

EXPLOITING THE POTENTIAL OF EUROPE'S PUBLIC SECTOR INFORMATION



*European Commission, Directorate General for the Information Society
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Information Society

Much of the information produced by the public sector has the potential for re-use in the market place

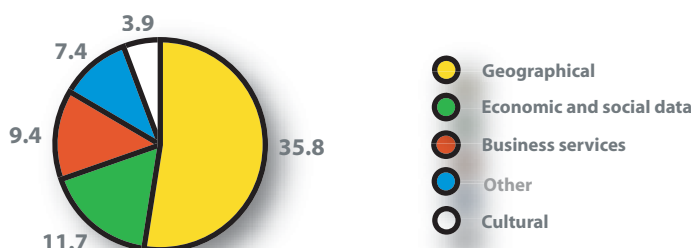
1 WHAT IS PUBLIC SECTOR INFORMATION?

Public authorities produce considerable amounts of information. This information covers widely diverging sectors.

The tools of the information society have radically changed the accessibility of this information to the public. More and more information is available in digital format and posted on the Internet. Citizens and enterprises can greatly benefit from this development, which increases the transparency of government and facilitates communication with the public services.

At the same time, public sector information has a considerable economic value. A study done for the European Commission in 2000 by Pira international, estimated this value for Europe at an amount of 68 billion EUR. The main sectors concerned are the following:

Economic value of public sector information in the European Union, 1999 (EUR billion)



What is public sector information?

Financial and business information (for example business statistics) is collected by a number of ministries and public sector organisations. Company registers are maintained by the public sector. Legal information and administrative information are by their very nature pre-eminent examples of public sector information. Patent offices are usually public sector bodies. Scientific, technical, cultural, and medical information is collected extensively by public research institutions and stored in public archives. Geographic information relevant to transport and tourism (digital maps) is also produced by public sector agencies. Tourist and traffic information is gathered and published by public sector bodies at different levels of government.

2 PUBLIC SECTOR INFORMATION: RAW MATERIAL FOR ADDED-VALUE SERVICES

Much of the information produced by the public sector has the potential for re-use in the market place. It can be the basis for new, added-value services created by private companies. This is for example true for digital maps. All information traditionally held and represented on conventional paper maps, can now be stored and handled in digital form. This opens the way to applications that go far beyond the simple digitisation of traditional maps, for example the provision of location-based services, spatial analysis for urban planning, environmental management etc.

Indeed, the tools of the information society have created unprecedented possibilities to combine data from different sources to make these types of added value products and services. You will find some examples of added-value services based on public sector information in the table below:



Type of public sector information	Examples of added-value service offered by private companies
Meteorological information	<ul style="list-style-type: none"> - Weather forecasts for mobile phones as part of a wider package of information services - Insurance of crops based on historical meteorological data
Laws and regulations	Collection of legal texts in a specific area at European, national and local level with links to relevant case-law
Digital maps	<ul style="list-style-type: none"> - Freight management service - System facilitating disaster management
Grant information	Comprehensive overview of European, national and local grants as part of a broader service to facilitate location decisions for companies
Tourist information from tourist boards	Mobile tourist service with description of main monuments, hotel information etc.
Business statistics	Business consultancy service based on statistical analysis
Administrative information	Overview of administrative formalities as part of a service for transport companies
Images of artefacts in museums	Online course in history of art
Audio-visual material from public archives	Documentaries integrating historical material
Traffic data	Intelligent navigation systems helping you to avoid traffic jams

The examples represent different types of added-value or a combination of these types: aggregation at cross-border level, new delivery mechanisms (e.g. mobile phones), integration in a broader package of services, tailoring of information to the needs of specific users.

In many cases, public sector information from one specific sector can be combined with other information coming from private or public sources. An example of such use is the Add-Wijzer project, co-financed by the European Community under the eContent programme.

The Add-Wijzer project

Add-Wijzer provides 'knowledge support for legal enquiry', by integrating different public sector information sources, in particular geographic information and legal information. The project, still in its development phase, has organised a demonstrator for use by 'intermediaries' who assist citizens and business in understanding law, and their rights and obligations under the law. Such intermediaries include citizen advisors, planners, developers, architects, management consultants, and many more.

The demonstrator (at <http://www.addwijzer.org>) shows how to explore scenarios such as 'relocating LPG (liquid petroleum gas) stations', and 'organising mass outdoor events'. By exploring clickable map displays, menus of applicable laws, and integrated data such as traffic flows, population densities, regional zoning plans, and even local municipal regulations, the user can construct and investigate scenarios to solve complex business problems (e.g. factory location). In Add-Wijzer, government departments, technology developers, researchers, and e-content vendors are collaborating to demonstrate realistic added-value service and business opportunities derived from law content and related public sector information.

3 BARRIERS TO THE RE-USE OF PUBLIC SECTOR INFORMATION

In spite of its potential, much of the public sector information in Europe is still not extensively re-used. What are the barriers that prevent such re-use?

No culture of re-use

The re-use of public sector information is a relatively new topic. With the Internet, the potential of this information as an economic asset has grown exponentially. This potential is, however, not widely identified within the public sector. There is at present no culture of systematically taking into account the possibility of re-use. It will take some time before such a culture develops throughout Europe. The exchange of good practices can help to achieve this goal, and to ensure that re-use is taken into consideration already from the moment the information is collected and stored.

This picture is in contrast with the situation in the United States of America, where a clear and comprehensive legal framework is in place to facilitate the re-use of public sector information.

The United States: A clear and comprehensive legal framework

In the United States, the exploitation of public sector information is facilitated by a clear and simple legal framework consisting of the following elements:

- *A strong Freedom of Information Act, ensuring extensive access to government information.*
- *No government copyright: this is explicitly embedded in the US Copyright Act.*
- *No restrictions on exploitation and re-use.*
- *Maximum fees limited to reproduction and dissemination costs.*

This picture, valid at the federal level, has led to substantial economic activity based on public sector information resources. In fact, estimates indicate that the US market based on public sector information resources may be several (possibly five) times the size of the comparable European market (Pira 2000).

Lack of information on available public sector information and conditions of re-use

It is often hard to find out what information is available for re-use and under what conditions this can be done. There are hardly any asset-lists, giving an overview of the material available. Even from the individual web-sites of public sector bodies it is not always obvious what information can be re-used and under what conditions.

An example of a good practice, that aims at improving the transparency of the conditions for re-use, are the UK click and use licence and asset lists.

Lists of information assets, and click and use licences (UK)

The Inforoute website offers a link to information that is available from the UK public sector <http://www.inforoute.hmsa.gov.uk/inforoute/>

In addition, a click and use licence is in place. Available through a simple and user-friendly web-mechanism, this license allows you to re-use a large set of core government material without any charges. Its conditions are clear and concise. By subscribing to the license, a re-user undertakes to acknowledge the source of the information, to reproduce it accurately and not to use it in a misleading way. The licence has proved to be successful. Between April 2001, when it was launched, and December 2003 more than 4200 core licences were issued.



Competition issues

Public sector bodies often are the only ones to produce a certain type of information and therefore have a natural monopoly in relation to this information. This can lead to high charges, or to exclusive licenses granted to one single, or a very limited number of market players. These exclusive licenses may have short-term advantages for the individual public sector body, since they guarantee a stable income for a certain period of time. However, they prevent others from getting the information under similar conditions and to produce added-value services based on it. It seems natural that public sector information is made available to all potential re-users under similar conditions.

Another issue arises when public sector bodies develop commercial activities in parallel with the fulfilment of their public tasks. There is a risk that these commercial activities are in fact sponsored by public funding. An example is the preferential use of a database produced with public money to develop a new commercial service. Such cross-subsidies lead to considerable market distortion.

Different traditions, different rules

The Member States of the European Union all have different administrative traditions, frequently dating back centuries. In line with these traditions, each country has developed its own ways of handling information flow. The various administrations react in different ways to requests for the commercial reuse of their information resources. As a result, it is very difficult to make pan-European data products and information services based on public sector information. To set up a service which covers all the Member States you would have to face the different rules and practices that exist in the different countries.

The language factor

The linguistic diversity within the European Union constitutes one of its riches, but at the practical level it also presents a number of challenges. Public sector bodies produce their information in the first place in a national context and often their information will only be available in the national language(s). This obviously has an impact on cross-border re-use.

ePatent

The ePatent project, sponsored by the eContent programme, aims at providing a European wide cross lingual repository of patent information based on the IPC (International Patent Classification). ePatent develops a natural language access in French, English, Spanish and German to patent databases, fitting the needs of non-professional users. It answers the needs of small and medium enterprises and innovators to access patent information by removing the difficulties of language barriers and of complex query languages. ePatent automates access to patent publications by translating a natural language query into a formal one exploiting the language of standardised International Patent Classification (IPC) and patent abstracts. The query is then processed, and patent publications addressing the query are further ranked and proposed to the user together with tools, which provide help in understanding foreign languages. Partners in the ePatent project are JOUVE and Lingway (two French companies), and the French, Spanish, UK and Austrian Patent offices. The project is a good example of collaboration between the private and public sector.



Lack of common standards and metadata

Last but not least, the absence of common principles for storing and describing information is another barrier to re-use. This issue is particularly relevant for cross-border information services, but also plays a role within the Member States. Authorities at a local, regional and national level may all use different standards and descriptions of data. This makes it difficult to combine data from different sources. An example of successful integration of data within one Member State is the MIDAS system in use in the Czech Republic in the area of geographical information.

MIDAS, a national example of metadata (Czech Republic)

The Czech Republic has set up an interesting metadata system in the area of geographic information (MIDAS). The MIDAS system provides a description and an overview of existing data in the area of geographic information. It helps to co-ordinate data requirements and to share data and to remove duplication of efforts. The system has been in use as the result of a public private partnership since 2000. A portal site that is free of charge <http://www.cagi.cz/midas> gives access to a large number of datasets.

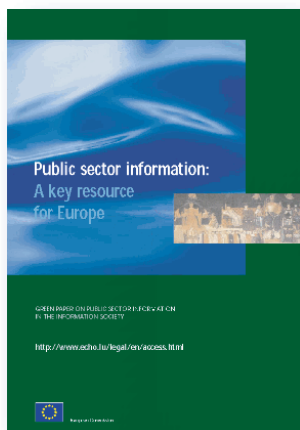
4 COMMUNITY ACTION ON THE RE-USE OF PUBLIC SECTOR INFORMATION

To overcome the barriers that limit the re-use of public sector information, the European Commission has defined a coherent set of actions, ranging from legislation to project financing. This package is described in the Commission Communication of 23 October 2001 'eEurope 2002: Creating an EU Framework for the exploitation of public sector information'. The actions are amongst others based on the results of a public consultation, launched in 1999 with the Green Paper on 'Public sector information a key resource for Europe'.

The **legislative action** consists of a directive on the re-use of public sector information, adopted by the European Parliament and the Council on 17 November 2003.

Projects specifically aiming to bring out the potential of public sector information are co-financed under the eContent programme (2001-2005), to be followed by the eContent plus programme. Other programmes such as IDA, eTen and the 6th framework programme for R&D are also relevant. Although they do not specifically target public sector information as such, they also co-finance projects that contribute to the goal of making information resources held by the public sector readily available.

Furthermore, the Commission stimulates the **spread of good practices** through a public sector information group, consisting of amongst others officials of the Member States and through several accompanying measures to the eContent programme.



5 DIRECTIVE 2003/98/EC ON THE RE-USE OF PUBLIC SECTOR INFORMATION

Directive 2003/98/EC on the re-use of public sector information was adopted by the European Parliament and by the Council on 17 November 2003 and published in the *Official Journal of the European Communities* on 31 December 2003. The directive provides for minimum rules applicable in all the Member States on the re-use of the information resources of public sector bodies and on their behaviour in the information market.

The directive incites Member States to make as much information available for re-use as possible

The aims of the directive

The aims of the directive are the following:

- To facilitate the creation of Community wide services based on or integrating public sector information.
- To enhance an effective cross-border re-use of the information for added-value information and services.
- To limit distortions of competition on the Community information market.

To achieve these aims, the directive sets basic rules that all Member States have to respect. However, Member States are encouraged to go beyond this minimum level, and adopt measures which are more favourable for re-use. Ultimately, the directive aims at a change of culture in the public sector, creating a favourable environment for the re-use of its information resources

To what information does the directive apply?

The directive covers written texts, but also databases, audio-files and film fragments. It addresses material held by public sector bodies in the Member States, at national, regional and local level. Public sector bodies are for example ministries, state agencies, municipalities, but can also be organisations for the most part financed by or under the control of the public authorities, such as the national meteorological institute.

The directive does not apply to the educational, scientific, broadcasting and cultural sectors. It deals with the economic aspects of information and is not about the access of citizens to information. It incites Member States to make as much information available for re-use as possible.



What does the directive prescribe?

The directive is built around two key pillars of the internal market: **transparency** and **fair competition**. It contains rules on the following aspects:

- The procedures to deal with requests for re-use.
- The availability of documents for re-use in all formats and languages in which the information exists. Where possible, the material shall be made available by electronic means.
- An upper limit for charging. The upper-limit is based on costs incurred to produce the information, together with a reasonable return on investment. Lower charges (or no charges at all) can certainly be applied, and public sector bodies are encouraged to do so. On request, public sector bodies have to indicate the calculation base for the charges.
- Transparency of conditions applicable to re-use. Charges and other conditions have to be pre-established and published. It also has to be clear where applicants can complain about decisions that affect them.
- An obligation to avoid discrimination between market players in the conditions for re-use.
- A provision to avoid cross-subsidies between the public part and the commercial part of the same public sector body, that re-uses the information.
- A prohibition of exclusive arrangements, with an exception for exclusive rights necessary for the provision of a service in the public interest.
- The availability of standard, on-line licences. In any case, licences should not unnecessarily restrict possibilities for re-use or be used to restrict competition.
- Practical tools that make it easier to find the material available for re-use. This could be lists of information assets or portal sites.

By when will the directive have to be turned into national law?

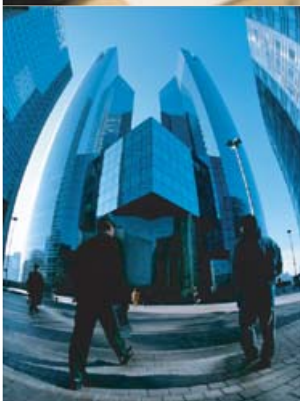
The directive was published in the Official Journal of the European Union on 31 December 2003 (L-345/90). Member States have to complete transposition by 1 July 2005. Within three years after that date, the Commission will carry out a review of the way in which the directive has been implemented and its effects.

6 THE eCONTENT PROJECTS

The eContent programme (2001-2005) supports the increased availability, use and distribution of European digital content. It aims at improving access for all to high-quality digital content on the global networks, in a multiplicity of languages. One of the main action-lines of eContent deals with the re-use of public sector information and aims at stimulating the cross-border use of public sector information for added-value information products and services. The action line co-finances projects showcasing the potential of public sector information for cross-border information services, and projects stimulating the development of pan-European digital data-collections based on public sector information.

In February 2004, the Commission proposed a follow-on programme to eContent, which also addresses the issue of public sector information and in particular the area of geographic information.





Below, you will find the description of two further eContent co-funded projects which illustrate the concept of re-use of public sector information. These projects show the potential for added-value services based on public sector information in Europe and the benefits that these types of services can have to the public. More information on these projects can be found at the eContent web site at <http://www.cordis.lu/econtent/>

EuroGlobalMap

The EuroGlobalMap project is creating a digital, pan-European geographic information collection covering 37 countries. It can for example be used for spatial analysis, geographic backdrop for presentations, or as geographical interfaces to ground related data in Europe. In the current situation data in each European country is created to meet the national needs. The resulting data infrastructure is not seamless between countries and no European wide data base is available with full coverage and secured up-dating. The aim of the EuroGlobalMap project is to provide the first European geographic information infrastructure that will be maintained at the source level by the national mapping agencies. It also aims at providing harmonised access conditions for geographic information across Europe. EuroGlobalMap is developing an application that will facilitate freight fleet management at European level, environmental assessment, strategic planning, strategic cross-border security initiatives and crime investigation in conjunction with crime mapping and criminal statistics using geographic information. Among the participants are the National Land Survey of Finland, IGN - Institut Géographique National, France, and BKG - Bundesamt für Kartographie und Geodäsie in Germany.

M-Guide

The M-Guide project aims at developing and deploying location based information services re-using cultural information originating from the public sector in the city of Athens and in the city of Turku. Information on sights and monuments, exhibitions, and theatres will be repackaged and delivered to mobile platforms using existing mobile technology.

The service will be available in English, Greek, Finnish, French and German and offer mobile users:

- A simple way to navigate through historic monuments and sights of the cities.
- An inexpensive, on-demand information guide.
- Accurate information about current location.
- Credentials for the information retrieved.

Partners in the M-Guide project are Exodus S.A., Vodafone-Panafon Hellenic Telecommunications Company S.A, National & Kapodistrian University of Athens, Municipality of Athens, Adaptia Solutions Oy Ltd, Applied Language Services International Ltd, Suomen Matkain Oy Iternet Ltd.

7 LEARNING FROM SEEING: GOOD PRACTICES IN THE MEMBER STATES

Public sector bodies in the different countries can learn from each others' experiences. They can avoid mistakes and duplicating efforts by looking at successful applications in other countries. Therefore the Commission stimulates the exchange of good practices, amongst others through the PSI-group and through EPSINet and SPREAD, accompanying measures under the eContent programme.

The public sector information group

In 2002, the Commission initiated an informal group to stimulate the exchange of good practices between Member States. This group also has a role in the transposition of the directive on the re-use of public sector information and will discuss practical issues that may come up in the transposition phase. The group mainly consists of Member States officials, but also involves others in its meetings, such as representatives from the information industries, consumer organisations, and local or regional authorities.

EPSINet

EPSINet is an accompanying measure co-financed under the eContent programme. It provides an up-to-date frame of reference on public sector information issues. It focuses on the following areas: business and investment models, policy and legislation, information management throughout its lifecycle and standards.

The information gathered in the project can be consulted at <http://www.epsigate.org/>

8 FOR MORE INFORMATION

You will find more information on the European policies on the access to and the re-use of public sector information at the following web-address:
http://europa.eu.int/information_society/policy/psi/

The implementation of Directive 2003/98/EC is monitored by the 'Information market' unit (E4) of Directorate General Information Society of the European Commission.
You can contact the unit at the following address:

European Commission
Directorate General Information Society
Unit E4, Information market
EUFO 1175
L-2920 Luxembourg

Alternatively, you can contact us through the help-desk: info-psihelp@cec.eu.int

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