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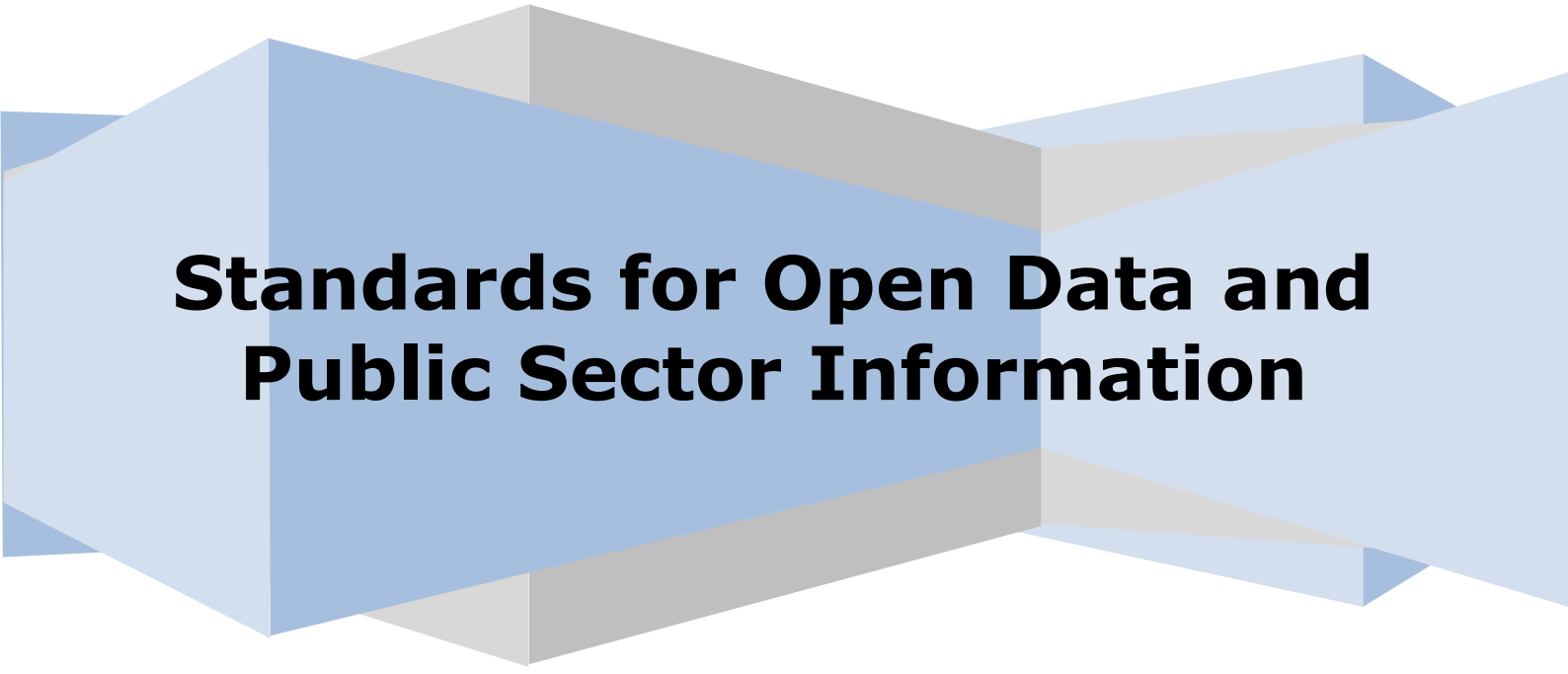
Report on the second workshop

Encouraging open data usage by commercial developers



Standards for Open Data and Public Sector Information

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Executive Summary

Share-PSI 2.0 is organising a series of workshops throughout 2014 and 2015, each focussing on a different aspect of public sector information.

This report provides a summary of the second workshop which was hosted by the Portuguese Agency for Public Services Reform, AMA on 3 and 4 December 2014.

1 Introduction

The second Share-PSI workshop was very different from the first. Apart from presentations in two short plenary sessions, the majority of the two days was spent in facilitated discussions around specific topics. This followed the success of the bar camp sessions at the first workshop, that is, sessions proposed and organised in an ad hoc fashion, enabling people to discuss whatever subject interests them.

Each session facilitator was asked to focus on three key questions:

- What X is the thing that should be done to publish or reuse PSI?
- Why does X facilitate the publication or reuse of PSI?
- How can one achieve X and how can you measure or test it?

This report summarises the 7 plenary presentations, 17 planned sessions and 7 bar camp sessions. As well as the Share-PSI project itself, the workshop benefited from sessions lead by 8 other projects. The agenda for the event includes links to all papers, slides and notes, with many of those notes being available on the project wiki. In addition, the #sharepsi tweets from the event are archived, as are a number of photo albums from Makx Dekkers, Peter Krantz and José Luis Roda. The event received a generous write up on the host's Web site (in Portuguese).

1. Opening Presentations, Workshop Themes

> Amanda Smith: "It's not sufficient to just make available the data. For a successful #opendata initiative you have to engage with the community"

The event was generously hosted by Portugal's Agência para a Modernização Administrativa (AMA). Its president, Paulo Neves, stated in his opening remarks that it is expected that open data will have great impact on economic, political and research level. He made 4 key points:

1. It is not sufficient just to make data available, you have to build communities around the data for using and re-using it. That is the way to prove which information is more essential to be opened.
2. We should guarantee the quality of the published data. Maintaining the quality of data is a difficult task, but it has to be ensured if others are to create value from it.
3. Opening, making available and publishing data has a low priority level among politicians, since they have to deal with problems that are crucial for citizens living standards.
4. Nevertheless, the objective for the Portuguese government is to provide open data by default as part of its daily process.

AMA's João Vasconcelos continued this theme is his plenary talk. Openness means more responsibility – exposure, accountability – but it also means more strength. How can citizens trust governments if government doesn't trust the government? This was an echo of the sentiment expressed on behalf of the Greek government in Samos. AMA recognises 3 pillars of open government: (a) transparency, (b) participation, and (c)

collaboration. But openness is also a matter of economics. An Open government is also a smart government.

These ideas are being put into practice with portals for public software as well as public data, and new laws that require Portuguese public administrations to adopt interoperable standards and a comply or explain policy in favour of free open source software over proprietary alternatives.

Like Paulo Neves, the deputy head of the Data Value Chain unit at the European Commission, Beatrice Covassi, used her speech to emphasise the importance of community building. In that context there is a clear need to foster open data policies and to develop an adequate skills base of data professionals.

To strengthen Europe's Big Data community and help lay the foundations for the thriving data-driven economy of the future, the EC signed a Memorandum of Understanding for a Public-Private Partnership (PPP) on Big Data. The EC has earmarked over €500 million of investment that private partners from industry are expected to match at least four times over. To prepare this process, meetings take place on a regular basis in the PSI Expert Group which consists of representatives from the EU Member States. The EC also provided guidelines on charging, data sets and licenses. Open data should generally be accessible and available for all, at zero or at very low cost. Due to the fact that materials in national museums, libraries and archives now fall under the scope of the revised Directive, there will now also be access to more exciting and inspirational content.

Beatrice referred to the Open Data 500 project in which she was involved. The Open Data 500 is the first comprehensive study of U.S. companies that use open government data to generate new business and develop new products and services.

A European example of engaging the private sector in the implementation of open data policies is the Open Data Users Group established as part of the UK's Open Data strategy. Amongst others, it helps to build business cases on how additional government funding for the free release of data should be prioritised. Another example is the Spanish government's regular assessment of the impact of PSI re-use on the national market and its dialogue with the private sector data re-users. It would be good to see more of such engagements of Open Data re-use in commercial contexts in the EU-28.

Beatrice Covassi: Combination of #opendata & closed data creates added value. Variety, quality & legal certainty needed.

The subject matter for the Lisbon workshop: Encouraging open data usage by commercial developers, was also the one chosen for the 2014 Open data Day in Flanders. This was the third annual event in the series and its organiser, Noël Van Herreweghe, used it to ask the open data community what their expectations and recommendations were with respect to things such as the relevance of defined open data policies, the availability of data feeds, standards, challenges, opportunities etc. From that event, a long list of conclusions was drawn up.

In summary: we need a reality check. open data, even when freely available, is not free to use since so much time has to be spent cleaning it up, converting it, integrating and maintaining it. There is a marked difference in approach between government and business. One provides long term investment and slow innovation, but the opposite is true for business, especially activists. Start-ups innovate quickly but are in it for the long haul.

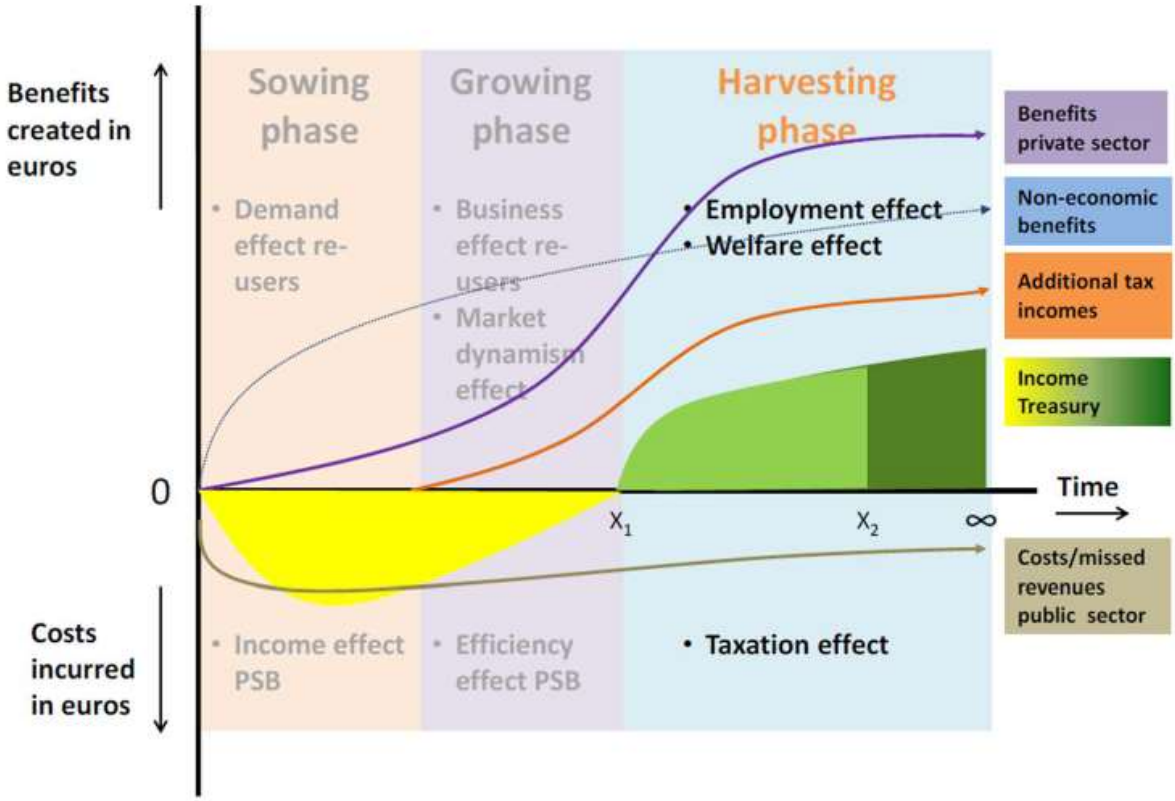
Businesses prefer stable, complete data to simply 'more data' and demand Service Level Agreements. And

greater stability can only come from a uniform legislative framework.

This last point was picked up in several of the LAPSI sessions (the LAPSI project focuses on the legal aspects of the PSI Directive and so complements Share-PSI). To what data do citizens actually have right of access? It's commonly agreed that personal information should only be available to the individual concerned but the legal barriers to releasing some data, such as tax data in the Czech Republic, are mixed up with privacy issues that only specialists can understand. Therefore the decisions about what data should be made available are often being taken by a very small number of individuals. What's needed is a mixture of legislation and a general culture that is inclined towards sharing. This supports the view from the session on incubators that feedback from the users, including businesses, is essential if the benefits of actively making PSI accessible.

In their paper and presentation, Marc de Vries (The Greenland) and Georg Hittmair (Compass/PSI Alliance) set out the context and original expectations for PSI. Experience has shown that the results are different than expected and a lot harder to measure. The value is non-linear and often non-monetary which makes it hard to measure and correlate.

Paul Suijkerbuijk: Opendata, not a value chain, it is a value network.



The economic effects and their time span. Only Denmark is already on the right hand side of this graph having released all its geographical and cadastral data.

They made the case for a stable framework and new business models that include:

- a clear value proposition
- marketing model
- profit model

Marc and Georg were among the many workshop participants to argue that the demands of users need to be recognised and responded to. If a user requests a dataset, the chances are they have a business model behind the request. Policies need to be in place that take proper

> Harris Alexopoulos: Governments already know which the valuable datasets to be published are. They charge for them!! says Marc de Vries

account of privacy concerns with a suitable redress mechanism in place to settle disputes. This will only happen if (potential) businesses are made aware of the commercial re-user rights rather than data being published as if it's a gift of ill-defined merit.

A number of key suggestions for improvements were offered:

- strict national provisions regarding charging;
- service Level Agreements secure investments;
- standardised interfaces reduce the developers efforts;
- liability clauses are helpful in many cases;
- no restrictions regarding distribution channels (resellers …)

App contests are all well and good but the outcomes are rarely based on sound business models and it's hard to avoid the suspicion that the public sector body is looking for a diversion from publishing the really valuable data.

2. Hackathons

Perhaps surprisingly for a workshop about encouraging commercial use of PSI, there was only one session dedicated to the subject of hackathons. There was general recognition that these events often don't lead to anything as businesses generally have little interest in the applications developed – they develop their own applications under very different circumstances.

Alberto Abella & Emma Beer (OKF), Amanda Smith (ODI and Simon Whitehouse (Digital Birmingham) lead the session on events, hackathons and challenge series - stimulating open data reuse. This was one of the sessions held in the Anfiteatro (amphitheatre)

Success stories from hackathons begin with the problem, not the data. An example comes from Scotland where the problem was stated as: how do we improve health in our country and what are the constraints on spending and the ageing population? A blueprint for a new system was created at a hackathon that then turned into a successful, government-backed open source ecosystem, with the prototype developed by an ex-nurse who happened to be able to code. Challenges were the quality of the data and the willingness of certain government entities to open up. There were clear benefits for all which explains the success of this project. One way to encourage this in future is to have one or more domain experts present at hackathons.

Often though, hackathons start with the data and 'the use of open data' is not a priority for investors. It's not just data publishers and businesses who have different agendas. Many hackers see hackathons as a social occasion, whether or not they do any coding. It is for these reasons that what often look like really good ideas for bringing investors and project leaders together may have disappointing results. Hackathons are, however, good for proofs of concept and to demonstrate to people within organisations that open data has a value and that open data programmes have internal credibility.

3. Business Models

The importance of business models was highlighted in a session lead by Clemens Wass of openlaws.eu and Fatemeh Ahmadi, Insight Centre for Data Analytics. Repeating a lesson from the hackathon session, the world view held by the public sector is different from that of the commercial sector. Although public sector bodies should not be concerned, or try to influence, what their data is used for by others, they do need to understand the kind of business models that exist around their data.

At what point does the public sector compete with the private? Publishers in Austria complained when government legal data was made available for free and a period of adjustment followed where it was understood that, while the data was available for free, services built on top of that data could be provided by the commercial sector.

Different business models apply to different types of data. For example, transport data is very different from legal data.

In the session run by Ingo Keck of the Centre for Advanced Data Analytics Research, participants worked to sketch out a number of different business plans. In each case there were three key questions to answer:

1. What is the need that the business fulfils?
2. What is the market?
3. How is your business unique?

Two very different businesses were discussed. One centred on data quality services – adding value to data by cleaning, standardising, describing and linking the data and then selling it as a service (Data-Publica is an example of such a service). The other, 'Know Your Neighbourhood,' would offer information about services available in a given area that might be useful to residents, businesses looking for the best location etc. Consistent availability and openness of the data were found to be crucial for business development.

Both of these ideas would be classified as infomediary companies in Spain, the topic of two studies into the sector presented by Dolores Hernandez of the Ministry of Finances and Public Administrations. Although her remarks were prefaced with with caveat that the two studies conducted in 2011 and 2012 were not scientifically rigorous, the slides include many interesting statistics that are at least indicative. For example, it is estimated that the infomediary sector employs around 4,000 people in Spain and generates up to €550M per year directly from infomediary activities (around half of the relevant companies' turnover).

The most valuable PSI concerns geographic/cartographic data and company data and, as well as companies and self-employed individuals, 65% of infomediary companies cite the public sector as a client. In other words, they are deriving value from processing and selling PSI back to the public sector. Fully one third of infomediaries have overseas clients so that PSI can be seen as an export earner too. Payment per access is the most common revenue model, employed by more than half of Spanish infomediaries with products like processed

data and generic reports being dominant, more than 60% of which are delivered as PDF documents.

Dolores ended her presentation with a list of demands from the infomediary sector to increase the re-use culture:

- increased coordination and clear leadership by public administrations;
- recognise the differences between Spain's autonomous regions to ensure a common market;
- better regulation through modification of existing rules as well as new ones;
- culture change should be seen as a mechanism for collaboration, not confrontation.

Dietmar Gattwinkel, who heads Saxony's Open Government Data project, lead a session dedicated to infomediaries. Again, it's the geo and business data that is the most commercially viable, things like the number of residences and residents in an area, planning; dates of incorporation, size of company, turnover etc. For these areas there is already a competitive market between multiple players.

The discussion in that session looked at the boundary between the public and private sectors, how the political aims interact with the business need, what role data portals should and do play cf. data aggregators, visualisations etc. These boundaries and roles need to be more clearly defined, perhaps to encourage the commercial development of brokerage services and applications that might distract from more fundamental tasks of providing standardised, DCAT-based, access to repositories, perhaps over a Content Delivery Network. This perhaps conflicts with, for example, the Portuguese plans and highlights the lack of clarity over what role is to be performed by which sector.

Another topic was the increasingly common notion of moving computation to where the data is rather than moving the data. A search engine is an example of this. You send a small amount of data (the query), the computation is done in the cloud and the results are delivered back to you. This offers a possible route to addressing privacy concerns as control remains within the service.

Noël: We have a rule of three in Belgium: If you can bring it down to 3 people that it is privacy. Also we should treat that as a risk. If we fear risks we should stop building roads

A final topic in the session centred on privacy, an issue that shows distinct differences in different countries. Privacy is often used as a smokescreen for other motivations not to publish PSI but in reality it's about granularity.

Linda Austere, Michele Osella waiting for the signal from Phil Archer to encourage people to come to their session (Xenia Beltran and Nikolay Tcholtchev are hidden from view)

4. From Wow to How?

Michele Osella from the Istituto Superiore Mario Boella lead a session that asked how we go from the wow – the billions of Euro cited as the potential of open data in various consultants' reports – to the how, that is, how to realise that potential. There were three primary conclusions:

- there is a need to educate potential entrepreneurs about what open data is and is not;
- access to data is essential of course;
- data must be maintained in terms of quality, frequency of update, formats and licences.

The second and third of these are inherited from upstream, i.e. from the relevant public sector body that holds the data. If there is no demand for the data, the public sector can carry

on not publishing it and no one will notice so the requests for data need to be made clearly by citizens.

Linda Austere, Michele Osella waiting for the signal from Phil Archer to encourage people to come to their session (Xenia Beltran and Nikolay Tcholtchev are hidden from view)

The cost of publishing PSI is rarely recouped by the publishing public sector body. Where PSI is published, it is often done due to obligation or even because it is currently fashionable. Ultimately we need evidence to show to policy makers that opening data vaults is not a cost but it will bring benefits. Opening data will be beneficial for governments according to an inward orientation: no more open data as a fad or an obligation, but as a necessity.

Michele developed these ideas further in a joint bar camp session with Paolo Dini of the LSE. The discussion centred around the notion of a non-capitalist market, a different socio-economic model that can encourage collaboration between the public and private sectors and that can support both equally. This would reinforce constructive interaction between social and economic spheres, and democratic participation and trust. It might even include the creation of a new type of non-commodity money (a zero-interest mutual credit system) with broad participation by all stakeholders. Another bar camp session on overcoming resistance to publishing data, lead by Cristiana Sappa and Muriel Foulonneau, focused on the cultural heritage sector but the same conclusion could apply to the broader public sector: institutions should calculate the full cost of selling data – in many cases they cannot make enough money by selling data to cover the costs – and compare it with the costs and benefits of sharing the data.

Ways of increasing user involvement were among the topics discussed at a bar camp lead by Peter Winstanley (Scottish Government), Jan Kucera (University of Economics, Prague) and Harris Alexopoulos (University of the Aegean). It was agreed that users – i.e. the broader community – need not be involved in making the original data available, but can make a significant contribution to its description through additional metadata, tagging etc. They might also be involved with transforming the data into different formats. In each case, there needs to be a distinction between the source data and the related user-generated content.

5. Incubators and Accelerators

During her speech, Beatrice Covassi mentioned a new EU initiative: the upcoming European Open Data Integration and Reuse Incubator for SMEs "… to foster the development of open data supply chains. It strives to attract the participation of European companies willing to contribute their own data assets as Open Data for experimentation or to integrate open data with their own private data as the basis for innovative applications. This is a very promising avenue. All in all, open data can be used to launch commercial and non-profit ventures, to do research, to take data-driven decisions, and to solve complex problems."

> Deirdre Lee: @openstreetmap emerging as an important #opendata source for the @finodexproject call @mig_garcia #SharePSI

The Lisbon workshop included a session lead by Miguel Garcia (Zabala) who coordinates a similar accelerator programme, FINODEX, based on FIWARE and open data. Entrepreneurship is provided through funding, training and mentor programmes, all of which enable publishers to see the possibilities offered by opening their data. The selection process is based on the proposed business model ensuring that sustainable businesses are created rather than what might be good ideas but that lack a long term future. The success of an accelerator can be measured through the number of proposals received, the quality and sustainability of the funded projects, the kind of data re-used and the amount of private funding attracted.

The FINODEX accelerator project has a good deal in common with the Open Data Institute's start-up programme. So far 16 start-ups have been supported with an emphasis on long term sustainability and the sharing of experience. The process includes a good deal of data processing to turn raw, messy data, perhaps PSI published in PDF documents, into clean, usable data that can be analysed and visualised. It's notable that using government data has helped the ODI to identify inefficiencies within the public sector such as delays in the tender procedure. This benefit of open data was highlighted during Michele Osellas' session From Wow to How as one of the possible situations where public sector bodies could see a tangible return on the investment made in publishing their data.

The wide ranging support for start-ups, including the culture and training, clearly makes a difference. OpenCorporates, Spend Network, Mastodon C and Open Utility are examples of successful companies supported by the ODI. In comparison, a year after three open data start-ups were awarded funding in Gijon through a much simpler programme, only one is still in operation.

Working with established companies to help them understand the value of open data, and highlighting the successful start-ups and other businesses that use open data helps them to understand the potential benefits. The promotion of best practice across Europe can help data harmonisation and scale. The ODI points to their certificates as a guide. Doing this creates an evidence base that encourages further PSI provision and solutions to common problems. These ideas are not limited to government data; the same is true for the cultural heritage sector as discussed in the COOLTURA session lead by Xenia Beltrán Jaunsaras and the bar camp lead by Cristiana Sappa and Muriel Foulonneau.

The issues in the cultural heritage sector are the same as elsewhere: the reluctance to publish can only be overcome with a succession of demonstrations not just of potential but of actual value for publishers and users alike. Copyright issues around cultural heritage objects vary enormously and although libraries have long been used to sharing metadata, museums have a variety of funding models and are often more sceptical. Being able to track data

usage was raised at the bar camp, often a simple 'thank you for the data' is often enough but perhaps the music industry's tracking of usage of its material could be an inspiration?

> Eva Méndez: Again thinking at #sharePSI: standards/metadata are like toothbrushes everyone thinks it is a good idea, but everyone wants to use their own

A possible solution to modelling a business derived from high-level business requirements is the TOGAF® architecture methodology from The Open Group. It can be used to create a complete description of a business problem, both in business and in architectural terms, that enables individual requirements to be viewed in relation to one another in the context of the overall problem. It takes a business process, application, or set of applications that can be enabled by an architecture, and describes the business and technology environment, the people and computing components (called "actors") who execute the scenario, and the desired outcome of proper execution. Without such a complete description to serve as context, the business value of solving the problem is unclear, the relevance of potential solutions is unclear, and there is a danger of solutions being based on an incomplete set of requirements that do not add up to a whole problem description.

On behalf of The Open Group, Arnold van Overeem trailed a new standard under development, Open Platform 3.0TM that builds a common architecture environment on top of the Web. It's designed to overcome typical stakeholder concerns such as:

- the compulsory use of business registers;
- government imposed deadlines;
- transparency of administrative decision making;
- protection of privacy.

Open platform 3.0 will use an updated UDEFTM Standard as an enabler for semantic interoperability. This is a technology-neutral standard that can be encoded in many ways including RDF.

6. Infrastructure

An issue highlighted by the FINODEX session and in the Flanders Open Data Day conclusions, among others, concerns infrastructure. A technical infrastructure, such as FIWARE, can support multiple businesses and provide the kind of service level needed if businesses are to rely on the data and related services. Workshop hosts AMA see the future of the Portuguese data portal as a data broker, a provider of data-centric services as much as data. This can be used by several platforms and government Web sites, and as a way to present information about services rather than a simple catalogue. In his session Model-Driven Engineering for Data Harvesters, Nikolay Tcholtchev of Fraunhofer FOKUS explained his ideas around metadata harvesting as a means of increasing the discoverability of data in different portals.

One of the major new European initiatives in opening data is the pan-European Open Data portal. The main idea is to build a portal of portals for Open Data to increase synergies and the creation of value. The metadata repository of the pan-European Open Data portal will be an entry point to the more than 70 Open Data portals throughout Europe. The first operational version of this portal is foreseen by the end of 2015. Both the COOLTURA and COMSODE projects include metadata harvesting too. In the latter case, a new open source

platform is being developed, Open-Data-Node. This is being used by the Slovakia open data portal that unusually, as well as data enhancement tools, offers Service Level Agreements and 'certified data.'

> Development Gateway: Awesome! MT @ingo_keck Slovakia public contracts now completely open, only valid if published - #opencontracting fact from #sharepsi #ogpirl

Collecting feedback and crowd-sourcing information about data quality requires additional infrastructure which, of course, increases the cost and complexity required. This is not always seen as a realistic prospect, however the Gov4All project is all about providing tools for collaboration including a mechanism for rating datasets. In the Slovak portal, government employees need to be certificated to post data or comments, while users can be anonymous. Making government representatives identifiable is seen as an important aspect of trust.

In the Open Data Life Cycle and Infrastructure bar camp session, the observation was made that it would be helpful to abandon infrastructure that has its roots in the 20th century and use the infrastructure developed for the 21st century that can better satisfy needs of publication of data on the Web. This suggests a revolutionary, not evolutionary, approach that the public sector in particular finds hard.

7. Multilingualism and Location

One of the projects that ran multiple sessions during the workshop was the LIDER project. The re-use of PSI is strongly encouraged if the data is of good quality and semantic conflicts have been resolved before publishing. General information can be combined with domain-specific data and metadata using standardised, linked data ontologies and established terminologies. Such resources are more easily processed by machines and ease discovery and consumption of PSI by the human end user. Language and/or locale are critical to many applications. Is 10.000 exactly ten or ten thousand? Is red a colour or a net? Providing multilingual (meta)data can solve these questions.

Raquel Saraiva (DGT), Imgo Simonis (OGC) and Adomas Svirskas (Advisor to the Lithuanian Cadastre, President of Lithuanian Software and Services Cluster) leading the session on The Central Role of Location

Location, or rather, how location is expressed, is equally important, and the workshop heard from OGC's Ingo Simonis and Raquel Saraiva (DGT) that there is no shortage of standards. However, this variety itself presents a problem – which standards and vocabularies should be used? Two widely used 'standards' actually aren't formal standards at all. GeoJSON is widely respected and massively used but is a community effort and Shape Files are a proprietary format developed by a single company (ESRI). Does this matter? To many the answer is no but in government situations it might. Google Maps is a proprietary base map in one reference system while national base maps use a variety of coordinate reference systems and so on.

The call is for some best practices on vocabulary and modelling choices, perhaps with profiles of different standards for different situations. In this way geospatial data can be more easily used with other data to enhance the value of both. Initiated by the SmartOpenData project, W3C and OGC are in close collaboration to achieve exactly this.

The workshop included plenty of time for networking. In the foreground Peter Krantz and András Micsik share a table with Heike Schuster-James and Valentina Janev, soon to be joined by Mª Dolores Hernandez Maroto

8. Licensing

The LAPSI track was the focus of much discussion about licences. Intellectual Property Rights were introduced to allow organisations and individuals to profit from their ideas and so was designed as an enabler. Today it is often seen as a barrier. The law on IP varies significantly across the EU28. Some treat databases differently than other PSI, for example. The big question is whether copyright applies to PSI or not.

The session lead by Freyja van den Boom of KU Leuven included many examples of the differences in approach. In Ireland, commercial exploitation of PSI is simply not allowed. Finland has a licence that is a translation of CC0, but is not technically a CC0 licence. The situation in Latvia is very confusing. No datasets available from the National Library have associated licences but some are covered by specific laws that declare the data to be open – although it is not clear whether such openness extends beyond the country's borders and so on.

Asunción Gómez-Pérez: RDFLicense, a dataset of licenses in RDF to define open and close data licenses by @vroddon @oeg_upm

The widely used Data Catalogue Vocabulary, DCAT, re-uses a lot of the Dublin Core metadata set but doesn't include properties for the sort of fine-grained machine-readable details that are a minimum requirement if machines are to be able to detect and process licences. Two possible vocabularies exist for this however:

- The Open Digital Rights Language (ODRL) which is used in Spain (among other contexts).
- The similarly named, but different Open Data Rights Statement vocabulary (ODRS) was developed by Leigh Dodds on behalf of the Open Data Institute.

The session agreed that standardisation of such vocabularies would be beneficial.

Licence interoperability was an issue at another LAPSI session lead by Antigoni Trachaliou, (Greek National Documentation Center) and Leda Bargiotti (PwC EU Services). If an openly licensed dataset includes another dataset that is not openly licensed, who is liable, the publisher or the re-user? An example of this would be the UK Address file which is 'closed data' but often included in openly licensed datasets.

> Peter Krantz: Our swedish post code revolution to crowd source postal code and address data: postnummeruppror.nu
>
> Amanda Smith: The UK open address revolution is coming. Follow @openaddressesuk & visit openaddressesuk.org

It's the responsibility of the data provider to make sure they have the necessary IP rights in third party data but are they aware of this? Licences cannot solve all the problems. Good IP management combined with education and raising awareness essential. The session concluded with a number of recommendations to promote the re-use of PSI:

- limit number of licences, allow commercial reuse;
- ensure interoperability between licences;
- be sure that what you licence as open data does not include third party rights;
- where there has been improper clearance in terms of copyrights, re-users' liability should be limited;
- attach a licence to datasets and make licences machine readable.

These steps will provide legal certainty, increase legal interoperability and lower costs.

Away from the LAPSI track, the session on open data start-ups lead by Amanda Smith & Elpida Prasopoulou (ODI) and Martin Alvarez-Espinar(CTIC) listed “publish open data with clear licenses” as its first answer to what should be done to promote the publication and re-use of PSI.

Although the Directive mandates the provision of PSI, it doesn't mandate that this be under a regulator since this is outside the competence of the EU. A dispute resolution mechanism between PSI publishers and re-users is therefore undefined and depends on a member state's existing laws and transposition of the Directive. They may create a regulator or assign PSI regulation to an existing one but such a network of regulators would need coordination. This situation is complicated further in countries with decentralised systems.

Nevertheless, the provision of a redress mechanism, one able to make binding decisions on public sector bodies, would represent a mechanism to challenge a Public Administration over denials of re-use.

9. Additional Bar Camp Topics

> Paolo Dini: Attended #SharePSI workshop in Lisbon 1-min pitches to create ad hoc discussion groups in real time: brilliant! :-)

Miguel Garcia lead a bar camp discussion of an Open Data Exchange Programme as a bottom-up approach to connect communities in the Open Data field. This idea of an 'Erasmus programme for Open Data' was well received and seen as a way to connect isolated communities in Europe.

Muriel Foulonneau (Henri Tudor Research Centre) asked whether the emphasis on RDF, i.e. the 5 stars of Linked Open Data, was a help or a hindrance to commercial re-use of PSI while Peter Krantz asked “why is standardisation so difficult?” The discussion attracted a lot of people and much discussion but the conclusion was that data should be self-descriptive (whatever the format) so that applications can automatically display the data in human-readable form. This is best achieved using standard RDF vocabularies such as SKOS and FOAF, but also XML schema such as SDMX and XBRL. A feedback loop from developers and data users such as journalists to publishers is essential. One possible solution to the 'marketing problem of RDF' might be a standardised graphical notation similar to UML – with appropriate tooling.

10. Conclusions

There were a total of 31 sessions or presentations, and well over 200 registered participants – and this report has not highlighted the two sessions held in Portuguese. Any bullet point summary of such a substantial exchange of expertise will necessarily miss a lot of detail, however, these appear to be the most repeated themes.

- There is a lack of knowledge of what can be done with open data which is hampering uptake.
- There is a need for many examples of success to help show what can be done.
- Any long term re-use of PSI must be based on a business plan.
- Incubators/accelerators should select projects to support based on the business plan.
- Feedback from re-users is an important component of the ecosystem and can be used to enhance metadata.
- The boundary between what the public and private sectors can, should and should not do needs to be better defined to allow the public sector to focus on its core task and businesses to invest with confidence.
- It is important to build an open data infrastructure, both legal and technical, that supports the sharing of PSI as part of normal activity.
- Licences and/or rights statements are essential and should be machine readable. This is made easier if the choice of licences is minimised.
- The most valuable data is the data that the public sector already charges for.
- Include domain experts who can articulate real problems in hackathons (whether they write code or not).
- Involvement of the user community and timely response to requests is essential.
- There are valid business models that should be judged by their effectiveness and/or social impact rather than financial gain.

Annex 1 - Agenda

Wednesday 3rd December

- **08:30 - 09:00 Coffee, Registration and Conference Speed Dating**

Get your badge, get a coffee, work out how you're going to spend the next 2 days by talking to session leaders.

- **09:00 - 09:25 Welcome**

Auditório

Welcome: Paulo Neves, AMA President

Introduced by: Phil Archer, W3C.

- **09:25 - 11:00 Parallel Sessions A**

Come To My Session! Don't know which parallel session to go to? Come to the Auditório to hear each facilitator describe his/her session in 60 seconds. Don't be late or you'll miss it!

Share-PSI 2.0 Track
Anfiteatro

- **Events, hackathons and challenge series - stimulating open data reuse**

Facilitators: Amanda Smith, ODI & Simon Whitehouse, Digital Birmingham [paper], Alberto Abella & Emma Beer, OKF. Scribe: Noel van Herreweghe

"We opened up some data, held a hackathon, fed people pizza, now where are all the cool apps?"

When engaging with the open data community, an organisation may hold an event to achieve one or more of the following aims: data awareness; understanding demand for, and improving the quality of, their datasets; and to encourage the reuse of datasets to create apps and other services.

This session will explore a classification scheme placing these (and other) aims against the sort of activities that organisations might engage in to achieve them.

A rich source of experience in this regard is Apps for Europe, an EU-funded support network with a mission to help turn open data based apps into viable businesses. The project

developed a concept named "Business Lounge" which can be deployed at local app contests and hack events across the continent. The concept is focused on accelerating the relationship between developers and investors.

The culmination of these open data events is an International Business Lounge at Future Everything where the best apps, either invited after a local Business Lounge, or selected from an online competition, have the opportunity to pitch their idea to win investment for the future development of their product.

We will use this session to demonstrate to an organisation what they might get out of different activities, and in addition, explore what the blockers might be for ensuring sustainable data reuse following the investment of data publishers and consumers at such events. Reflecting on experiences from Apps for Europe and the Open Data Challenge Series (a programme managed by NESTA and the ODI), we will explore how significant investment in time and resources can create credible services, products and businesses.

LAPSI Track
Room 5

- **What do licenses that promote and don't hinder reuse look like?**

Facilitators: Antigoni Trachaliou, National Documentation Center,
Leda Bargiotti, PwC EU Services [paper]
Scribe: Jo Ellis

This discussion asks whether current licensing practices of open government data hinder its commercial reuse. A crucial principle indicated in open government data policies is that legal rights in publicly owned information must be exercised in a manner that is consistent with and supports the open accessibility and reusability of the data. In particular, where government information and data is protected by copyright, access should be provided under licensing terms which clearly permit its access and reuse. In the context of Action 4.2.5 of the Interoperability Solutions for European Public Administrations (ISA) Programme of the European Commission, PwC looked at the current licensing practices for open data across the EU and set a discussion on whether current licensing practices hinder the commercial reuse of open data. This complementes work done in the LAPSI 2.0 project's Licensing Guidelines, which focuses on the question of the optimal licensing approach based on the best practices of various Member States and the results of previous work conducted by the Legal Aspects of Public Sector Information (LAPSI I and II) projects.

Discussion points

1. Do current practices on open data licensing conditions hinder reuse?
2. What re the essential steps throughout the entirety of the life-cycle of PSI, from the moment it is obtained or created by the PSB to the moment it is made available for reuse through a variety of means?
3. Based on your experience are standard licences more appropriate for the reuse of open data for commercial purposes?
4. Which conditions are most cumbersome? Can you give some examples?

   a. Giving attribution
   b. Commercial use restrictions
5. How about Public Domain Dedication?
6. What are the main consequences of licences that limit reuse of data for noncommercial purposes only?
7. How does the use of non-commercial provisions affect the reuse of data?
8. What are the advantages of promoting the reuse of open data for commercial purposes? Who and how can benefit from it? Can you give examples?
9. Besides the examples identified in the course of our survey, what are additional obstacles that licences create to the commercial reuse of open data? Can you enlist concrete examples?

LIDER Track
Room 6

- **Multilingual PSI data on the Web**

Facilitator: Felix Sasaki, DFKI/W3C
Scribe: Asunción Gómez Pérez

Why is multilingual PSI data on the Web relevant for you? Reasons may be for example:

- you provide national PSI with obligations to multiple official languages;
- you provide national PSI with multilingual requirements in support of inclusion, e.g. social service access for recent immigrants;
- you provide cross border PSI (e.g. EU, UN, interpol etc) with specific language obligations to member states;
- you export (economic and/or cultural) PSI with global outreach aspirations.

We will introduce the general topic and provide demos with existing tools. Then we will discuss with you: what benefits do you seen in multilingual PSI data? Have you encountered barriers and issues? Do you have existing solutions or data sets and like them improved, in areas like:

- cross lingual cataloguing;
- indexing and search;
- localisation and machine translation;
- content analytics for international citizen/patient/learner/research engagement.

Structure:

- Introduce general topic (select some monolingual data in various languages, ...), ask general questions for feedback
- Demos and Q&A
- Elevator pitch from people on issues with multilingual data? or moving from monolingual into multilingual…. → Eliciting requirements
- Elevator pitch with current working solutions → invite regional data providers

Open Track
Room 4

- **FINODEX**

Facilitator: Miguel García (Zabala Innovation Consulting) [paper]
Scribe: Muriel Foulonneau
Target audience: SMEs, entrepreneurs or representatives of organisations and networks reaching to them.

The session will facilitate a debate about the generation of business from the reuse of open data in the context of the FINODEX project.

FINODEX, Future Internet Open Data Expansion, is a European Project co-funded by the European Commission that is fostering the creation of innovative services and products based in open data and in the developments coming from other EU projects within the Future Internet Public Private Partnership, FI-PPP.

The FI-PPP has been in charge of the creation of the biggest European platform for developers, FIWARE, which seeks to provide a truly open, public and royalty-free architecture and a set of open specifications that will allow developers, service providers, enterprises and other organizations to develop products that satisfy their needs while still being open and innovative.

FINODEX is an accelerator for SMEs and Web Entrepreneurs from Europe, offering funds and services totally free and under a two open calls scheme. The first of those will be closing on 19th of December and a new one is planned for the spring of 2015.

Within this session, the FINODEX call for proposals will be briefly introduced to open then the conversation about the first call itself, our expectative for new businesses generation thanks to FINODEX, sort out any kind of doubt about the operative of the project and have a debate about the business models that can be attached to open data in a wider sense.

Portuguese Track (in Portuguese)
Auditório

- **Open Data in Portugal I**

- Ana Martinho, Open Data Journalism
- João Vasconcelos, AMA
- Paulo Rupino, Instituto Pedro Nunes

- **11:00 - 11:30 Coffee**

- **11:30 - 13:00 Plenary Session**

Auditório

Facilitatior: Phil Archer, W3C. Scribe: Harris Alexopoulos

- João Vasconcelos, AMA
- Beatrice Covassi, Deputy Head of Unit, Data Value Chain, European Commission DG CONNECT
- Feedback from the Open Data Day in Flanders, 3 October 2014. Noël Van Herreweghe, CORVe [slides]

- **13:00 - 14:00 Almoço/Lunch**
- **14:00 - 15:10 Parallel Sessions B**

Come To My Session! Don't know which parallel session to go to? Come to the Auditório to hear each facilitator describe his/her session in 60 seconds. Don't be late or you'll miss it!

Share-PSI 2.0 Track
Auditório

- **Open Data Startups: Catalyzing open data demand for commercial usage**

Facilitator: Amanda Smith & Elpida Prasopoulou, ODI [paper] Martin Alvarez-Espinar, CTIC [paper]
Scribe: Jan Kucera

A discussion on startup incubation as a way to catalyze the demand-side of open data. Incubating startups that build products and services around open data provides great opportunities to enable the creation of an innovative commercial ecosystem. It also ensures that open data reuse is not limited to innovative ideas but actually contributes to sustainable economic growth. The session will include insights on how to run a successful open data incubation programme focusing on the opportunities and challenges faced by the startups as well as the incubator.

The objective of this session is to discuss in more detail the role of incubation programmes in the promotion of open data innovation for commercial use. During the session, we will briefly present the ODI's start-up programme, currently in its second year. This will include the following:

- An outline of the ODI startup programme, focusing on its main objectives but also its commitment to economic, environmental and social impact (triple bottom line)
- Brief introduction to the startups currently incubating at the ODI. These include: Mastodon C, TransportAPI, 3D Repo, Carbon Culture, Datapress, Demand Logic, I Can Make, Open Bank Project, OpenCorporates, Open Data Soft, Pesky People, Provenance, Resurgence, Spend Network, Opensensors.io.

- Overview of the programme's impact and success stories that unlocked value and had significant economic and societal impact.

The discussion will then have to address the following topics of interest:

- Selecting startups with the potential to achieve economic, environmental and societal impact.
- Following up from early success stories that unlocked value in order to develop a commercially successful product.
- Assessing the economic and societal impact of startups/social ventures. Developing metrics beyond market valuation and exits.
- Opportunities and challenges when building products/services around open data
- Facilitating the open innovation through the collaboration of startups with big companies. Showcasing the value of open data and catalyzing the publication of open datasets in the commercial sector.
- Scaling successful products - opportunities for collaborations across the EU.

LAPSI Track
Room 5

- **Steps to a suitable redress mechanism**

Facilitatior: Cristiana Sappa (KU Leuven, LAPSI coordinator)
Scribe: Maria Magnolia Pardo, Murcia University

Discussion on the suitable features of an appropriate redress mechanism related to the access and reuse of PSI including some good and bad European examples.

This session is aimed at pointing out good practices with regards to the PSI framework for institutional embedding and enforcement. Policy makers, the public sector, civil society, businesses and the general public have all broadly accepted the value of public sector information (PSI) for economic growth, public participation and accountability. In many countries, there is a "right to information" and the re-use of PSI and open data are encouraged. When the new PSI directive will be transposed in the Member States of the European Union, citizens and businesses will have a right to re-use information held by public sector bodies.

However, having such a right is not useful, if one cannot enforce it. Therefore, it is essential that the right to re-use PSI is supported by an effective redress mechanism. Criteria to which redress mechanisms should answer have to be identified, to provide the reusers with sufficient guarantees and to ensure that the economic potential of PSI can actually be realised. For each criterion, one or more "good examples" can be described from redress processes already existing in different EU Member States. These examples may serve as inspiration for other organisations or countries when implementing or adapting their redress mechanisms.

LIDER Track
Room 6

- **Making your PSI data multilingual and interoperable**

Facilitator: Asunción Gómez Pérez
Scribe: Felix Sasaki

What steps are needed to make your PSI data multilingual and interoperable? Why should you care? We will gather your input why the question of data formats is important - or not. We then will introduce the linked data representation of PSI data in general and the role of linguistic linked data specifically.

Structure:

- Beyond CSV….why?
- LD presentation for interoperable PSI data.
- Linguistic Linked Data presentation for creating multilingual PSI data.

Open Track
Anfiteatro

- **Open Data Business Model Generation**

Facilitator: Clemens Wass, openlaws.eu, Fatemeh Ahmadi, Insight Centre for Data Analytics [paper]
Scribe: Leda Bargiotti
Target audience: SMEs, entrepreneurs, open data providers

A discussion about innovative business models that are based on open data and open innovation.

If open data is the new oil, we still have to build cars and roads - any commercial and sustainable exploitation needs innovative business models. We will take a look at real world examples that are already working on the market. In addition, a few sample business model concepts and frameworks will be discussed and analyzed.

Knowing and understanding open data business models will encourage entrepreneurs to use open data. Furthermore, open data providers will get a better understanding of the needs of entrepreneurs (including but not limited to licensing issues, which will be discussed in separate sessions).

About: Dr. Clemens Wass, MBL, MBA has studied law, business law, and entrepreneurship & innovation. He has been working for Sony and Skidata and is now project partner of the EU project openlaws.eu, funded by DG Justice. openlaws.eu is creating an innovative legal information platform based on open data, open innovation and open source software. The project includes the development of a sustainable business model for the openlaws.eu platform.

Fatemeh Ahmadi is a researcher in e-Government unit at Insight Centre for Data Analytics, Galway, Ireland (formerly Digital Enterprise Research Institute (DERI) - a leading research center in Semantic Web and Linked Data research). At Insight Centre, her research addresses the problems exist in Business Models more specifically Open Data Business Model. She has been working on Finnish and Swedish e-Government projects and is an active member of the Swedish Research Network in e-Government and now she is (Insight Centre as the RTD Partner) working on PaaSport Project - the European project developing semantically-enhanced marketplace of interoperable platform-as-a-service offerings for the deployment and migration of business applications of SMEs.

During this session, she will be talking about the 6-V Business Model which claims to be a complete and comprehensive business model in the existing business model literature. Its main improvement and contribution compared to other models is that it seems to cover all the relevant components of a business model and to provide the relationships between the main components through a modeling approach.

Open Track
Room 4

- **Model-Driven Engineering for Data Harvesters**

Facilitator: Nikolay Tcholtchev, Fraunhofer FOKUS [paper] [slides]
Scribe: Daniel Pop

Since its launch in February 2013, the German governmental data platform GovData.DE, has accommodated a large number of datasets. It serves as a metadata hub providing a single point of access to governmental data, whereby the data itself is available over the web portals of the partner institutions, e.g. municipalities, city councils, or federal institutions such as the Federal Statistical Office of Germany.

The metadata is regularly obtained from the Internet platforms of the institutions in question. In order to achieve this, a large number of so-called data harvesters had to be developed, which regularly update the metadata on GovData.DE, based on the data providers' information. In this session, we will discuss our experiences in developing data harvesters and identify the need for a model-driven approach to the engineering of data harvesters, which at the same time constitutes a potential for various tool providers to sell and commercialize their MDE (model-driven engineering) tools. Furthermore, we argue that the use of MDE based harvesting will improve the quality and timeliness of the provided datasets (including their metadata) and will correspondingly encourage the utilization of Open Data platforms for commercial developments.

- **15:10 - 15:40 Coffee**
- **15:40 - 16:45 Parallel Sessions C**

Come To My Session! Don't know which parallel session to go to? Come to the Auditório to hear each facilitator describe his/her session in 60 seconds. Don't be late or you'll miss it!

Open Track
Auditório

- **Open Data Economy: from 'Wow' to 'How'**

Facilitator: Michele Osella, Istituto Superiore Mario Boella [paper]
Scribe: Lorenzo Canova
Target audience: Entrepreneurs, start-ups, IT professionals, researchers, policy makers.

This highly interactive and cross-disciplinary session calls upon a broad range of stakeholders to debate blind spots still affecting the yearned-for Open Data Economy. As the title suggests, the idea behind this session is to overcome the great deal of initial excitement ('wow') – frequently accompanied by a leap of faith about the future to come – in order to get a realistic vision that draws on evidence to distill actionable insights ('how'). Consequently, the main objective of the session is to portray a neat and up-to-date picture of the multi-faceted mechanisms underlying the creation and appropriation of value from Open Data. Outcomes of the discussions – in the guise of experiences brought by participants, lessons learnt, and guidelines – will represent valuable takeaways for policy makers.

Consequently, the main objective of the session is to portray a neat and up-to-date picture of the multi-faceted mechanisms underlying the creation and appropriation of value from open data. Outcomes of the discussions – in the guise of takeaways, lessons learnt, and guidelines – will be collected and systematized in the "Open Data Economy Primer", a co-created 5-page essay to be given to policy makers as a present from the "Share-PSI 2.0" community.

LAPSI Track
Room 5

- **Access and Accessibility for Data**

Facilitatior: Linda Austere, Providus
Scribe: Maja Lubarda

Access is the first step one needs to go through when he/she wishes to reuse data. When is access enabled? Is there a difference between access and accessibility? What about accessible data that cannot downloaded nor reused: are they really open?

Reuse of government information naturally requires access to the information. However, the PSI Directive itself does not oblige Member States to provide access. This can be explained by the fact that the legislative competences of the EU to regulate access to public sector information within a national setting. The PSI Directive applies to documents that are already made publicly accessible under the national rules for access to documents (art. 1(3) PSI Directive). It does not add to them or change them. An important improvement of the PSI Directive as amended in 2013 is that it requires rather than invites Member States to allow the re-use of documents of information that can be accessed under national access regimes (art. 3(1) PSI Directive). Effective access is a conditio sine qua non for re-use. This session discusses the relationship between Directive 2003/98/EC (PSI Directive) and national access regimes and the methods by which good practices can be identified and structured with rights

of access to data. Good practices have an effect on the three main aspects: data must be discoverable (what information is held by which organisation?), available (public under FOIA, at reasonable terms and prices) and usable (meeting user needs, e.g. as regards format, timeliness, etc.).

Open Track
Room 4

- **Roadblocks in Commercial Open Data Usage**

Facilitator: Ingo Keck, Centre for Advanced Data Analytics Research [paper]
Scribe: Martin Alvarez-Espinar

What keeps people from using Open Data for commercial purposes? Find out what happens in the mind of an entrepreneur by developing a business plan for a fictive open data based product!

One big problem in the field of open data is that there is a fundamental difference in the mind sets between the people that are in charge of opening up government data, i.e. civil servants with very high job security, and people who want to create a business on top of it, i.e. the commercial users. The idea of this session is to get the participants to understand what drives commercial users and what are the special restrictions they have to adjust to if they want to successfully make money out of open data. The session will focus on subjects that hinder commercial open data usage and that can be seen as risks that are involved for business users.

Open Track
Room 6

- **COOLTURA: scalable services for cultural engagement through the cloud**

Facilitators: Nikolay Tcholtchev, Fraunhofer FOKUS [paper] [slides]
Scribe: Peter Krantz

Although culture is a very important asset of population the engagement of citizens with their cultural heritage environment still remains low. Coupled with the efforts of Cultural Heritage institutions with access to digital content for actively encouraging learning, debate, action and interaction of culture consumption, the European project TAG CLOUD explores the use of cloud-based technologies that lead to adaptability and personalisation to promote lifelong engagement with Culture.

Within the context of this project, user centered evaluations as well as scenarios and use cases have been developed to thrive the COOLTURA Platform and COOLTURA App. This session presents the introduction to COOLTURA by TAG CLOUD, the creation of an intelligent layer based on harvesting tools as the key approaches allowing the building of personalized visualization and social interaction services.

The aim of the COOLTURA workshop session is to facilitate discussion and interaction to share experience and knowledge for increasing the usability of eGov standardized cultural

content (especially digital cultural content from public sector or domain) for non-commercial and commercial purposes. The COOLTURA platform aims at fostering the creation of innovative services and software developments for supporting not only cultural engagement but also a set of business models that extend over the cultural heritage environment.

- **16:45 - 17:30 Session Reports**

Auditório

Brief (3 minute) summaries from each session, focusing on three questions:

1. **What** X is the thing that should be done to publish or reuse PSI?
2. **Why** does X facilitate the publication or reuse of PSI?
3. **How** can one achieve X and how can you measure or test it?

Thursday 4th December

- **08:30 - 09:00 Coffee**

- **09:00 - 10:30 Plenary Session**

Auditório

Facilitatior: Makx Dekkers, AMI Consult. Scribe: Phil Archer
Max 30 minutes including Q&A per speaker

- The Economic Impact of PSI, Georg Hittmair and Marc de Vries [paper] [slides]
- A Scenario for Business Benefit from Public Data, Arnold van Overeem, The Open Group [paper] [slides]
- Spanish Infomediary Sector Characteristics, Mª Dolores Hernandez Maroto, MINHAP [paper] [slides]

- **10:25 - 10:30 Parallel Sessions D (Pitches)**

Come To My Session! Don't know which parallel session to go to? Come to the Auditório to hear each facilitator describe his/her session in 60 seconds. Don't be late or you'll miss it!

- **10:30 - 11:00 Coffee**

- **11:00 - 12:30 Parallel Sessions D**

Share-PSI 2.0 Track
Anfiteatro

- **The Central Role of Location**

Facilitator: Facilitator: Raquel Saraiva (DGT), Ingo Simonis (OGC)
Scribe: Jens Klessmann

It is widely agreed that data is becoming a more and more valuable resource in today's economy. Data can enable the creation of added value in various forms — new innovative data-based services, new businesses and jobs, more accurate information for citizens, companies and governments, better transparency of public sector operation, citizen participation and other aspects. For this potential to be unlocked and realised, relevant institutions need to provide strong leadership in both policy making and practical terms.

While the legislative basis for sharing public sector information and opening data is in place, implementing regulations are often not in force, nor are best practices established or followed. It is important that public sector institutions, which own and govern substantial amounts of data and have enough authority to promote data reuse, lead and initiate the creation of data services ecosystems to attract and encourage commercial developers.

TheINSPIRE directive has been put in place to help to address the environmental challenges our society faces nowadays. The directive states that geospatial data and location information shall be made publicly available for government agencies, industry and the broader public. Sharing and reuse of this public sector information is one of the goals of the directive.

In the previous years there have been tremendous efforts to unlock this data and many EU member states have implemented open data strategies within their countries. Many EU funded projects have been addressing the interoperable usage of INSPIRE data. This has helped the implementation phase of INSPIRE to reach a level of maturity which allows third parties to build business models on the data and generate revenue.

In this session we want to address various questions around location data that are currently being discussed in the Maintenance and Implementation Group (MIG) of the community around INSPIRE. We want to facilitate communication and a dialogue about good practices and examples for reuse of location and geo data in other disciplines:

- use and uptake of data by SMEs;
- policy concerns addressed in the MIG;
- examples of EU funded projects for the broader use of INSPIRE data (ELF, Europa (Insurance, Re-Insurance);
- test environments for interoperability of INSPIRE data and services.

We invite data providers, implementors, experts and users to share their experience related to location data and information, re-use policies for open data and uptake for innovative businesses.

LAPSI Track
Room 4

- **The most known challenges of PSI Access and Re-USE: Intellectual Property (and Data Protection)**

Facilitatior: Freyja van den Boom
Scribe: Lorenzo Canova

IPR is traditionally perceived as a tool for development; however they reveal to be an obstacle for an easy access and reuse of PSI. The same goes for Privacy and Personal Data protection rules. How can we overcome these challenges?

The discussion is aimed at identifying best practices on legal rules, contractual transfers of rights and other issues in the area of public sector works in different European Union countries. A particular attention is devoted to cultural institutions legal rules and practices as well. More precisely, this session focusses on three different levels of the public sector works production and circulation:

1. legal rules on protectability of works;
2. legal rules and contractual practices on rights ownership;
3. legal rules and other practices implemented within the cultural institutions.

The LAPSI 2.0 network can share its experience in identifying some good practices, based on a questionnaire that was prepared and answered by the partners of the network. In particular, the LAPSI 2.0 network identified some best legal rules on protectability of public sector information eligible for copyright protection, some good and bad legal rules on rights ownership of PSI covered by copyright protection and some best practices on the transfer of such rights. In the area of cultural institutions the LAPSI 2.0 network identified some best practices as to the metadata exploitation, access and re-use to cultural content.

Open Track
Room 5

- **Boosting Open Data Re-Use and Business**

Facilitator: Miroslav Konecny, Addsen/COMSODE [paper] Harris Alexopoulos, University of the Aegean/Gov4All [paper]
Scribe: Benedikt Kaempgen

The project COMSODE is an SME-driven RTD project aimed at progressing the capabilities in the Open Data re-use field. The concept is an answer to barriers still present in this young area: data published by various open data catalogues are poorly integrated; quality assessment, and cleansing are seldom addressed. Data consumers have to integrate the data before they can use them which increases significantly the costs of open data consumption and hinders open data usage and uptake, etc.

Gov4All is a Marketplace towards enhancing open data re-use through collaboration. It identifies the already made solutions and patterns on the way open data is used now by providing lists and catalogues for open data, open services and apps using open data, as well as, an open space for collaboration and feedback mechanisms. Finally, Gov4All enables the introduction of new solutions and new material by its users complying to its metadata schema in each category.

Main barriers identified and topics for discussion at the Share-PSI workshop

- Missing clear message for investors and eterpreneurs – numbers, business models and good examples that convince to put efforts and investments into open data services.
    - How to promote best practice of commercial cases?
    - What business models can reveal the value of Open Data?
    - What market potential numbers are credible (when certainly talking about disruptive approach to information management!)?
- Critical mass of quality open data is still not available - It is note easy to find the right dataset. There are islands of dataset groups (catalogues, national servers) but crossinformation is missing. COMSODE contributes by its activities to solve this problem.
    - How much Open Data is needed to create critical mass with commercial value?
    - How to interling available datasets and enable their cross-use?
    - What quality is needed for commercial applications?
- Do you know other initiatives in your country?
- What are the most important characteristics of such an initiative?
- What other functionality this site could have?
- Should these initiatives target international?

Open Track
Room 6

- **Open Market Dilemmas**

Dietmar Gattwinkel, Saxony Open Government Data [paper]
Scribe: Sebastian Sklarß,]init[

The Deloitte Study Market assessment of public sector information for the UK Department for Business, Information and Skills identifies datamarketplaces and data enrichment as important business models utilizing open data. However these business models and open data policies geared towards them face a couple of dilemmas often overlooked.

For example:

- Attribution vs. trade secrets
    - How can one protect ones business from the risk of "attribution leakage?"
    - Which licenses in which areas carry such risk?
    - Are there examples of Open Data Policies addressing such risks?
- Privacy vs. information density
    - How does anonymization affect the usefulness/value of open data?

    - Which anonymization techniques diminish the values more than necessary, which retain more information density?
    - Is the perceived "mosaic effect" a potential barrier to more open data?
    - Do we need regulation (e.g. by certification) which companies or types of
- Technical restriction prohibition and share alike vs. monetization of added value
    - Which licenses in which areas carry such risk?
    - Are there examples of Open Data Policies addressing such risks?
    - What should businesses sell: The enriched data or rather the service of enriching the data, or even applications for enriching data?

Portuguese Track (in Portuguese)
Auditório

- **Open Data in Portugal II**

- Fábio Fernandes, Gabinete Secretário Estado da Administração Local
- Isabel Rosa, Instituto da Construção e do Mobiliário
- Maria José Vale, Direcção-Geral do Território
- Nuno Xavier, Câmara Municipal de Lisboa
- Ricardo Suzano, CCDR-N

- **12:30 - 13:00 Bar Camp Pitches**

Auditório

Time keeper: Steinar Skagemo, Difi

Pitch your idea for an afternoon session in 60 seconds or less. Please let Phil Archer know the title of your session as soon as convenient.

1. Muriel Foulonnneau - RDF: does the emphasis on RDF data publication help commercial reuse?
2. Peter Winstanley - What public sector IT infrastructure best supports commercial use of public data?
3. Miguel Garcia - Erasmus on open data
4. Peter Krantz - Standardised information, why is this so difficult?
5. Paolo Dini - A non-capitalist market for open data
6. Cristiana Sappa - Counter arguments for cultural heritage institutions' reluctance to share data
7. Steinar Skagemo & Deirdre lee - Share **My** data?
8. Jan Kucera - The open data life cycle
9. Michele Osellaa - What benefits can governments reap thanks to open data, and how can we prove it?
10. Heike Schuster-James - Risk assessment & unintended consequences of open data.
11. Muriel Foulonnneau - Evaluation of open data reuse: how to track and assess commercial reuse?

- **13:00 - 14:00 Almoço/Lunch**

- **14:00 - 15:10 Bar Camp Sessions (Round 1)**

Take your pick from the sessions on offer and vote with your feet.

- **15:10 - 15:40 Coffee**

- **15:40 - 16:45 Bar Camp Sessions (Round 2)**

Take your pick from the sessions on offer and vote with your feet.

- **16:45 - 17:30 Wrap Up**

Facilitator: Steinar Skagemo, Difi

Brief summaries from each of the 8 barcamp sessions (2 mins each)

Final words; André Lapa, AMA, Phil Archer, W3C.

Annex 2 – workshop participants list

1. Alberto Abella, Open Knowledge Foundation
2. Fatemeh Ahmadizeleti (Sanaz), NUIG Insight
3. Miguel Abrantes, MPA
4. Maria João Albuquerque, Junta de Freguesia de Matança
5. Margarida Aldeia, Direção Geral das Actividades Económicas
6. Ana Paula Almeida, CMLoures
7. Bruno Almeida, Instituto Pedro Nunes (IPN) - Association
8. Rotimi Aluko, Remotetek
9. Martin Alvarez-Espinar, CTIC
10. Pedro Alves
11. Cláudia Anjos, INA
12. Jane Ankori, Health and Social Care Alliance Scotland
13. Phil Archer, W3C/ERCIM
14. Linda Austere, Providus
15. Joseph Azzopardi, MITA
16. Rui Baptista, Instituto Hidrografico
17. Nazaré Barão, Serviços Sociais da Administração Pública
18. César Barata, Município, S.A.
19. Stelmo Barbosa, Stelmo Barbosa
20. Leda Bargiotti, PwC
21. Edgar Barreira, Esri Portugal
22. Cláudia Barroso, AMA
23. Maria Aires Barroso, Gabinete SEMA
24. Manuel Barroso, CIG - Comissão para a Cidadania e Igualdade do Género
25. António Batista, CGA
26. Emma Beer, Open Knowledge Foundation
27. Maria Eugenia (Xenia) Beltrán (Inmark), Fraunhofer FOKUS
28. Peter Biro, Ministry of Finance of the Slovak Republic
29. Uldis Bojārs, IMCS
30. José Borbinha, IST / INESC-ID
31. Enrico Borghetto, New University of Lisbon
32. Catarina Bouca, Grupo impresa
33. Ana Branco, ICNF
34. Ellen Broad, ODI
35. Rogerio Candoso, Mind
36. Lorenzo Canova, Politecnico di Torino
37. João Pedro Capelo, Porto Digital / Município do Porto
38. Elsa Cardoso, ISCTE- Instituto Universitário de Lisboa
39. Carola Carstens, European Commission
40. Teresa Cascais, Universidade Europeia
41. Rui Casteleiro, Mind
42. Pedro Castelo Xavier, Município de Portimão
43. Paulo Castro, Instituto de Informática MSESS
44. Carlos César, PT Comunicações
45. Gabriele Ciasullo, Agenzia per l'Italia Digitale
46. José Cid Gonçalves, DGS

47. Margarida Coelho da Silva, Câmara Municipal de Lisboa
48. Ana Sofia Correia
49. António Correia, Spms - Serviços Partilhados Ministério da Saúde, EPE
50. Conceição Correia, IEFP
51. José Correia, IRN
52. Carlos Costa, ISCTE-IUL
53. Mónica Costa, Coelho Ribeiro & Associados
54. José Costa Ramos, Gabinete SEMA
55. Beatrice Covassi, European Commission
56. Rui Cruz, Secretaria-Geral do Ministério da Educação e Ciência
57. Teresa Cruz
58. Stasa Curk Accetto, Portuguese Ministry of Justice
59. Marc de Vries, The Green Land
60. Makx Dekkers, AMI Consult
61. Edite Dias, Secretaria Estado da Administração Pública
62. Paolo Dini, LSE/Open Laws
63. Carla Duarte, Câmara Municipal de Lisboa
64. Paula Elias, Municipio de Loures
65. Jo Ellis, UK National Archives
66. Pedro Eusébio, Município de Oeiras
67. Sonia Fernandes, Agencia Portuguesa do Ambiente, I.P.
68. Catarina Ferraz, Direção Geral da Qualificação dos trabalhadores em funções públicas (INA)
69. Cândida Ferreira, PGR
70. António Fitas, Camara Municipal Alenquer
71. Julio Flôr, Câmara Municipal Lisboa
72. Paulo Franco, Camara Municipal Alenquer
73. Muriel Foulonneau, Henri Tudor Research Centre
74. Agostinho Freitas, Instituto Geográfico do Exército
75. Fernando Gameiro, Lusodata
76. Chus García, Fundacion CTIC
77. Miguel García, Zabala Innovation Consulting
78. Dietmar Gattwinkel, Saxony Open Government Data
79. Siniša Gavrilov, Omega software d.o.o.
80. Fernando Glória, EPCG
81. Stijn Goedertier, PwC
82. Irina Gomes, ESOP
83. Sílvia Gomes Belona, Direcção Geral das Actividades Económicas
84. Sofia Gomes, AMA
85. Asunción Gómez Pérez, UPM/LIDER
86. Bruno Gonçalves, Linkare TI
87. Carlos Gonçalves
88. Hugo Tamagnini Gonçalves, Forum Virium Helsinki
89. Miguel Gonçalves, Câmara Municipal Lisboa
90. Vanderley Gondim, FACAPE - Brazil
91. Pedro González Yanes, ULL
92. Mª Dolores Hernandez Maroto, MINHAP
93. Georg Hittmair, PSI Alliance/Compass
94. Johann Höchtl, DUK
95. Valentina Janev, Institute Mihajlo Pupin

96. Martynas Jusevičius, UALB/Graphity
97. Jiří Kárník, Ministry of Interior, Czech Republic
98. Ingo Keck, Centre for Advanced Data Analytics Research / DIT
99. Benedikt Kämpgen, KIT
100. Jens Klessmann, Fraunhofer FOKUS
101. Miroslav Konecny, ADDSEN
102. Pekka Koponen, Forum Virium Helsinki
103. Benedikt Kotmel, Ministry of Finance of the Czech Republic
104. Peter Krantz
105. Jan Kučera, UEP
106. Manorama Kulkarni, TCS
107. Gabriel Lachmann, EEA
108. Miguel Laginha, Instituto Pedro Nunes
109. André Lapa, AMA
110. Carlos Lopes, Instituto dos Registos e do Notariado
111. Deirdre Lee, NUIG Insight
112. Carla Libânio Capela, Novabase
113. Maja Lubarda, Information Commissioner of Slovenia
114. José Miguel Magalhaes, DGLAB
115. Maria Magnolia Pardo, Murcia University
116. Carlos Malaca, DGEEC-MEC
117. Erik Mannens, iMinds
118. Fábio Marques, Universidade de Aveiro
119. Joaquim Marques, AMA
120. Sérgio Marques, Câmara Municipal da Amadora
121. Anabela Martins, LNEC
122. Vladimir Mašala, Omega software
123. Paulo Mauritti, AMA
124. João Melo, Municípia
125. João Mendes Moreira, FCT
126. Eva Méndez, University Carlos III of Madrid
127. Bruno Meneses, DGT
128. Manuel Mesquita
129. András Micsik, SZTAKI
130. Susana Miguel, CIG - Comissão para a Cidadania e Igualdade do Género
131. Nelso Mileu, Municipia
132. Pedro Milharadas, Câmara Municipal de Lisboa
133. Joana Miranda, Joana Miranda
134. Luís Moitinho de Ameida, Gabinete SEMA
135. Pedro Monteiro
136. Ricardo Mostardinha, Município de Castelo Branco
137. João Moura, IAPMEI-Agência para a Competitividade e Inovação
138. Pedro Moura Ferreira, Institute of Social Sciences - University of Lisbon (ICS-ULisboa)
139. Filipa Mourão, Câmara Municipal de Torres Vedras
140. Marcia Muñoz, Câmara Municipal Lisboa
141. Gil Nadais, Município de Águeda
142. Roberto Navigli, Sapienza University of Rome/LIDER
143. Fernando Sérgio Neves, Instituto dos Registos e do Notariado
144. Helena Neves, Câmara Municipal de Lisboa

145. Paulo Neves, AMA
146. Andrei Nicoara, Prime Minister Chancellery, Romania
147. Judite Nozes, Ministry of Education and Science - Secretariat General
148. Adriana Nugta, Data Privacy Consultant
149. Ana Maria Oliveira, Instituto de Informática da Segurança Social
150. Carlos Oliveira, Ubiwhere
151. Claudia Oliveira, Institute of Social Sciences - University of Lisbon (ICS-ULisboa)
152. João Carlos Oliveira, Unidade Local de Saúde de Castelo branco, EPE
153. Ricardo Oliveira, DGAIED
154. Manuel Ordaz, FLUL
155. Paulo Ornelas Flor, PSP
156. Michele Osella, Istituto Superiore Mario Boella
157. Thodoris Papadopoulos, MAREG
158. Carlos Paredes
159. Priit Parmakson, Estonian Information Systems Authority
160. Marta Penedo, Novabase Consulting
161. João Pequenão, Novabase Consulting
162. Ana Paula Pereira, Mind
163. Maria Pereira, Camara Municipal Lisboa
164. Fatima Pereira, Lusodata
165. Maria Pereira, Camara Municipal Lisboa
166. Ana Pinto Martinho, ISCTE
167. David Pinto, Câmara Municipal de Cascais
168. Teresa Pimenta, ICNF
169. Daniel Pop, UVT
170. Elpida Prasopoulou, ODI
171. Mateja Prešern, MNZ
172. Jorge Quiterio, SourceFactor
173. Celestino Ramalho, Unidade Local de Saúde de Castelo branco, EPE
174. Francisco Ramires, COMPETE
175. Priit Raspel, Estonian Information Systems Authority
176. Rita Rei, AMA
177. Rui Reis, Direção Geral do Território/SmartOpenData
178. Vitor Reis, IFAP, ip
179. Anabela Ribeiro, DGLAB
180. Paulo Ribeiro, Linkare TI
181. Dina Rocha, Instituto Politécnico de Santarém
182. José Luis Roda García, ULL
183. Aline Rodrigues, Direção-Geral do Território
184. Cristina Rodrigues, ISS, IP
185. Jose Antonio Rodrigues, AMA
186. Paulo Rodrigues, Planeta Rosmaninho
187. Pedro Rodrigues, Instituto de Informática MSESS
188. Philippe Rohou, ERCIM
189. Nancy Routzouni, MAREG
190. Paulo Ruivo, Presidência do Conselho de Ministros
191. Henrique Saias
192. Lisdália Sanches, AMA
193. Cátia Santos, AMA - Agência para a Modernização Administrativa
194. Jorge Santos, www.uevora.pt

195. Rui Santos
196. Nuno Santos, PT
197. Cristiana Sappa, KU Leuven/LAPSI
198. Raquel Saraiva, DGT
199. Felix Sasaki, DFKI/W3C/LIDER
200. Heike Schuster-James, Bigital Birmingham
201. Jorge Serro, DGLAB
202. Francisco Silva, IRN
203. Gonçalo Silva, DGEEC/MEC
204. Susana Silva, IGAMAOT
205. Steinar Skagemo, DIFI
206. Sebastian Sklarß,]init[
207. Sandra Silva, IEFP
208. Ingo Simonis, OGC
209. Amanda Smith, ODI
210. Donatella Solda, MIUR
211. David Sousa, Gabinete SEMA
212. Jorge Sousa, AMA
213. Rui Spínola, Infarmed
214. Paul Suijkerbuijk, Dutch Open Data portal
215. Adomas Svirskas, National Software and Services Cluster - Lithuania
216. Nikolay Tcholtchev, Fraunhofer FOKUS
217. Isabel Telha, Camara Municipal de Lisboa
218. Helder Touças, Camara Municipal de Lisboa
219. Džiugas Tornau, UALB/Graphity
220. Antigoni Trackalia, Avgerinos and Partners
221. Filipe Trancho, Universidade de Aveiro
222. Mikael Vakkari, Ministry of Finance Finland
223. Freyja van den Boom, KU Leuven
224. Noël Van Herreweghe, CORVe
225. Arnold van Overeem, The Open Group/Capgemini
226. Pedro Vargas, Câmara Municipal de Oeiras
227. João Vasconcelos, AMA
228. Paula Vasconcelos, AMA -Agência para a Modernização Administrativa ip
229. Olaf Veerman, Flipside
230. Vanessa Veríssimo, Camara Municipal de Lisboa
231. Marta Vicente Pinto, PT Inovação
232. Tomislav Vračić, Ministry of Public Administration, Croatia
233. Sanja Vranes, Institute Mihajlo Pupin
234. Neven Vrček, University of Zagreb
235. Clemens Wass, Open Laws
236. Simon Whitehouse, Digital Birmingham
237. Peter Winstanley, Scottish Government

Annex 3 - Dissemination Activities for Lisbon Workshop

Date	Action taken	Partner
14 July	Email to Invest Lithuania, business-promoting agency	UABLD
17 July	Blog post on Samos Summit ODI / Samos Summit blog post, Open Data Institute (ODI)	ODI
17 Sept	1-1 e-mail to Bulgarian Ministry of Transport	W3C
17 Sept	1-1 e-mail sent to DataMarket.com	W3C
17 Sept	Blog post	W3C
17 Sept	1-1 e-mail to DBPedia Association	W3C
17 Sept	E-mails to relevant persons at Ministry of Enterprise, Energy and Communications in Sweden	PKZ
17 Sept	Post to swedish opengov group (1700+ members)	PKZ
17 Sept	Post to Nordic Open Data Ecosystem	PKZ
17 Sept	Email to the Lithuanian Open Data public group	UABLD
24 Sept	Mentioned in the occasion of one of the monthly seminars held at the Nexa Center for Internet & Society (POLITO) about Government transparency in Italy, and related Open Data quality/standardization/reuse [1] (ca. 20-25 participants)	POLITO-NEXA
29-30 Sept	Included in presentation and conversations at OGP Paris	MAREG
16 October	Included in Open Data Support training session with the Bulgarian Institute of Public Administration	AMI
16 Oct	Presentation about Share-PSI and encouraging participation at future Share-PSI workshops during W3C eGov workshop	SZTAKI
20 October	Open Public Sector Data stream at the Open Group's London conference	TOG, NUIG
18 Sept	Encouraging open data usage by commercial developers - Call For Participation -News item	CORVE
18 Sept	Post to LinkedIn group opendataforum -[2]	CORVE
18 Sept	Post to LinkedIn groups eGov Community, ENGAGE, European Data Forum, Linked Data Web, Mayor Cities of Europe IT User Group, Open Data Research Network, Open Data Support, Open Government (Europe), PSI4PROFT	DUK
18 Sept	Pulication on Center for E-Governance public Blog [3]	DUK
18 Sept	Twitter [4]	DUK
18 Sept	Google+ [5]	DUK
18 Sep	Email to SEED (FP7 CIP project) mailing list	UVT
18 Sep	Email to Open Data Coalition Romania mailing list	UVT
19 Sep	Entry in OpenData.hu Facebook group: https://www.facebook.com/groups/OpenData.hu/	SZTAKI
19 Sep	Twitter	SZTAKI
23 Sep	Joinup [6]	PwC
23 Sep	Twitter [7]	PwC

24 Sep	OpenData.cz - English news channel, Czech news channel	UEP
24 Sep	Email to OKFN-CZ mailing list (130 subscribers)	UEP
24 Sep	Email to COMSODE project mailing list (private)	UEP
25 Sep	Twitter [8]	PwC
25 Sep	Promoted at semantic wiki community [9]	KIT
25 Sep	Promoted at Publishing Statistical Data community [10]	KIT
25 Sep	Email to LOD2 and GeoKnow mailing lists	IMP
26 Sep	Promoted at Luxinnovation (the Luxembourg innovation agency)	Tudor
26 Sep	Promoted at the Finodex project	Tudor
26 Sep	Promoted to stakeholders at the EC of the Europeana environment	Tudor
26 Sep	Promoted to the ICT cluster Luxembourg	Tudor
02 Oct	Email to Danish Agency for Digitisation [11]	UABLD
02 Oct	Post in Swedish Semantic Web public group on FB [12]	UABLD
03 Oct	Included in presentations, conversations and workshops Open Data Day in Flanders -[13]	CORVE
03 Oct	Post to OKF Open Government mailing list	W3C
03 Oct	Post promotion messages to the following linkedin groups: weGov - 42 members http://tinyurl.com/lfjdsqw Open Data Foundation - 1419 members http://tinyurl.com/qgqy2kv egov Research Community - 793 members http://tinyurl.com/qzk56fx Policy Making 2.0 - 2152 members http://tinyurl.com/pgnv72z ENGAGE project - 235 members http://tinyurl.com/ortpjzc Open Data Innovations Network - 1419 members http://tinyurl.com/pseplva eGov Community - 6169 members http://tinyurl.com/qxorv4a Open Data Center Alliance - 953 members http://tinyurl.com/oebceey Open Data Professionals - 287 members http://tinyurl.com/ogbmqda Open Data Support - 156 members http://tinyurl.com/kz9rva7 PSI4Profit - 57 members http://tinyurl.com/l6ro6jj	UAEGEAN
03 Oct	Post in Spaghetti Open Data group SOD	POLITO - NEXA
6 Oct	Email to the members of the W3C Open Data Spain Community Group	CTIC
6 Oct	Email to the members of the OKF Spain charter	CTIC
6 Oct	Deadline extension announcement on ePSI Platform	CTIC
7 Oct	Tweet to 4,600 followers	MINHAP-Spain
7 Oct	ReTweet to 7,000 followers	MINHAP-Spain

7 Oct	Piece of news at our national e-goverment portal with 55.000 visits/month and 4.500 suscribers to the news section	MINHAP-Spain
8 Oct	Piece of news at our national opendata portal	MINHAP-Spain
8 Oct	Blog post	TOG
10 Oct	Published on FOI homepage [14]	FOI
10 Oct	Presentation at ePSI Platform + LAPSI workshop Milan (IT) Simon Whitehouse	BCC
13 Oct	Tweeted link to TOG blog post Rewteeted from W3C account Mail to (public) DWBP list	W3C
16 Oct	Dedicated slide during a presentation in Coimbra (PT)	CTIC
16 Oct	Promotion of SharePSI at W3C Meetup meeting in Budapest	DUK
16 Oct	News on w3c.hu	SZTAKI
17 Oct	W3C Hungarian Office tweet	SZTAKI
31 Oct	Send CFP to internally used long mailing list of journalists, NGOs, and government officials from Albania	AIS/KIT
3 Nov	Twitter	FOKUS
3 Nov	Twitter	CTIC
3 Nov	Twitter and LinkedIn to our network	Difi
4 Nov	OpenData.cz - English news channel updated, Czech news channel updated	UEP
4 Nov	Email to OKFN-CZ mailing list (130 subscribers)	UEP
4 Nov	Email to Open Data Romania mailing list	UVT
6 Nov	Post to Spaghetti Open Data Group (more than 1000 members)	POLITO-NEXA
7 Nov	Tweet, Retweeted 17 times including by W3C, AMI, AgID, PK, SZTAKI, ULL; as well as Katleen Jansen, Malte Beyer, Bart Hanssens	W3C
7 Nov	Blog post	W3C
7 Nov	Jornadas Ibéricas de Infraestruturas de Dados Espaciais Announcement during presentation	OGC
11 Nov	Tweet	IMCS
11 Nov	LinkedIn post	SZTAKI
13 Nov	Workshop announced at the website of the Faculty of Informatics and Statistics of the University of Economics, Prague (in English, in Czech)	UEP
13 Nov	Promoted Lisbon workshop and Share-PSI to people from re3data.org project [15]. The project fosters the publication of research data which fits well with Share-PSI objectives.	KIT
17 Nov	FINODEX Newsletter	N/A
1 Dec	News item	AgID