) under an open license [1]

★★ make it available as structured data (e.g., Excel instead of image scan of a table) [2]

★★★ use non-proprietary formats (e.g., CSV instead of Excel) [3]

★★★★ use URIs to denote things, so that people can point at your stuff [4]

★★★★★ link your data to other data to provide context [5]

http://5stardata.info

Keep it simple.

Start out small, simple and fast. There is no requirement that every dataset must be made open right now. Starting out by opening up just one dataset, or even one part of a large dataset, is fine – of course, the more datasets you can open up the better.

Engage early and engage often.

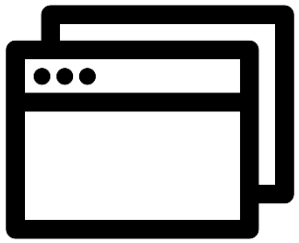
Engage with actual and potential users and re-users of the data as early and as often as you can, be they citizens, businesses or developers. This will ensure that the next iteration of your service is as relevant as it can be.

Address common fears and misunderstandings.

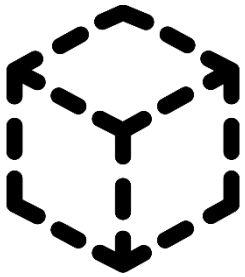
This is especially important if you are working with or within large institutions such as government. When opening up data you will encounter plenty of questions and fears. It is important to (a) identify the most important ones and (b) address them at as early a stage as possible.

- Choose your dataset(s)
- Apply an open license
- Make the data available (in bulk and in a useful format; consider API)
- Make it discoverable

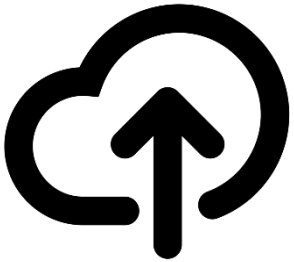
WHERE TO PUBLISH YOUR OPEN DATA?



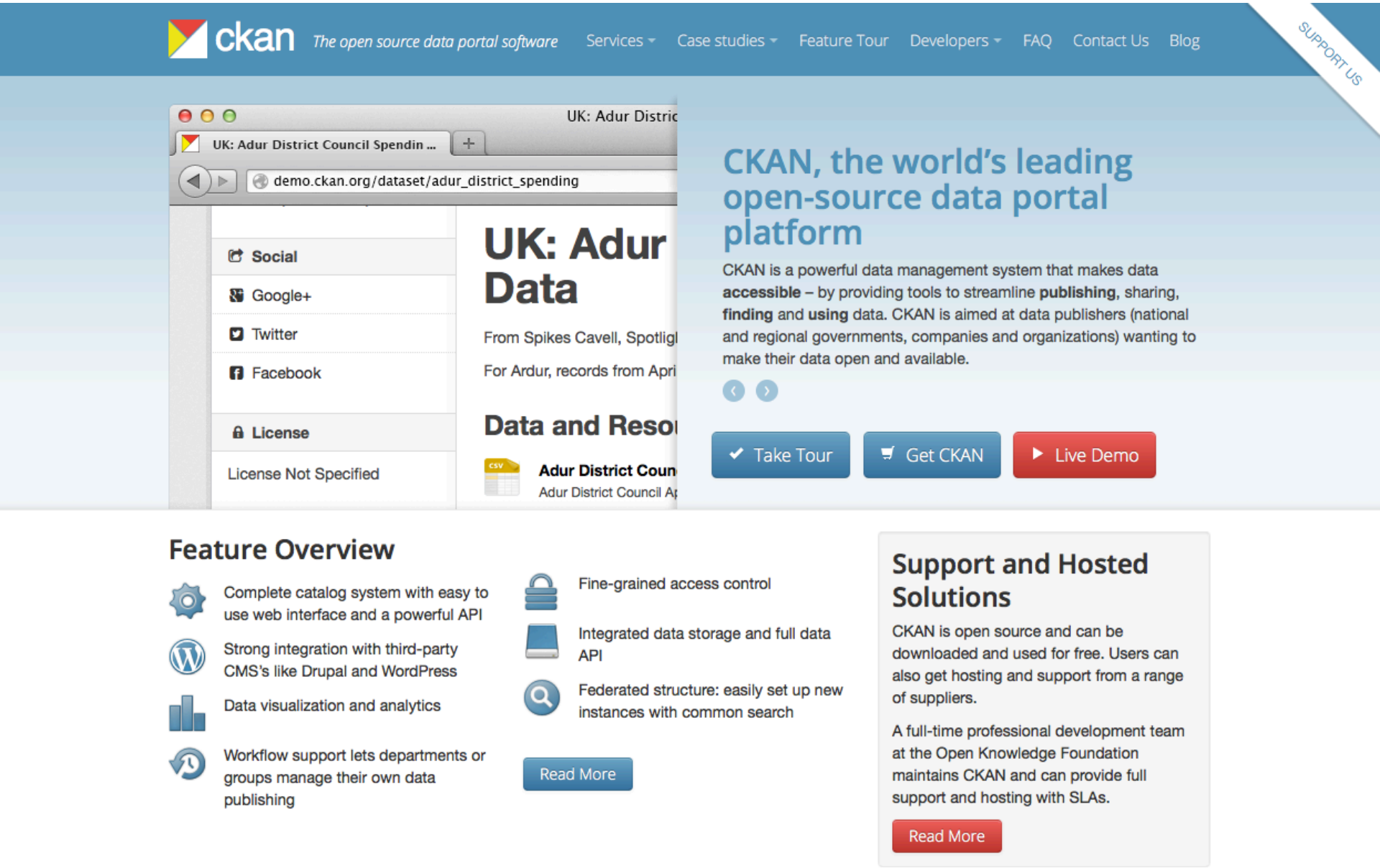
YOUR WEBSITE



THIRD-PARTY SERVICE



CONSIDER
A SPECIALIZED TOOL



http://ckan.org

Publish & find datasets

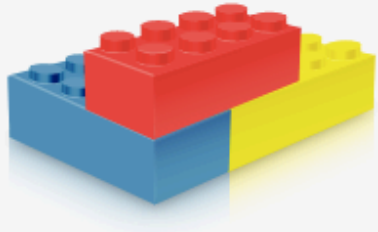
Publish datasets via import or through a web interface. Search by keyword or filter by tags. See dataset information at a glance. Full change history lets you easily undo changes or view old versions.

Store & manage data

Store the raw data and metadata. Visualise structured data with interactive tables, graphs and maps. Get statistics and usage metrics for your datasets. Search geospatial data on a map by area.

Engage with users & others

Federate networks with other CKAN nodes. Theme with CSS or integrate with a CMS. Build a community with extensions that allow users to comment on and follow datasets.



Customise & extend

Use the API's rich programming interface, and benefit from over 60 extensions including link checking, comments, and analytics. CKAN's Open Source licence allows you to download and run it for free.

Geospatial

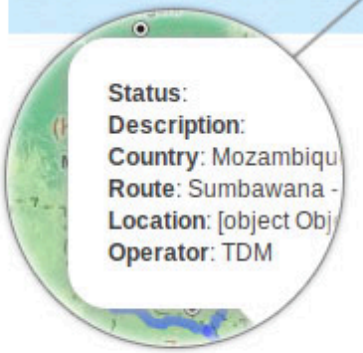
CKAN has advanced geospatial features, covering data preview, search, and discovery.

Preview

Where structured data with location information is loaded into CKAN's DataStore, CKAN can plot the data on an interactive map. The screenshot shows a map view of a sample dataset, with markers showing individual data points and full details shown for records as they are selected.

Search

CKAN can understand a location associated with a dataset, and use this to offer geospatial search capabilities via the web interface and API. A user searching for datasets can filter the results by geographical location, specifying a bounding box to limit the area the are interested in. CKAN understands different co-ordinate geometries and parses location information accordingly.



Discovery

To ensure your datasets can be easily integrated with other systems, CKAN includes tools to import geo-coded metadata in a number of formats and make it queriable ('discoverable') according to the INSPIRE standard. It can import major metadata schemas such as ISO19139, GEMINI 2.1 and FGDC can handle records hosted in a variety of ways, including the geospatial CSW standard, WAFs, ArcGIS portals, Geoportal Servers and Z39.50 databases. CKAN can also serve geospatial packages via its own CSW interface. The architecture is extensible, making it easy to support other standards and distribution services. For more detailed documentation on CKAN's geospatial functionality, see the Geospatial Capabilities documentation.

Thank you!

Paulo Rupino da Cunha

rupino@ipn.pt

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