

# **Internet Time: Open Data and Laws for European Citizens**

Carlo Vaccari<sup>1</sup>, Maria Concetta De Vivo<sup>2</sup>, Alberto Polzonetti<sup>3</sup>, Pietro Tapanelli<sup>4</sup>,

Abstract: This article covers three different aspects related to the Internet usage in Europe. The first theme examines the Open Data phenomenon and the use of Public Sector Information in the interest of the citizens. In this part we listed the studies that in last years attempted to quantify the PSI market. In the second paragraph we list the actions taken by European Commission to develop the PSI market and to use the "openness" to improve economic growth in Europe. In the final section an overview of the Italian law relating to the use of the Internet is given, connecting it with the latest developments of European and UN laws on the usefulness of new technologies for the European digital citizen. The paper provides an overall look at the studies, actions and European laws regarding the use of the Internet and public data and the resulting benefits for citizens.

Keywords: Open Data; Digital Agenda; Public Sector Information; Digital Rights; European Citizen

### 1. Open Data for European Growth: how big is PSI market?

When tackling the issue of the contribution that the Public Sector Information (PSI) can make to economic growth, the first major problem is the evaluation of the potential market for PSI.

Over the years there have been several studies that have assessed the value of PSI with different methodologies.

### 1.1. PIRA study

In 2000 the PIRA study (Epractice.eu, 2000) provided the first extensive estimates of the economic value of PSI. The study identified two main estimates of this value: i) investment value and ii) economic value.

By "investment value" the study identified the government investment in the acquisition of PSI. In the PIRA study, the cost of acquiring the information gathered by the public sector provides a lower bound to the value of PSI.

"Economic value" refers to the part of national income attributable to industries and activities that are based on the exploitation of PSI (i.e. value added of PSI with respect to the economy as a whole and private sector expenditure on PSI).

PIRA study is the first to suggest that existing revenue based licensing models may be operating not only against private sector and consumers interests, but also against the financial interests of

<sup>1</sup> PhD student, University of Camerino, via Madonna delle Carceri 9, Camerino (MC), Italy, tel +39 0737 402505, fax +39 0737 40632525, Corresponding author: carlo.vaccari@unicam.it

<sup>2</sup> Assistant Professor, University of Camerino, via Madonna delle Carceri 9, Camerino (MC), Italy, tel +39 0737 402505, fax +39 0737 40632525

 $<sup>3 \</sup> Assistant \ Professor, \ University \ of \ Camerino, \ via \ Madonna \ delle \ Carceri \ 9, \ Camerino \ (MC), \ Italy, \ tel \ +39 \ 0737 \ 402505, \ fax \ +39 \ 0737 \ 40632525$ 

<sup>4</sup> PhD student, University of Camerino, via Madonna delle Carceri 9, Camerino (MC), Italy, tel +39 0737 402505, fax +39 0737 40632525

governments themselves. Although governments gain income from the commercial licence fees, they lose the taxation and employment benefits from the higher volumes (at least doubling of market size assumed by the study) of commercial activity that would be generated by abandoning charges.

The report results emphasized the importance of geo-spatial information, making up around one half of the total. They estimated a total value of PSI of EUR 68 billion annually, with a value of EUR 36 billion for geo-spatial information.

#### 1.2. MEPSIR

The MEPSIR study (EU Commission, 2006) (MEPSIR stands for Measuring European Public Sector Information Resources), completed in 2006 by HELM Group of Companies of Moira (UK) with Zenc company (NL), rebuilds the value chain of Public Sector Information, identifying three main phases performed by the public sector and, subsequently, by the private sector:

- I) generation of data, usually by the public sector;
- II) processing (collection, aggregation and combining) of data to make easy to access them, to share and work with combining them with other data. This processing may also be intended as "adding value" to the data and can be a matter of private sector;
- III) distribution of data: at the end of the chain, the data are distributed to the re-users. Distribution can be a task for public bodies or by private firms.

After analyzing the different business models for public data, the study lists the different types of economic effects on which the 2003 Directive (2003/98/EC) took effect, from "Direct price effect" (the costs of purchasing public sector information from the government will decrease), "Quantity effect" (re-users will buy more products, due to lowered prices and increased accessibility), "Entry effect" (more companies will enter the value chain) and so on.

MEPSIR finally, after collecting the feedback of re-users and public offices, attempted an evaluation of the amplitude of the PSI market in Europe, leading to an assessment, however, significantly lower than both the PIRA study and estimates of the American Public Sector Information market.

In MEPSIR indeed, estimates for the overall market size for PSI in the European Union range from €10 to €48 billion, with a mean value around €27 bijon (about 0.25% of the total GDP for the European Union).

# 1.3. Vickery's Study

In 2010, in preparation for the revision of the Directive, the Commission has commissioned to Graham Vickery<sup>1</sup> the following study: "Review of recent studies on PSI re-use and related market developments" (EU Commission, 2011a).

In the study is recognized that knowledge is a source of competitive advantage in the "information economy", and then it is economically important that there is wide diffusion of public information. Between the benefits gained from improving access to PSI and facilitating its reuse, the following are listed:

- development of new products built directly on PSI;
- development of complementary products such as new software and services;
- reduction of transaction costs in accessing and using such information;
- efficiency gains in the public sector itself;
- the crossing of different public and private information to provide new goods and services.

 $<sup>1\ \</sup> Some\ \ note\ \ about\ \ Graham\ \ \ Vickery:\ \ http://www.devex.com/en/news/leader-profile-graham-vickery-head-of-iccp-oecd/29936\ and\ \ http://www.oecd.org/speaker/0,3438,en_21571361_42740239_43561454_1_1_1_1,00.html\\ 818$ 

After the after the analysis of a number of national cases of use of public information, Vickery comes to the conclusion that there is the need to update the figure of the potential market value of PSI re-use in Europe, evaluated by MEPSIR to 27M.

The first estimate, based on studies of "business as usual", provide economic gains from opening up Public Information and providing access for free or marginal cost up to € 40M for the EU27.

But the Study continues, indicating that PSI can be used in a very wide range of direct and indirect applications across the economy and direct and indirect economic impacts from PSI applications and use across the whole EU economy are of the order of €140 M annually, confirming that there are large economic benefits from easier access to PSI.

#### 2. EU Main Actions

#### 2.1. Directive 2003/98

The Directive 2003/98/EC states in Article 1 as its main objective: to establish "a minimum set of rules governing the re-use and the practical means of facilitating re-use of existing documents held by public sector bodies of the Member States". It can be seen that the Directive sets out to establish a frame-work for fair, proportionate and non-discriminatory conditions for re-use of Public Sector Information in the European Union.

The General Principle: Member States shall ensure that, where the re-use of documents held by public sector bodies is allowed, these documents shall be re-usable for commercial or non-commercial purposes in accordance with the conditions set out in Chapters III and IV. Where possible, documents shall be made available through electronic means.

Directive establishes that for all public document users can ask for re-use and public bodies must answer timely (usually in 20 days) having to justify any negative opinions and allowing an appeal against their decision.

Transparency on conditions and charge is granted: conditions must be pre-established and published, and any applicable conditions for the re-use of documents must be non-discriminatory for similar categories of re-use.

Moreover there is the prohibition of exclusive arrangements to grant exclusive rights on documents.

Finally the Directive stated that the Commission should review his application before 2008, verifying the scope and impact of this Directive, especially in terms of the extent of the increase in re-use of public sector documents.

### 2.2. Open Data Package

In December 2011, the Commission presented, with the slogan "Turning government data into gold", an Open Data Package consisting of:

- 1. A proposal for a revision of the Directive (EU Commission, 2011b);
- 2. A Communication on Open Data (EU Commission, 2011c);
- 3. New Commission rules on re-use of the documents it holds (EU Commission 2011d).

The main **changes to the Directive** that the Commission is proposing are:

- General rule that all documents held by public sector bodies will be re-usable for both commercial and non-commercial purposes, unless covered by the exceptions provided for in the Directive;
- Libraries, museums and archives will be included under the Directive rules;
- Public bodies shall in principle not be allowed to charge more than marginal costs generated by the individual request for data;

- Introducing regulatory oversight over fees charged by public authorities on requests for re-use;
- Usage of standard machine-readable formats so as to avoid technical barriers for re-use.

The date of adoption of the revised Directive is expected towards the end of 2012.

**Open Data Communication** starts from Vickery's Study which provides that the gains from opening up this resource could amount to  $\in$  40 billion a year in the EU. Furthermore opening up PSI will encourage the participation of citizens in political and social and will help improve policies in different sectors such as the environment.

As part of the Digital Agenda for Europe (EU Commission 2012a), the Commission presents three interconnected actions to overcome existing barriers and fragmentation across the EU:

- Adapt the legal framework for data re-use, with the quoted proposal for a revised Directive on the re-use of public sector information and a revised Commission Decision on the re-use of its own information are adopted together with this Communication;
- A Mobilize financial resources in favor of open data and support the development of European data portals;
- A Facilitate coordination and experience sharing between European countries, in particular through:
- ♣ the PSI group (EU Commission, 2012b), a Member States' expert group exchanging good practices of PSI re-use and initiatives supporting PSI re-use;
- he Public Sector Information platform (EU Commission, 2012c), a web portal which provides news on good practices, new products and services, and legal cases concerning PSI re-use:
- the LAPSI network (EU Commission, 2012d), the European network for policy discussions and strategic action on legal issues related to the access and the re-use of PSI;
- ▲ the ISA action (EU Commission, 2012e) on semantic interoperability: ISA (Interoperability Solutions for European Public Administrations programme with a budget of 164 Million Euro) addresses the need of efficient public services in EU by facilitating electronic collaboration between European public administrations.

New **rules on re-use of Commission documents:** for Commission documents a new General Principle has been established, by which all documents (with few exceptions) shall be available for reuse for commercial or non-commercial purposes, without charge and without the need to make an individual application. A data portal as a single point of access to documents available for reuse will be set up. Also the research information produced by the Joint Research Centre will be included and all documents will be in the future available under machine-readable formats. So Commission documents will be generally available for reuse without the need for individual applications, through open reuse licenses or simple disclaimers.

#### 2.3 ICT PSP 2012 Work Programme

Finally in 2012 February, inside the 2012 ICT Policy Support Programme (EU Commission, 2012f), which provides EU funding to support the realization of the Digital Agenda for Europe, we can find other concrete actions towards the goal of open data.

Inside the Call for Proposals (deadline 15 May 2012) in the Objective 2.2 "Open data and open access to content" funded with 12 M€ the following goals are highlighted:

- ▲ Stimulate the opening up of European data resources for re-use by businesses;
- ▲ Work on legal aspects of Public Sector Information and standards for open data;
- A Experiment with Open Access to scientific information.

For these goals following projects will be funded:

- A Geographic Information to foster the wider use of spatial data by public and private sector organizations and citizens, making available harmonized information related to the INSPIRE Directive and developing innovative value-added services by the private sector;
- A Open access to scientific information, to support experiments with open access to scientific information, exploring new paradigms for accessing, querying, using and evaluating this information;
- Legal aspects of PSI and standards for open data, taking into account the results of the LAPSI thematic network to analyze the field of legal aspects of PSI;
- Landards for open data, facing interoperability (technical and legal) aspects of open data.

We have seen that Europe is pursuing a wide range of actions that converge towards an ever greater availability of public data confident that the increased availability and their re-use can help to stimulate economic growth on the continent.

# 3. Europe and Internet: New Technology and Digital Citizens

# 3.1. The Italian legal system

It's time to Internet. More than 2 billion users of the network in the world (so says the International Telecommunications Union, ITU, in its report of May 2011). Network access is considered, now finally, as a fundamental right, which is part of the inviolable rights of the person.

The Italian legal system has many important laws that relates indirectly to Internet.

First there is the Italian Constitution, which remarks "indirectly" in many parts of the text, the right of Internet. Some legal experts think that this right is part of the "fundamental rights", while other experts think that is one of the "social rights".

The article 2 of the Italian constitution is a law considered by most authors as "open" and says that the Republic recognizes and guarantees the inviolable rights of man as an individual and in social education where man plays its activities and requires the fulfillment of duties imperative of political solidarity, economic and social development. In this case we must consider Internet between these inviolable rights of the person.

Article 21 recognizes the importance of network in reference to another fundamental principle of our Constitution. The right of free expression of our thoughts, speech, writing and "any other form of communication."

There are other articles of the Italian Constitution which deal with the subject.

These include: Article 4 (right to work) says that the Republic should ensure and promote the conditions (all, including technology) to perform this right the best. Article 9 states that must be guaranteed the development of culture (Internet is an instrument and at the same time a product of culture). Articles 17 and 18 ensure the freedom of assembly and association, by any means (do not forget that the Internet is also a place for social gatherings).

Article 117 of the Italian Constitution, reformed by Constitutional Law no. 3 of 2001, section 2, letter. r), introduced in our Constitution an explicit reference to the subject of the "informatics". This rule is "exclusivity" of the State legislature, and shows that you should establish a technical coordination to guarantee a "commonality of language, procedures and uniform standards, to allow the communicability between the computer systems of public administration".

With regard to Public Administration and relationships with citizens, another law is the Digital Administration Code (CAD). Article 9 CAD ensures democratic participation by electronic means. This warranty is promoted and pursued by the government through new technologies and must be made to serve the user-citizen, also the citizen who is abroad, in order to allow the exercise of political rights and civil.

The article 3 in the CAD outlines an original, but also necessary, "Right use of technology" thought for the citizen and, more importantly, also for the companies that can (indeed must) require the use of computer technologies in communications with public administrations.

## 3.2 The European Legal System

The European legislator tries to overcome the digital divide: this problem contrast with the intimate nature of Internet because the network was created for everyone access (overcoming all forms of disability).

The aim of the European legislator is to prevent what a tool like the Internet, created with the intention of encouraging "anyone", becomes, on the contrary, a potential instrument of profound social inequality. The dream shared by the ardent supporters of the network is to induce the states (EU and internationals) to realize a widespread distribution of the Net, even in areas not adequately developed, where the "people" has not yet learned to use this technology.

The EU has repeatedly reaffirmed the one hand the aim to foster a digital culture addressed to the type of technologically illiterate citizens on the other's commitment to the creation of public places where everyone can use advantage of the Net. In this context, the Internet Point can arise in even small local (villages and small towns) to allow everyone to perform tasks that would otherwise not be possible. A technology that serves the citizen, allowing easier access to the citizens. Wherever they live.

Even the UN has highlighted the importance of the impact of on-line connections on the development of the whole universal community (in economic, social and civil). The study is an interesting report of May 16, 2011 (discussed in the June 3 meeting of the UN Human Rights Council, A.HRC.17.27\_en, UN Special Rapporteur on freedom of expression Frank LaRue). The UN has recognized the nature of the Internet as a "key means of exercising the right to freedom of opinion and expression".

The document states, moreover, that any restriction on the use of Internet is "a violation of fundamental human rights" since the network, in fact, facilitate the full realization of the person in all areas: from education, participation, culture and social life.

The report want to ensuring universal access to the web; it should be a priority for all countries.

The study produced by the United Nations, however, has awareness of how states are in a very unequal situation between them and therefore it is as difficult to achieve the same result simultaneously

To hinder the development, the creation and access of the Internet violates the international covenant on human rights (civil and political), adopted by the UN General Assembly on 16 December 1966 and entered into force during 1976.

The provisions contained in the Covenants are modeled on the rights set forth in the Universal Declaration of Human Rights (December 10, 1948) which becomes another legal important standard reference text.

The Declaration of the Citizenship Act (Article 15) now recognizes with growing conviction the right of "universal citizenship" different respect to the "national citizenship" (guaranteed by the state of belonging, according to a *jus soli*, the law of the land, or a *jus sanguinis*, the right of blood).

The idea of universal citizen was acknowledged for the first time in international law but which turns out to be, in reality, the product of globalization that brought the Internet. The "World Citizen" (desired shape by historical characters and excellent jurists such as Giorgio La Pira, and the Pope Wojtila himself) is increasingly becoming a legal law reality. It replaces the law of reciprocity of mold purely "commercial". This requires the State to treat citizens (of any country) in respect to their

fundamental rights, universally recognized as "Person", regardless by treatment granted by other Member States<sup>1</sup>.

Not all of the numerous interventions of the European Union were a success.

Much hope is for action plan of the Council of Europe for the eGovernment 2011-2015<sup>2</sup>. In line with the Digital Agenda for Europe, the Action Plan is divided into four priorities, as defined by the Malmö Declaration of November 18, 2009<sup>3</sup>: 1. increase empowerment citizens and businesses; 2. increase mobility in the European single market; 3. improve the efficiency and effectiveness of public and 4. create the enabling factors and pre-conditions necessary to set in useful procedures. ICT (Information Communication Technology) has the aim to use "an intelligent, sustainable and innovative administration."

The Plan will recognize and enhance the "new trend" of the PA about the open government, open data, social media and all other tools of technology. In this context there are the "technologies" that promote interoperability in the digital environment, such as electronic signature and e\_Identification.

The intent is to satisfy a new generation of eGovernment services, cross-border, designed around European citizens and European businesses, regardless of their nationality or country of origin.

The aim of the EU is to provide services accessible to all EU citizens in order to "significantly enhance the digital single market" and allow the harmonization of legislation existing in individual States, in those key areas that involve all aspects eProcurement, the e-Justice and e-health.

The European Commission predicts to obtain, till 2015, an increase of the eGovernment services usage by citizens (around 50%) and by the business class(around 80%).

#### 4. Final Remarks

Recently Italy reiterates the need for an Italian digital Agenda (February 9, 2012 by d. Law no. 5, Art. 47th, in the section dedicated to technology innovation, published in G.U. February 9, 2012, n. 33.)

The law says "According to the indications of the Digital Agenda, European Commission Communication COM (2010) 245 final / 2, 26 August 2010, the Government pursues the primary objective of the modernization of the relationship between public administration, citizens and businesses class, through coordinated actions aimed at encouraging the development of demand and supply of innovative digital services; to enhance the delivery of broadband connectivity and to encourage citizens and business class to use digital services; to promote capacity growth adequate to support the industrial development of innovative products and services."

It's no accident that Tim Berners Lee (founder and creator of the Web) in a recent interview he quoted the famous words of Liu Xiaobo, Nobel Peace Prize 2010, which defined the Internet "a gift from God."

\_

 $<sup>1\</sup> A.\ Papisca,\ UNESCO,\ "Diritti umani,\ democrazia\ e\ pace"\ University\ of\ Padova\ (Italy)\ about\ the\ article\ 15\ of\ the\ Universal\ Declaration\ of\ Human\ Rights;\ and\ http://web20.excite.it/onu-internet-e-un-diritto-fondamentale-N103464.html.$ 

<sup>2</sup> Brussels, 15 December 2010, COM(2010) 743,

 $http://ec.europa.eu/information\_society/activities/egovernment/action\_plan\_2011\_2015/docs/action\_plan\_en\_act\_part1\_v2.p.\ df$ 

 $<sup>3\</sup> http://europa.eu/legislation\_summaries/information\_society/strategies/si0021\_it.htm$ 

#### 5. References

Epractice.eu (2000) – Web page. Retrieved from http://www.epractice.eu/en/library/281342, date: 27.02.2012; (study completed by Pira International Ltd., University of East Anglia and KnowledgeView Ltd)

EU Commission (2006) - Web page. Retrieved from

http://ec.europa.eu/information\_society/policy/psi/actions\_eu/policy\_actions/mepsir/index\_en.htm, date: 27.02.2012

EU Commission (2011a) - Web page. Retrieved from

http://ec.europa.eu/information\_society/policy/psi/docs/pdfs/opendata2012/reports/Vickery.docx, date: 27.02.2012

EU Commission (2011b) - Web page. Retrieved from

http://ec.europa.eu/information\_society/policy/psi/docs/pdfs/directive\_proposal/2012/en.pdf, date: 27.02.2012

EU Commission (2011c) - Web page. Retrieved from

 $http://ec.europa.eu/information\_society/policy/psi/docs/pdfs/opendata 2012/open\_data\_communication/en.pdf, \ date: 27.02.2012$ 

EU Commission (2011d) - Web page. Retrieved from

 $http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:330:0039:0042:EN:PDF\ ,\ date:\ 27.02.2012:D1:2011:330:0039:0042:EN:PDF\ ,\ date:\ date:\$ 

EU Commission (2012a) – Web page. Retrieved from http://ec.europa.eu/information\_society/digital-agenda/index\_en.htm, date: 27.02.2012

EU Commission (2012b) - Web page. Retrieved

from http://ec.europa.eu/information\_society/policy/psi/psi\_group/index\_en.htm, date: 27.02.2012

EU Commission (2012c) – Web page. Retrieved from http://ec.europa.eu/information\_society/policy/psi/index\_en.htm, date: 27.02.2012

EU Commission (2012d) - Web page. Retrieved from http://www.lapsi-project.eu/, date: 27.02.2012

EU Commission (2012e) - Web page. Retrieved from http://ec.europa.eu/isa/index\_en.htm, date: 27.02.2012

EU Commission (2012f) - Web page. Retrieved from

 $http://ec.europa.eu/information\_society/activities/ict\_psp/participating/calls/call\_proposals\_12/index\_en.htm, \ date: 27.02.2012$