Good Law from Open Data

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10 April 2013
Themes

• Legislation as data
• Open data as an operating model for government data
• Using Linked Data to solve complex problems
1. LEGISLATION AS DATA
The web has changed who is accessing legislation and why, just as much as it has changed access to healthcare information
Legislation as data

• Three considerations for legislation as data
  o Typographic layout
  o Versioning / changes over time
  o Semantics
Foundations - naming things

• If you visit legislation.gov.uk you will see we have taken great care with naming things

http://www.legislation.gov.uk/ukpga/2005/14/section/1

Returns an html document for United Kingdom Public General Act (ukpga), 2005, Chapter 14, Section 1

http://www.legislation.gov.uk/all?title=wildlife

Returns an html document with a list from all legislation types where the title contains “wildlife”
Some of the names are quite sophisticated…

- UK Public General Act (ukpga)
- 1981
- Chapter 69
- Section 5
- As it extends to England
- As it stood on 30\textsuperscript{th} January 2001
- Displayed as an HTML document with the timeline on

- Although URIs are opaque having this type of design changes how people use the service
European Legislation Identifier

Council conclusions inviting the introduction of the European Legislation Identifier (ELI)

Official Journal C 325, 26/10/2012 P. 0003 - 0011

Council conclusions inviting the introduction of the European Legislation Identifier (ELI)

2012/C 325/02

1. INTRODUCTION

1. Article 67(1) of the Treaty on the Functioning of the European Union provides for the constitution of an area of freedom, security and justice with respect for fundamental rights and the different legal systems and traditions of the Member States.

2. A European area of freedom, security and justice in which judicial cooperation can take place requires not only knowledge of European law, but in particular mutual knowledge of the legal systems of other Member States, including national legislation.


II. IDENTIFICATION OF THE NEEDS

4. The EUR-Lex and N-Lex portals should fulfill the objective of providing access to information about the EU and Member States’ legal systems and should serve as a useful tool for citizens, legal professionals as well as Member States’ authorities.

5. Knowledge on the substance and application of European Union law cannot be solely acquired from EU legal sources, but also from national sources, in particular from national legislation implementing European Union law.

6. The process of cooperation within the European Union has increased the need to identify and exchange legal information originating from regional and national authorities at the European level. This need is partially met by digitally available legal information and the widespread use of the internet. However, the exchange of legal information is greatly limited by the differences that exist in the various national legal systems, as well as the differences in their technical systems used to store and display legislation through their respective websites. This hampers the interoperability between the information systems of national and European institutions, despite the increased availability of documents in electronic format.

7. The use of ELI could help overcoming these problems. Using unique identifiers and structured metadata in referencing national legislation in Official Journals and Legal Gazettes, if Member States so decide, would allow effective, user-friendly and faster search and exchange of information, as well as efficient search mechanisms for legislators, judges, legal professionals and citizens.

III. IDENTIFICATION OF SOLUTIONS

8. In line with the principle of proportionality and the principle of decentralisation, each Member State should continue to operate its own national Official Journals and Legal Gazettes in the way they prefer.

9. However, in order to facilitate the further development of interlinked national legislations and to serve legal professionals and citizens in their use of these databases, a common system for the identification of legislation and its metadata is regarded as useful. Such a common standard is compatible with the principles outlined in the previous paragraph.

10. For the identification of legislation, a unique identifier should be used which is recognizable, readable and understandable by both humans and computers, and which is compatible with existing technological standards. In addition, ELI proposes a set of metadata elements to describe legislation in compliance with a recommended ontology. The European Legislation Identifier (ELI) should guarantee a cost-effective public access to reliable and up-to-date legislation. Benefiting from the emerging architecture of the semantic web, which enables information to be directly processed by computers and humans alike, ELI would allow a greater and faster exchange of data by enabling an automatic and efficient exchange of information.

11. ELI should give the Member States and the European Union a flexible, self-documenting, consistent and unique way to reference legislation across different legal systems. ELI URIs uniquely identify in a stable way each legislative act across the European Union, while at the same time taking into account the specificities of national legal systems.

12. ELI takes into account not only the complexity and specificity of regional, national and European legislative systems, but also changes in legal resources (e.g. consolidations, repealed acts etc.). It is designed to work seamlessly on top of existing systems using structured data and can be taken forward by Member States at their own pace.
Data

• All the information on legislation.gov.uk is available as open data under the terms of the Open Government Licence.

• To access the data, visit any page and add:
  - /data.xml
  - /data.rdf
  - /data.xht

• For lists
  - /data.feed
The trouble with legislation
Amending legislation

12 Charitable status of Academy proprietors etc
(1) A qualifying Academy proprietor is a charity.
(2) A “qualifying Academy proprietor” is a company—
  (a) which is limited by guarantee,
  (b) whose registered office is situated in England and Wales,
  (c) which in pursuance of Academy arrangements is the proprietor of an Academy, and
  (d) whose object as expressed in its articles or memorandum of association (or each of whose objects as so expressed) is a charitable purpose.
(3) Expressions used in subsection (2) and in the Companies Act 2006 have the same meaning in that subsection as in that Act.
(4) In Schedule 2 to the Charities Act 1993 (exempt charities), after paragraph (c) insert—
  “(ca) a qualifying Academy proprietor (as defined in section 12(2) of the Academies Act 2010);”.

Section 12 (4) amends the Charities Act 1993, inserting some words into this Act.
Bringing into force the Act

12 **Charitable status of Academy proprietors etc**

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19 **Commencement**

(1) Sections 15 to 20 come into force on the day on which this Act is passed.
(2) The other provisions of this Act come into force on whatever day or days the Secretary of State appoints by order made by statutory instrument.
(3) An order under subsection (2)—
   (a) may make different provision for different purposes or different areas;
   (b) may make incidental, consequential, supplemental, transitional or transitory provision or savings.

Sections 15 to 20 come into force immediately when the Act is passed

But what about Section 12???
So, “A” changes “B” when “C” says so

So the timing for the rest of the Act coming into force is left open for the Secretary of State to decide…
Section 12 (4) came into force 1/1/2011
“A” changes “B” when “C” says so

- Academies Act 2010 Section 19 (2)
  - Confers power
  - Secretary of State
  - Makes

- Academies Act 2010 Section 12 (4)
  - Commences
  - SI 2010/1937 Schedule 3

- Charities Act 1993 Schedule 2 (ca)
  - Inserts text into
2. OPEN DATA AS OPERATING MODEL
Why does Open Source Software work?
“The impossible public good”? 

• Large and complex systems
• Enabled by the internet
• Two elements,
  o a system of sustainable value creation
  o a system of governance
holds together a community of producers
• Distributed property rights, eg the GNU Public Licence (GPL)
Can we do the same with data?
* Thanks to Jeni Tennison, the creator of the original version of these diagrams
Publisher

Intermediary

Consumer

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Publisher

data

Intermediary

payment

service

Consumer

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Publisher

- links
- snippets
- dumps
- searches
- updates

data

Intermediary

payment

service
- provision
- integration
- analysis
- visualisation
- interpretation

Consumer

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Publisher 

Intermediary 

Consumer 

guarantees 
data 
payment 
service 
information 
customisation 

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Publisher

Intermediary

Consumer

guarantees
- accurate
- reliable
- timely

data

payment

information

service

customisation

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Publisher

Intermediary

guarantees

data

payment

Consumer

maintenance
- collection
- correction
- expertise

* Thanks to Jeni Tennison, the creator of the original version of these diagrams
Expert Participation

- Governance
- Process
- Quality
- Technology
- Culture
- Guarantees
3. LINKED DATA TO SOLVE COMPLEX PROBLEMS
Ever since the start of the Semantic Web developments, one of the issues was how to make various types of data available on the Semantic Web for further integration. Technically, this means making data available in RDF. One approach is to encode the RDF data in one of its serialization formats, i.e., RDF/XML or Turtle, but that approach does not really scale. Interfaces to databases are being developed that can, for example, provide on-the-fly conversion of data into RDF, often via SPARQL endpoints. Automatic or semi-automatic conversions exist for a number of other formats. In general it has been recognized that one should not look for one specific approach; rather, different types of data on the Web require their own, data-specific way of expressing.
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**Documents**

- Unstructured text
- HTML web pages, PDF documents

**Structured data**

- CSV files, RDF Linked Data
Linked Data

- URIs to name things
- Graph based data model
So how does Linked Data help?
Many of these are defined in legislation.
Data, data, everywhere

- Data in legislation
  - Definitions
  - Changes
  - Duties
  - Powers
  - Offences
  - Transpositions
  - Designations

- Data about legislation
  - Economic - Impact Assessments
  - Social – opinions on twitter
Concepts are defined in legislation

• What does it mean to be a company
• What does it mean to be a school
• and so on…
3 Limited and unlimited companies

(1) A company is a “limited company” if the liability of its members is limited by its constitution. It may be limited by shares or limited by guarantee.

(2) If their liability is limited to the amount, if any, unpaid on the shares held by them, the company is “limited by shares”.

(3) If their liability is limited to such amount as the members undertake to contribute to the assets of the company in the event of its being wound up, the company is “limited by guarantee”.

(4) If there is no limit on the liability of its members, the company is an “unlimited company”.

4 Private and public companies

(1) A “private company” is any company that is not a public company.

(2) A “public company” is a company limited by shares or limited by guarantee and having a share capital—
   (a) whose certificate of incorporation states that it is a public company, and
   (b) in relation to which the requirements of this Act, or the former Companies Acts, as to registration or re-registration as a public company have been complied with on or after the relevant date.

(3) For the purposes of subsection (2)(b) the relevant date is—
   (a) in relation to registration or re-registration in Great Britain, 22nd December 1990;
   (b) in relation to registration or re-registration in Northern Ireland, 1st July 1983.

(4) For the two major differences between private and public companies, see Part 20.

5 Companies limited by guarantee and having share capital

(1) A company cannot be formed as, or become, a company limited by guarantee with a share capital.

(2) Provision to this effect has been in force—
   (a) in Great Britain since 22nd December 1980, and
   (b) in Northern Ireland since 1st July 1983.

(3) Any provision in the constitution of a company limited by guarantee that purports to divide the company’s undertaking into shares or interests is a provision for a share capital.

   This applies whether or not the nominal value or number of the shares or interests is specified by the provision.

6 Community interest companies

(1) In accordance with Part 2 of the Companies (Audit, Investigations and Community Enterprise) Act 2004 (c. 27)—
   (a) a company limited by shares or a company limited by guarantee and not having a share capital may be formed as or become a community interest company, and
   (b) a company limited by guarantee and having a share capital may become a community interest company.
Designation

The Whole of Government Accounts (Designation of Bodies) Order 2012

SCHEDULE

Designated Bodies for 2011-2012

Central Government, Public Corporations etc.

ABF: the Soldiers’ Charity
Advantage West Midlands
Advisory Conciliation and Arbitration Service
Agriculture and Horticulture Development Board
Appointments Commission
Armed Forces Pension Scheme
Arts and Humanities Research Council
Arts Council of England
Arts Council of England Lottery
Arts Council of Wales
Arts Council of Wales National Lottery
Audit Commission
## Transposition

<table>
<thead>
<tr>
<th>Articles</th>
<th>Objectives</th>
<th>Implementation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(1)</td>
<td>This Directive establishes a minimum set of rules governing the re-use and the practical means of facilitating re-use of existing documents held by public sector bodies of the Member States.</td>
<td>Minimum set of rules in UK in the Regulations.</td>
<td></td>
</tr>
<tr>
<td>1(2)</td>
<td>This Directive shall not apply to:</td>
<td>Regulation 5 contains exclusions from the Regulations</td>
<td></td>
</tr>
<tr>
<td>(a)</td>
<td>documents the supply of which is an activity falling outside the scope of the public task of the public sector bodies concerned as defined by law or by other binding rules in the Member State, or in the absence of such rules as defined in line with common administrative practice in the Member State in question</td>
<td>Regulation 5(1)(a)</td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>documents for which third parties hold intellectual property rights</td>
<td>Regulation 5(1)(b)</td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>documents which are excluded from access by virtue of the access regimes in the Member States, including on the grounds of - the protection of national security (i.e. State security), - statistical or commercial confidentiality</td>
<td>Regulation 5(2)</td>
<td>Over implementation is required in order to address the relationship between information access legislation and re-use. If we had not over implemented this provision all information exempt from the Freedom of Information Act by virtue of being “accessible to the applicant by other means” (for instance all publicly available</td>
</tr>
</tbody>
</table>
What changes to the law improved the conviction rates?
What changes to the law improve the conviction rates?

Changes to legislation

legislation.gov.uk
What changes to the law improve the conviction rates?

Changes to legislation

Conviction rates statistics

legislation.gov.uk
Justice
What changes to the law improve the conviction rates?

Changes to legislation → Linked Data Standards → Conviction rates statistics

legislation.gov.uk

Justice
Final thoughts

“We shape our tools and they in turn shape us”
– Marshall McLuhan