

Deployment of new broadband technologies through public sector information

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Abstract: This paper analyses the problems of the slow growth of broadband deployment in European union member states, and the effect of public sector information on future developments of new electronic communications technologies. The implementation of the recent EU directive 2003/98 on re-use of public sector information is the key element on developing broadband by reusing publicly available information and documents. Demand stimulation, for broadband growth, through cost effective public pan European eContent, is complimentary and further facilitates infrastructure based services.

Key-Words: Broadband, public sector information, eContent, eEurope action plan, eGovernment., information communication technologies.

1. Introduction

The last three years Information communication technology (ICT) sector was passing through financial turbulence, which nowadays seems to be in an early recovery face. State aid, an unthinkable means of help, put on the negotiating table by the industry [1]. Member states of the European union responded, by reassuring industry and all relevant stakeholders that implementing eEurope's action plan objectives, growth would occur fast, through the deployment of broadband communications either fixed or 3G mobile and satellite [2] - [5]. One of the tools of stimulating demand for services such as eGovernment, eLearning, eHealth and eBusiness, is the creation of a platform and relevant set of rules, to reuse the information held in public sector [6].

Reuse of public sector information, creates a new market on its own aiming to a pan European eService. Broadband, a horizontal action of eEurope action plan, which penetrates all levels of deployment either infrastructure or content, is the vehicle for guiding this new pan European market [7].

The relevant Commission proposal was discussed in the Telecommunications and Information Society Council's Working Party, and in the European Parliament, from July 2002 to June of the following year, during Danish and Greek Presidencies [7]. The directive came into force, on

its publication in the Official Journal of the European Communities [8].

The main concern of some member states, was the change of the access to public documents regime, for the shake of stimulating demand for broadband deployment.

2. Importance of public sector information

The evolution towards an information and knowledge society, enables citizens to gain new ways of accessing and acquiring knowledge. Digital content plays an important role in this evolution. The public sector collects, produces, reproduces and disseminates a wide range of information in many areas of activity, such as social, economic, geographical, weather, tourist, business, patent and educational information [8].

The main principle of the European internal market, is to create the relevant conditions for the development of Community-wide services.

Recital 5 of the EU directive 2003/98, on reuse of public sector information (PSI), explicitly states: "Public sector information is an important primary material for digital content products and services and will become an even more important content resource with the development of wireless content services. Broad cross-border geographical coverage will also be essential in

this context. Wider possibilities of re-using public sector information should inter alia allow European companies to exploit its potential and contribute to economic growth and job creation” [8].

The main difficulties for making European products in the area of digital content, are: the lack of clear rules and policies, the mindset of public sector bodies, the unfair competition, the lack of transparency and, the high charges [9], [10].

Broadband deployment, on the other hand, suffers by a “chicken- egg” problem. Telecom industry does not invest on infrastructure, invoking the lack of digital content. The reverse exactly argument comes from the *eContent* providers, who consider worthless investing on digital content, as broadband infrastructure is not ready. In most of the private discussions, industry argues that governments have to build broadband networks, exactly as they did for road highways, or electricity grids.

European governments responded by offering harmonised rules in reusing public content for creating suitable cross boarder European products.

3. PSI directive

EU 2003/98 directive establishes a minimum set of rules governing and facilitating re-use of existing documents / information held by public sector bodies. PSI directive builds on the existing access regimes and does not apply in cases in which citizens or companies have to prove a particular interest to obtain access to the documents / information.

One of the main issues discussed lengthily between Council and European Parliament was the term “document”. European Parliament, expressing more liberal opinion than of the Council, was insisting in using the term information all over the text. Council, having in mind that administration information is a very broad description, wanted to specifically use the term “documents”. The compromised solution, was to use information in the title of the directive and documents in the text. Simultaneously, a definition of “documents” is used in article 2 as: “any content whatever its medium (written on paper or stored in electronic form or as a sound,

visual or audiovisual recording); any part of such content” [8].

Re-use of this kind of documents, means the use by persons or legal entities of documents held by public sector bodies, for commercial or non-commercial purposes. Administrations in EU member states shall ensure that, documents and information produced shall be re-usable, i.e. in electronic form, for commercial or non-commercial purposes. Moreover this directive sets timeframe of not more than 20 working days for administrations to respond on relevant requests.

Charges should be cost-oriented and do not exceed the cost of collection, production, reproduction and dissemination, together with a reasonable return on investment. All process should be transparent and published in appropriate catalogues through electronic means. In particular, these catalogue contents should facilitate the search for documents available for re-use, such as assets lists. Fig. 1 bellow, depicts a simplified flow operational diagram of PSI directive.

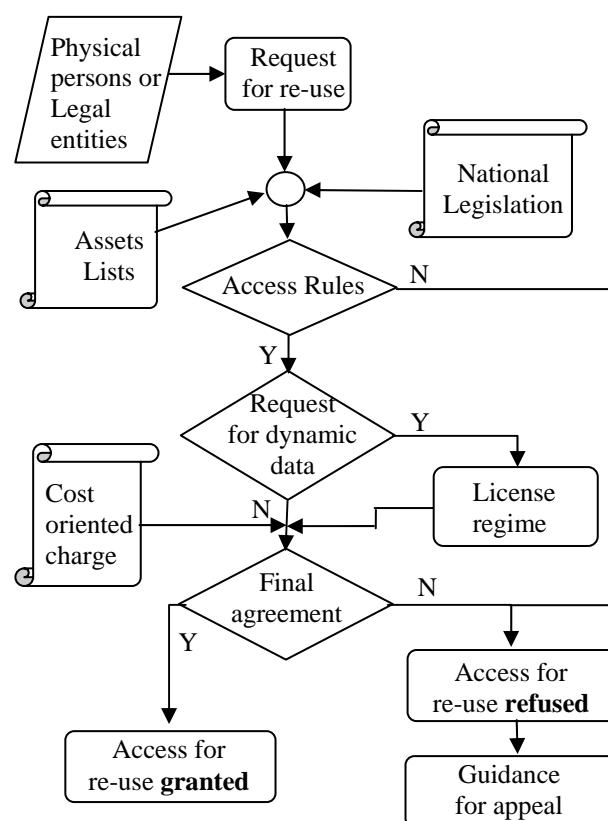


Fig. 1: Simplified functional diagram of PSI directive

PSI directive was published in the official journal of the European Communities on the 31 of December 2003. The deadline for transposition in

the national legislation of member states was 18 months later, i.e. 1 June 2005.

4. Removing obstacles

Applying PSI directive in all member states, uniform relevant rules are coming into force, governing a new market as shown in fig.2.

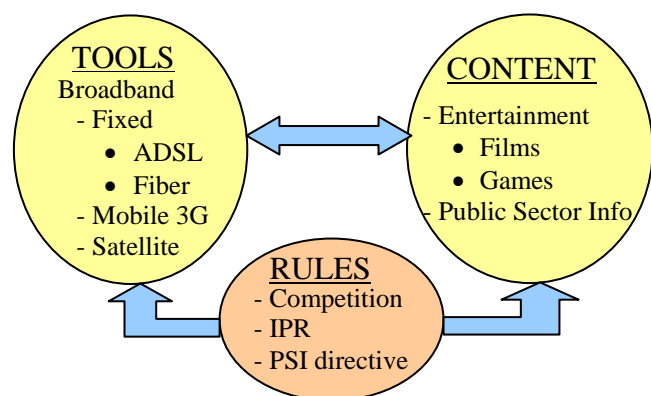


Fig. 2: A new pan European market on re-use of public sector information.

Tools should, essentially, be provided by private sector, or public private partnership. The entertainment content as well as the products of the reused public sector information, is undoubtedly private sector's responsibility. State's obligation is to provide digital on line, and where possible interactive content related to *eGovernment*. The role of state is to setup and enforce the rules and timely cope with changes.

The role of public sector administrations becomes clearer after PSI directive came into force, by unlocking, advertising and transparently charge its information. In the same pace, private sector has to develop suitable business models in order to transform "PSI on broadband" to a successful story for Europe, comparable to GSM.

Facilitating further the issue of re-use, a one stop *eGovernment* platform is been proposed [11]. The platform provides public services and information, by using metadata for locating and presenting information, locating and invoking services and linking services with information. The technologies are based on J2EE, Java, XML / RDF and Web Services. A schematic diagram of the platform is shown in next fig. 3.

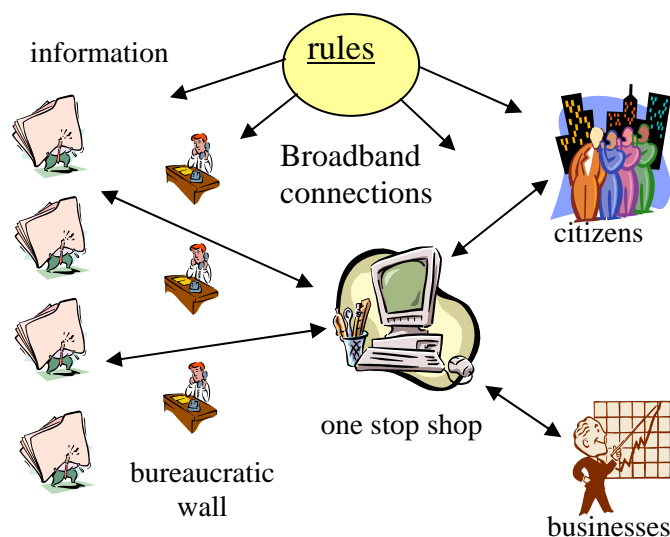


Fig. 3. The one stop shop model

5. Actions

Several projects that show-case the re-use of public sector information are co-financed by relevant programmes of the European Union.

Many of these projects also support the exchange of good practice and the dissemination of relevant information, aiming at stimulating the cross-border use of public sector information for added-value information products and services [12].

A good paradigm of synergy of broadband technologies and the need of on line access of public sector data, is a programme that combines spatial and traffic *eContent* for Europe [13]. In particular, the project combines geographic and traffic digital content, to build a complex Intelligent Transport Systems (ITS) application.

Many applications as such would occur after PSI directive coming in force in all EU member states. It is expected that the private sector will take this opportunity and thus, brake the vicious circle situation, between content and broadband infrastructure developments. Broadband highways then, would be wide open for investment and offer the benefits of information society to all citizens and businesses.

6. Conclusions

Re-use of public sector information directive, is the state aid to ICT industry. It offers an enormous amount of data held and continually produced within public sector bodies, in cost oriented prices. The obvious vehicle of future ICT applications, using PSI data, is broadband networks and in most of the cases 3G mobile. Demand stimulation, for broadband growth, through cost effective public pan European eContent, is complimentary and further facilitates infrastructure based services.

Public sector would obtain multiple benefits by applying PSI directive, as it will create transparency, fair competition, and downward effect on charges. Essentially PSI directive would change the culture in public sector.

Europe as a whole would be benefited as well. This directive facilitates the creation of Community-wide information products and services, enhances an effective cross-border use of public sector documents by private companies for added-value information products and services and, limits distortions of competition on the Community market.

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