

European PSI Platform
Topic Report: local and regional PSI re-use open data initiatives

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Title Regional and local PSI re-use: open data initiatives

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Abstract

This report describes the recent progress being made in improving access to local government data for re-use, catalyzed by Open Data initiatives, reflecting some of the mechanisms which are being deployed. It summarises some apparent issues which remain to be resolved and outlined some initiatives and possible ways of improving discovery and access across localities and borders.

Keywords

Local, regional, Open Data, Apps, hack

1 Introduction

Until quite recently, the re-use of data held by local authorities – as opposed to central government - has been seen as relatively unconquered territory throughout most EC member states.

According to the third annual survey carried published by PSI Consulting on the situation in the United Kingdom, in 2008 (the UK has been considered to be one of, perhaps the most, advanced member states in terms of PSI re-use in general).

- 25% of over 400 Local Authorities contacted, failed to respond at all, indicating low levels of interest or perceptions of relevance.
- Well over 50% indicated that they had not yet prepared an Information Asset Register (IAR), three years after the initial transposition of the PSI Directive, which included this requirement, into UK law. A small number (14) indicated that they were in the process of doing so.
- About a further 15% regarded a 'Publication Scheme' as a de facto IAR, although the former are not necessarily constructed or intended to function as an IAR and do not generally address the potential for commercial re-use of PSI.
- Well over 50% indicated that they had not yet adopted the OPSI Click Use License (recommended best practice in the UK at that time), whereas only 12 indicated that they might consider it in future. The clear majority of Local Authorities admitted openly to having no clearly defined terms, conditions and charges governing the release and exchange of Information

- http://ec.europa.eu/information_society/activities/egovernment/action_plan_2011_2015/docs/s10_752_en.pdf²⁵⁴ Local Authorities indicated that no requests for re-use had been received from the private sector whatsoever, whereas only 47 had received at least one

At that time, little data was published by local government or other local bodies, although a small amount of local data was published by central government. Basic information such as lists of councils, councillors and dates of meetings were not available as reusable data and local Council websites were often rather difficult to navigate.

In all, this somewhat lifeless landscape represented not only a lack of interest in supporting commercial re-use on the part of the local government, but suggested strongly that the business sector lacked an awareness of the powers and rights contained within the PSI Regulations to allow re-use.

There was little evidence of a significantly better situation in any other Member State in terms of locally held data.

Yet, at the same time, there was and is a clear interface between local government information in fields such as land, property, urban and rural planning and the environment and potential demand for commercial re-use. The economic importance of local geospatial data (such as addresses) has long been recognized, but had given rise to some conflicts between public and private sectors and in some cases between public sector bodies) often borne out of a drive by the public sector to generate revenue from its assets. Data on most areas of public life: politics, law, demography, urban planning, transport, telecommunications, environment, energy, health, culture, sport, roads, housing, citizenship, etc. are produced at local level.

Equally, cities and municipalities in many countries such as Canada, France, Germany and Netherlands have been the level at which PSI re-use is most visible and provide the context in which the impact on peoples' surroundings and identified needs of applications based on re-use are most likely to be seen. Arguably the threshold for gaining access to PSI is also likely to be more approachable at local level.

As this line of thinking has evolved in recent years, the role of the individual as citizen rather than as commercial entity has assumed a more prominent position (it is perhaps noteworthy that US Federal Law however makes no distinction between the two in this context).

Local and regional open data portals

Since 2008, a significant transformation of philosophy and approach has started to transform the picture. The catalyst for this is the progress in acceptance gained by the Open Data movement. Reflected by Commissioner Neelie Kroes clear message 'Yes to open data'¹ at the end of 2010, in the broad context of e-government policy.

As yet, this is more pronounced in implementation in some parts of Europe than others, but it is spreading quickly. A plethora of open data initiatives has started to come on stream and many of these are at local level, perhaps re-emphasising the point that locally-held data often represents comparatively low-hanging fruit.

¹ http://ec.europa.eu/information_society/activities/egovernment/action_plan_2011_2015/docs/s10_752_en.pdf

ePSIplatform has reported on the emergence of open data catalogue initiatives ² (it is not alone in doing so) and began by defining three possible categories for them.

1. Catalogues by Governments with access to raw data in formats such as XLS, XML, CSV etc.
2. Government Information Portals with no or limited access but potential to evolve in that direction
3. Catalogues produced by Civil Society initiatives, represented by individuals, digital activists or non-governmental organisations

The early list in Category 1 (there are fewer visible initiatives relevant to local and regional data in the other two categories as yet) included a substantial proportion of European initiatives at local and regional level, including those in

- France (Rennes): other municipalities and regions coming on stream include: Bordeaux, Brest, Montpellier, Paris, Toulon, Marseille and Provence
- Ireland (Fingal)
- Italy (Piemonte);
- Spain (Asturias, Basque Region, Zaragoza etc.) to which the Balearic Islands and Navarra can now be added;
- United Kingdom (Bristol, Kent, Lichfield, London, Manchester, Northern Ireland, Sutton, Trafford and Warwickshire etc.)

In addition there are a number in Australia, Canada and the USA.

In the UK, which was again probably the early leader in this area, friendly rivalry between localities to become the most 'open' has been nurtured. The UK government has committed to giving the public a 'Right to Data' at all levels of government and a new lightweight Open Government Licence has become available. Local councils were told to start publishing all spending over £500, contracts and senior salaries in open, standard form by January 2011. Street level crime data is being published

Even so, by December 2010, the UK Councils Open Data Scoreboard showed only 37 out of 434 local authorities as yet publishing open data, of which 31 could be considered truly 'open'

Increasing momentum has become evident in the first few months of 2011, through initiatives in major cities in Austria, Finland and (perhaps especially) the Netherlands

The **Helsinki Infoshare**³ project is a joint effort by Helsinki and surrounding municipalities to make available PSI for re-use. The regional data catalogue is based on CKAN, a free and open source software also in use at official data catalogues in the UK and the Netherlands. The web-based service makes public data from the Helsinki Region, such as statistics and forecasts, available for anyone to use, free of charge and enables feedback on data needs from application developers and other users. The core idea of the Helsinki Region Infoshare project is that opening public data and making it available for users helps to create new services and business in the region. Making data publicly available is also intended to facilitate research and development. It is intended to increase the participation of citizens and their understanding of their housing areas. The data can be used to monitor, analyze and visualize social phenomena.

² http://www.epsiplus.net/psi_data_catalogues

³ www.hri.fi

Enschede (Netherlands) has recently declared itself an 'Open Data City' with a short term action plan designed to; identify which data sets are easiest to release right now; index what other data sets are there, and how to release them; make sure that third parties that provide data and systems to the city do so in ways that freely allow re-use; and create a data catalogue.

Rotterdam Open Data, has been under way for some time now and involves students in building applications based on local government data.

Vienna has also announced an open government strategy including the forthcoming publication of an open data catalogue.

The rise of Apps and hacks

Key to the emergence of Open Data initiatives has been the emergence of 'Apps' based on government data. Topic report 18⁴ 'The rise of the App: a PSI opportunity' describes this phenomenon in greater detail.

Apps have been promoted by a fairly consistent range of mechanisms with 'cool' overtones such as competitions or 'hackathons'. The meaning of the verb 'to hack'⁵ in the context of information technology has begun to be transformed from its former illicit connotation to a much more positive sense of an opportunity for developers to utilise openly available data in a creative way, often with the collaboration of local government departments.

The recent annual Hack de Overheid (hack the government) event held in Amsterdam, in conjunction with the Apps for Amsterdam competition was such an example.

A list of some of the Apps created on that day gives a flavor of the way in which local government data is being reused in this kind of context:

- Amsterdam Time Machine, displaying artefacts from the collection of the Amsterdam Historic Museum on a time line.
- A toilet finder, mapping public toilets in Amsterdam.
- Check in for public services, a mobile App allowing discovery of a number for any public service and where and when the service can be conveniently obtained.
- A mobile App displaying the actual arriving time of a bus or tram for stops near someone's current location, using real time position data of buses in the city.
- A website mapping reports of incidents (trash on the street, fallen trees etc.) from a historical database.
- The Amsterdam Quiz, a mobile game seeking identification of the place where a photo was taken.
- The fastest ferry for those who need to cross a river in Amsterdam.
- An Energy Label App which shows the energy efficiency ranking homes in a neighborhood.
- Neighborhood sentiment. Visualizing the tone in which way various neighborhoods are mentioned in the news feeds of a local TV station.
- A layer for a mobile augmented reality browser that shows the way to the nearest handicapped parking space.

⁴ http://www.epsplus.net/topic_reports/topic_report_no_18_the_rise_of_the_app_a_psi_opportunity

⁵ http://en.wikipedia.org/wiki/Hack_%28term%29

- Two visualizations of the Amsterdam budget using a visualization tool.

The driving forces behind opening up local government data are frequently presented as including the following:

- greater transparency,
- more interoperability
- more citizen participation
- more open government
- better public services
- Increased economic value.

Increased collaboration, participation and public feedback and commitment are envisaged, together with improved data quality, achieved through approaches such as multi—sourcing, involving public and private sources (crowdsourcing).

However, among the issues identified at the ePSIplatform meeting focusing on local and regional data, organized at Rennes in November 2010⁶ and becoming apparent elsewhere, are the following, some of which may take time to resolve:

- How do developers, beyond the first phase of enthusiasm, make a living in the open data world? What business models and income streams are achievable from the reuse of local data?
- More generally, in the spirit of the current PSI Directive, whilst it is clear that local data Apps may improve the general social climate and the environment in which local business can take place, is there likely to be an extensive (or measurable) expansion of the commercial market, as intended by the original legislation on PSI re-use?
- Equally, in times of economic retrenchment, how can the value of public investments in maintaining open data be demonstrated?
- Privacy. A number of the Apps developed at hack days etc. (e.g. those in Amsterdam, above) appear to have the potential to infringe individual privacy. These issues will require working through carefully in the time to come.

In future the drive in developing applications, whether regional, national or cross-border, based on local data is likely to require access to data from more than one locality and in some cases from many localities

The question of how to provide access to those who wish to discover data for reuse across local and national borders is likely to become increasingly apparent. The issue of joining-up PSI Discovery was discussed in greater detail in Topic Report 8.⁷, which pointed to the need for services with wide European coverage in a mobile and cohesive Europe, citing a statement in the⁸Digital Agenda for Europe, one of the EU's 7 flagship programmes, about of the continuing problem of fragmented digital markets:

⁶ http://www.epsiplus.net/news/events/opendata_and_re_use

⁷ http://www.epsiplus.net/topic_reports/topic_report_no_8_psi_portals_overview_of_progress_part_1

⁸ <http://openlylocal.com/>

'Europe is still a patchwork of national online markets and Europeans are prevented by solvable problems from enjoying the benefits of a digital single market. Commercial and cultural content and services need to flow across borders'.

Evidence presented at the ePSIplatform meeting in Madrid in June 2010, suggested that many would-be re-users find the task of securing access to data across European borders a formidable one, which is deterring the creation of new products and services.

Any solution to this as far as Open Data from local government is concerned is likely to be iterative and to involve addressing significant questions of interoperability as well as consideration of standards and infrastructure.

In the United Kingdom, the Openly Local initiative⁹ screen-scrapes basic information from local council websites and combines this with data from central government such as statistical and demographic information and boundaries. An ever growing number of councils, councilors, meetings and financial transactions etc. is covered. This is all available as open data (XML, JSON, RDF) under Open Database Licence

At European level, the cultural sector provides one possible model through its Europeana¹⁰ initiative which has gained a high level of political and funding support from the Commission and Member States and is putting together a substantial cross-domain infrastructure for metadata aggregations throughout Europe, built on common standards for interoperability and has by this means so far succeeded in accumulating almost 17 million metadata records linked to cultural objects.

Interestingly, about 25% of these have been sourced from a sample of cultural institutions at local and regional level, through the three year Best Practice Network, Europeana Local¹¹. The Europeana index itself is now the subject of a forthcoming hackathon experiment.

The ability of the central service in this context to authorize re-use is a complex matter, currently under investigation. Hitherto, emphasis has been placed on strengthening the Public Domain and the development of Creative Commons-style licencing.

Likewise the use of Linked Open Data (see Topic Report 7 –linked data and government¹² for a more detailed discussion) may provide a less centralized approach to stitching together local data over time.

Conclusion

The impetus provided by the Open Data movement to the accessibility and reusability of local data is already substantial and increasingly visible. Its future sustainability and the ultimate economic and social rewards which flow from it beyond the initial stage of excitement are likely to depend on sustained effort, across a widening range of countries, both in the current viral and civil society modes and as time goes by, towards greater consideration of economic outcomes and the need for infrastructure.

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¹⁰ <http://www.europeana.eu/portal/aboutus.html>

¹¹ <http://www.europeanalocal.eu/>

¹² http://www.epsipius.net/topic_reports/topic_report_no_7_linked_data_and_government

Some relevant recent news items from ePSIplatform

Europeana Hackathon

Two days long developers will create apps with Europeana metadata, April 1st and 2nd.

Helsinki Region Infoshare Data Catalogue Launched

The Helsinki Region Infoshare project as officially launched its data portal.

Rotterdam Open Data, Free Beer and Pizza

Rotterdam started a series of informal meetings with students to stimulate PSI re-use.

13 Apps for Amsterdam in 1 Day

The Hack de Overheid event in Amsterdam last weekend yielded 13 Apps reusing PSI in 6 hours of programming.

Vienna Goes Open Government

The Vienna government announced an open government strategy.

Balearic Open Data Portal Launched

The regional government of the Balearic Islands announced their open data policy and the launch of a dataportal.

Navarra Open Data Portal Launched

The region of Navarra launched an open data portal.

The Role of Citizens in Nantes Open Data

Nantes civic organization Libertic, celebrating the city's decision to release data, explains the role of citizens in the process.

UK: Local Govt. adopts Open Government Licence

The Uptake of the Open Government Licence by local authorities continues to grow!

Paris Data Portal Live

Paris, capital of France, has launched a data portal for local government data.