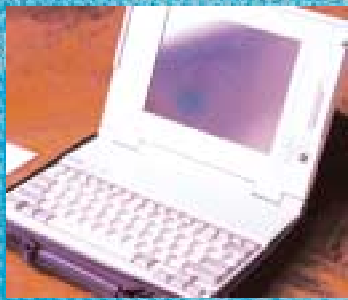

Commercial exploitation of Europe's public sector information

Executive summary

eContent

European Commission
Directorate-General
for the Information Society
Luxembourg
www.cordis.lu/econtent

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20 September 2000

European Commission

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A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (http://europa.eu.int).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2000

ISBN 92-828-9934-9

Printed in Italy

PRINTED ON WHITE CHLORINE-FREE PAPER

Contents

1. Background and introduction

Europe's rich potential

Public bodies are by far the largest producers of information in Europe. This information is recognised as a major, but so far under-exploited asset, which could and should be a fundamental building block of the 'new economy' in the information society. This study has set out to examine how commercial exploitation could help to maximise the value of this public sector information (PSI) to governments, citizens and business alike.

Such information created, collected, developed and disseminated by the public sector is the factual raw material for the products and services that support day to day decision-making in all walks of life in the information society.

The raw information is created and collected for the public sector's purposes, for government and its agencies. However, the products of such information cover a wide range – from company results used for business planning, to mapping information essential for travelling; from statistics for research and analysis, to weather forecasting produced for television or localised delivery to WAP mobiles.

The opportunity to meet the diverse needs of citizens and users for such products and services demands entrepreneurial and publishing skills that are more evident in the private sector. The market needs are best served by commercial exploitation of PSI.

Numerous studies undertaken in Europe over the past decade have investigated the issues and barriers and, to a lesser extent, the opportunities inherent in the potential public–private cooperation in exploitation of PSI. These culminated in the Green Paper (European Commission, Public Sector Information: a Key Resource for Europe, COM(1998) 585.) which, with the rapid growth of Internet usage, has stimulated Member States to re-examine their policies in this area.

The open approach in the USA

The US approach to the exploitation of PSI is often held up as one possible model to emulate. Certainly, there is no policy in place in any EU Member State with the simplicity and clarity of that of the US Federal Government. It has been summarised as, 'a strong freedom of information law, no government copyright, fees limited to recouping the cost of dissemination, and no restrictions on reuse' (attrib. Weiss P.N. and Backlund P. (1996), re-quoted by Harlan Onsrud 1998.)

What is Europe's PSI worth?

Until recently, the only evidence that commercial exploitation of PSI contributes significantly to the US economy was anecdotal (sometimes evangelical!). However, recent studies have shown that a very active market for value-added products has grown with the spread of the Internet. The scale of this market is only now beginning to be measured, but first indications are that it does make a significant contribution to the US economy in terms of employment and tax revenue generation.

This study represents the first major attempt to calculate the contribution made by PSI to the economy of the European Union. Our central estimate for the value of PSI is EUR 68 billion annually. This represents a substantial slice of total economic activity within the European economy. Nevertheless the evidence suggests that it is considerably less than corresponding figures for the USA. If we assume roughly comparable market sizes, we believe that the large difference between the two represents the potential for growth in EU industries that use and add value to PSI.

The potential pay-off

The private sector has long argued that existing revenue based licensing models for PSI have operated against their interests and those of consumers by impeding the development of new products. Our study is the first to suggest that such models may even be operating against the financial interests of governments. Although governments gain income from the commercial licence fees, they lose the taxation and employment benefits from the higher volumes of commercial activity that would be generated by abandoning charges. We find that a conservative projection of a doubling of market size resulting from eliminating licence fees would produce additional taxation revenues to more than offset the lost income from PSI charges.

Maximise value

From these findings and others described below, the key goals of creating a single European market and facilitating a fair trading environment for PSI emerged. These drive efforts to achieve better exploitation of PSI and contribute significantly to the central goal of maximising its commercial value.

Analysis of these goals led in turn to recommendations for the European Commission to consider for implementation through the *e*Content programme of the Information Society Directorate-General.

Overall there is cause for optimism: success stories illustrate opportunities inherent in exploiting PSI. Although barriers still hinder exploitation, they are increasingly being addressed by policy initiatives – not yet at the 'warp speed' of Internet development, but actively moving forward nonetheless. While there is still room for improvement, the scale of the opportunity and speed of opportunity-enabling technological change, particularly in promising market areas, generate options for business which will be increasingly attractive as recommendations are implemented.

2. Economic value and opportunity drivers

Maximise value

How large is the opportunity for exploitation of PSI in Europe? This study has carried out an assessment of the economic value and produced estimates. This was difficult, as the national accounting systems for the EU Member States are not yet structured to enable an 'information' category to be readily extracted.

Equivalent types of study in better established industry sectors such as 'manufacturing' have comprehensive and detailed data, gathered in the process of producing the national accounts. We cannot pretend to have had the resources available to us that most governments have at their disposal when making such assessments. Nor would we wish to give the impression that our figures can be viewed as absolutes – 10 out of the 15 EU Member States' values were extrapolated. Clearly more research in this important area is indicated.

Nevertheless, what we have obtained is compelling enough for the EU and European governments to view the issues with serious consideration and to realise the urgency of the actions needed. Time is not on their side.

The new 'information economy' cuts across traditional notions of sector. As such, estimating its size is still not an exact science. Whilst it is true that no government has yet produced accurate figures, the US has taken steps to reorganise its statistics collecting operations, and is only now beginning to produce the first systematically-gathered figures for the new economy. As yet there is no equivalent European action.

2.1. The values – investment and economic

For the sake of clarity there are some important distinctions to be made between the two principle value terms used in the following sections:

Investment value is what governments invest in the acquisition of public sector information, whereas;

Economic value is that part of national income attributable to industries and activities built on the exploitation of PSI. It is the value added by PSI to the economy as a whole.

The economic value of traditional industries is available from national accounts information. In the absence of this data for PSI we have combined information on the investment value of PSI with estimates of the value added by users of PSI to provide figures for the economic value of PSI.

European investment value

In every EU country, the largest single component of the PSI investment total is the geographical sector. This includes such categories as mapping, land registration, meteorological services, environmental data and hydrographical services. This sector takes over 37 % of the total investment in PSI in France, 41 % in Sweden and over 57 % in the United Kingdom.

Cultural information, including museums and libraries makes up the next largest sector, while statistical services are around 15 % of investment and services. The next sector includes company information and details of intellectual property rights – this accounts for approximately 10 %. The bulk of the remaining investment is in legal information, tourist information and the production of official publications.

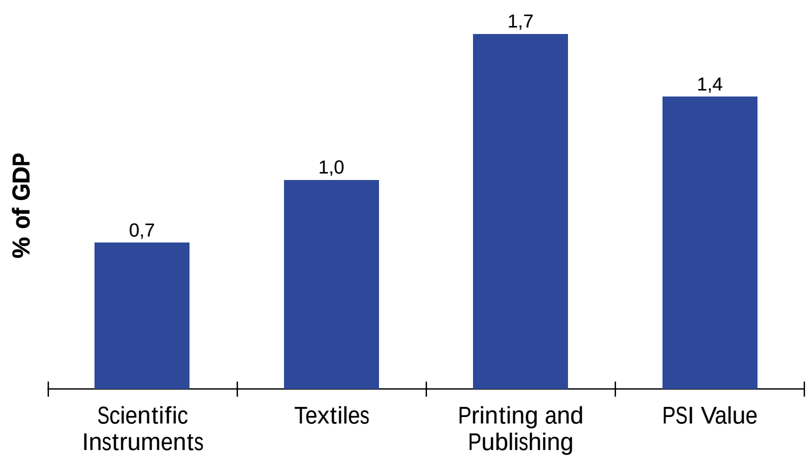
Across the European Union as a whole, governments invest in PSI to the tune of EUR 9.5 billion each year. Some countries spent significantly more than others – Sweden in particular puts over twice as much of its GDP into PSI, compared with the average proportion.

The US by comparison invests just under an estimated EUR 19 billion per year.

European economic value

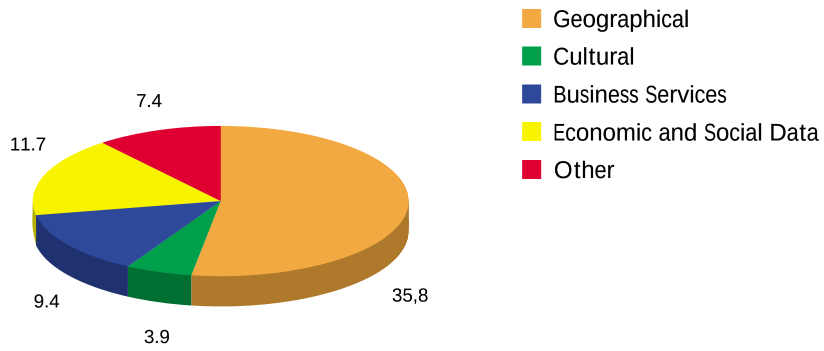
For the European economy, the estimated economic value of this investment lies between EUR 28 billion per annum and EUR 134 billion per annum, with a central estimate (NB not a simple average figure) of EUR 68 billion. The central estimate represents nearly 1 % of EU GDP, making the PSI sector of the economy already as important as established industries such as legal services, printing or textiles.

Comparing the size of EU industries



Within this total, the geographical information (GI) industries account for EUR 36 billion; the next largest are industries exploiting economic and social data (EUR 11.7 billion) followed by the area of company information (EUR 9.4 billion). Previous estimates such as the 1996 estimate of a turnover of USD 6 billion for the European GI market now look too low – particularly when the combined revenues for European governments from the sale of GI already exceed EUR 2 billion. (DG Information Society, GI 2000 initiative 'Towards a European policy framework for geographical information: A working document')

Economic Value of Public Sector Information in the European Union, 1999 (EUR Billion)



By comparison, the economic value for the whole information sector (much of which is built on exploiting PSI) in the US is EUR 750 billion.

2.2. Maximising value

Cost recovery is a mechanism for pricing access to information in order to allay all, or some, of the costs incurred by the government agency holding the PSI. Attitudes to cost recovery vary significantly across the Union. However, all Member States price some public sector information at well above its dissemination cost. Usually the information categories most affected are patents and trademarks, and to a slightly lesser extent traditional company information.

Patterns of cost recovery in the European Union

Low-cost recovery	Medium-cost recovery	High-cost recovery
Statutes Basic statistical information Citizens' rights	Economic and financial statistics	Meteorological Patent and trademark information Cartographical

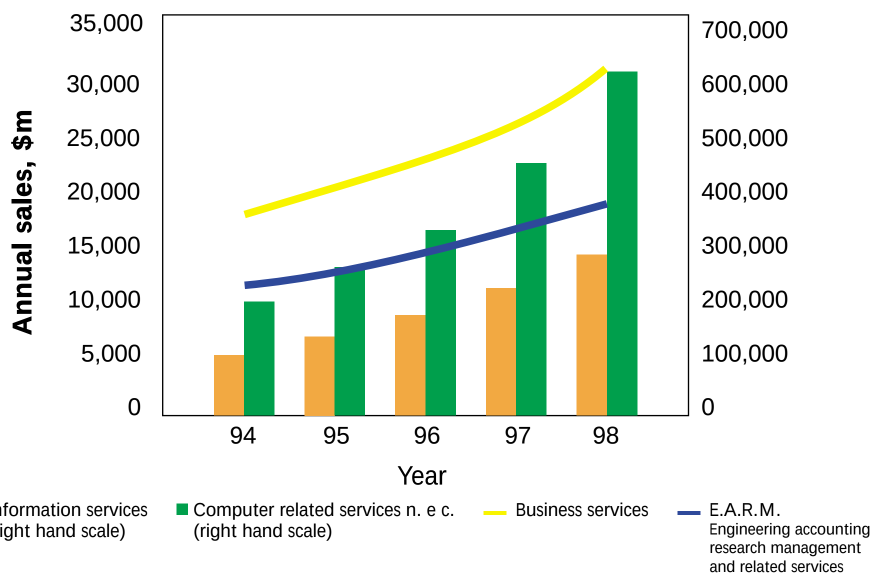
The United Kingdom government is the most consistent in setting high cost recovery goals for its PSI agencies, but several agencies in Sweden, including those dealing with company and land registration information also set prices close to average cost. In Portugal, the national statistical agency (INE), the geological institute (ING) and the official publisher are among the agencies set a target to recover two thirds of their costs through charges. The relatively high rate of cost recovery in Sweden shows that strong freedom of information legislation does not have to mean low prices for access to PSI.

Cost recovery looks like an obvious way for governments to minimise the costs related to PSI and contribute to maximising value for money directly. In fact, it is not clear at all that this is the best approach to maximising the economic value of PSI to society as a whole. Moreover, it is not even clear that it is the best approach from the viewpoint of government finances. As mentioned above, estimates of the US PSI market place suggest that it is up to five times the size of the EU market (see note of caution above). But the EU market would not even have to double in size for governments to recoup in extra tax receipts what they would lose by removing all charges for PSI.

Opportunities and challenges

Commercial exploitation of public sector information in the EU is still limited compared with the USA, and also with the USA and Canada, where the information industry as a whole has an annual turnover of nearly EUR 800 billion and where the key industries exploiting PSI have posted annual growth rates ranging from 11 to 37 % in the last six years. Key individual companies such as ESRI and MapInfo in the geographical information sub-sector have consistently matched these high growth rates – ESRI reports a continuing rate of sales growth of 23 % per annum.

Market size for key PSI exploiting industries, USA



This gap between the USA and the European Union offers opportunities and challenges for European companies and for their governments.

For the commercial sector in the European Union the challenge arises from the gap between the sizes of the US and European information industries. We estimate that the US information market is between two and five times that of the EU – even though the two economies are almost equal in size. Competitive advantage in the exploitation of PSI rests on knowledge of the enabling technologies, coupled with access to locally relevant information. In many cases US organisations have a technical lead on their European counterparts, but do not yet have a widespread understanding of European PSI sources and European consumers.

The challenge for EU organisations is to close the technical gap on US organisations before the US organisations close the understanding gap.

For governments in the European Union, the first challenge is to close the gap in PSI investment levels with the US Federal government.

In some cases, such as Sweden, investment levels match or exceed the US level, but for most countries the proportion of national income invested annually each year is lower than for the US. The USA spends significantly more on financial and agricultural information than the EU. As a result it has high quality economic data available on a timely basis.

Where total investment in PSI matches or exceeds that for the US – as it does for the patent offices and for meteorological information, there is the possibility that EU Member States are duplicating one another's efforts.

The second challenge for Governments is to invest in human resources. The PSI industry in the US employs large numbers of highly educated individuals, often with highly technical backgrounds.

The third challenge is to reconsider the value of pricing to recover all costs. As the Mandelkern report (*Des moyens nouveaux au service de la diffusion des données publiques*, 1999) illustrated for France, a number of countries are considering whether this policy is best for the economy as a whole.

Trading PSI

Though it is likely to increase in the future, the trade of PSI between Member States is currently limited, especially since most national agencies have extensive arrangements to share and pool data with other national agencies. However, some trade does occur. The UK's Hydrographic Office exports its charts around the globe. Meanwhile, the Swedish Meteorological and Hydrographic Institute (SMHI) has recently begun to expand its exports, opening an office in Finland and developing a new weather service aimed at golfers in Germany and the Nordic countries. Revenue from its exports accounts for about 17 % of all income from commercial operations and has risen at an annual rate of 8.6 % since 1997.

The cross-boundary nature of the Internet and telecommunications means that if suppliers have relevant and timely information they can offer it as easily to subscribers right across the Union. With weather information in particular there are therefore opportunities for national agencies to compete with one another across Europe. This may provide an alternative to the US model for the growth of commercial exploitation of PSI in the European Union.

3. Success stories

Commercial exploitation of PSI is not a new phenomenon in the EU. It is an established practice that the public sector creates, gathers and distributes information for the public good and that the private sector finds ways of exploiting that information and those processes for commercial gain by delivering products and services that benefit their customers.

The missions of such commercial ventures may or may not coincide with the mandates of the public sector bodies from which they source the information. In turn, their success may consequently be judged in at least two ways: as purely commercial ventures whose success will be determined in the marketplace, or as partnerships between public and private sectors in which at least some of the success is measured by benefits to society.

New opportunities arise through new market conditions, regulatory environments and technological infrastructures. In these early days of the 'information society', PSI is more freely available and technology enablers – digitisation and the Internet in particular – have dramatically lowered barriers for large and small organisations alike.

These successes leverage the public investment in different ways. Some support the original mandate of the public sector institution, but do so more cost-effectively and more efficiently than the public sector itself; others deliver the PSI in new ways or through new channels. Another category focuses on adding value through aggregating and linking available (raw) information, while a yet another merges content/information with service (whether e-commerce or public service). Various examples of the types of innovative exploitation already occurring in Europe are given below together with factors key to their success and barriers they may have experienced.

Low-barrier aggregation

The availability of databases on the Internet has opened up opportunities for start-up companies to reach widespread audiences with innovative information services. The *aggregation* of content – licensing, drawing together and interlinking content from diverse sources – is one such opportunity, empowering citizens to conduct their own research whether for nice-to-know or need-to-know information. Exemplified by UpMyStreet the added value comes from making this traditionally inaccessible nice-to-have content available in new, creative and attractive ways.

CASE STUDY 1 UpMyStreet.com www.upmystreet.com

UpMyStreet.com was launched in 1998 as a proof of concept to show the power of the Internet in disseminating personally relevant information quickly and easily. Due to the interest generated, a business was launched around the

Success factors

- Net infrastructure available
- Databases available

Barriers to use of PSI

- Locating databases
- Lack of standards

site in September 1999. It provides a free service to members of the public wanting more neighbourhood information. Value is added by aggregating publicly available but disparate information (such as property prices and crime and education statistics) into one location, searchable by postcode.

UpMyStreet.com is Europe's first website of this type and its uniqueness may be due to the UK's postcode system, which defines a small geographical area. Since its launch is has expanded rapidly in size with employees increasing from 4 to 50 in 10 months and reaching over 200 000 unique users per month by June 2000.

Specialist skills applied

Specialist skills applied to public sector data can result in products never imagined by the public sector producers of the raw data. For example companies with IT skills have been able to successfully manipulate large public sector databases to create a wide range of products (see case study 5 on Bureau van Dijk). Licensing some of these databases, for example British Telecom's OSIS directory list, is costly enough to deter most small or medium-sized companies and therefore requires courageous entrepreneurial spirit and a clear business plan in addition to the technical ability.

Opportunities presented by PSI exploitation have also been taken by start-ups with other specialist skills (see case study 2).

biovista

Success factors

- Eye for the market
- Combination of skills
- Global access to information

Barriers to use of PSI

- Location of some data
- Lack standards

CASE STUDY 2 Biovista www.biovista.com

Biovista is a publishing and research company providing corporate intelligence products and services to the biotechnology industries. With offices in Greece and the US they have grown rapidly, regularly adding new titles and products to their list. Their users are spread fairly evenly between Europe and the US with their main customers being biotechnology and pharmaceutical companies.

Biovista's staff, with experience in biotechnology, business development, IT, finance and intellectual property, produce these focused reports drawing on a variety of sources. The use of PSI is vital to their business and includes drug approval notification, patent and companies' information and stock market data, all of which is used to analyse the market.

Supporting the original mandate more effectively

Public bodies are successfully using partnerships with the private sector to ensure that their dissemination is as targeted and cost-effective as possible. Public bodies bring official, unique content to the relationship and the private sector bring skills such as technical know-how, market knowledge and products, or network positioning. Case study 3 on MAGIS illustrates an excellent example of a partnership in practice.

CASE STUDY 3 MAGIS www.sandandgravel.com

In November 1999, a consortium of public and private organisations led by MARIS in the Netherlands launched a portal for the dredging industries; MAGIS (Marine Sand and Gravel Information Service) using funding from the INFO2000 programme.

Information on the site includes details of various EU governments' sand and gravel extraction licences, an online dredging news service, equipment and vessel registers and links to relevant associations and private companies. A commercial news service is available by subscription and other income is generated from substantial advertising and sponsorship deals. About 6 000 regular users were making 200 000 hits a month by August 2000.

Two major factors can be seen to have contributed to MAGIS' success. The INFO2000 funding gave the impetus and incentive to ensure the cooperation of the consortium. However, the positioning at the centre of a network of a prosperous, but geographically disparate and fairly small market, has been equally vital to its success.

Success factors

- Public-private partnership
- Net infrastructure available
- Market and network knowledge available
- Investment available

Barriers to use of PSI

- Lack of standards

Successes are not just an Internet phenomenon

In the 1980s and 1990s, established legal publishers began to face stiff competition from start-up electronic publishers such as Context, who licensed available legal information databases and developed successful businesses. The successes are also not limited to start-ups, with mature established companies successfully reinventing themselves. Examples here are the Danish companies Schultz and Kraks who both developed online businesses through applying their particular skills to the exploitation of PSI. More details of Kraks success are given in case study 4.

CASE STUDY 4 Kraks Forlag www.kraks.dk

In 1995 Kraks started publishing directories on CD-ROM and subsequently branched into Internet publishing, becoming the first directory publisher in Scandinavia with directory information on the web. Later a new Internet section was set up which developed Kraks e-commerce site, sells adverts on their website and designs and maintains websites for other business. This venture has seen the number of employees rise by 50 % since 1995 to around 200 and about 35 % of Kraks total income now comes from new media products.

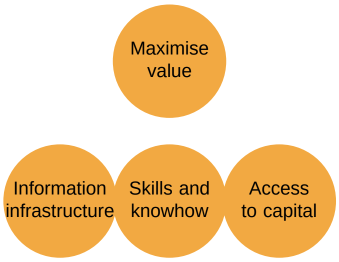
The success of Krak's on-line business is partly due to substantial investment but Krak's has taken advantage of the fact that, unlike many other publishers, directory publishers are used to business models that generate income from selling advertising space.

Success factors

- Business strength and experience
- Technical skills can be bought in

Barriers to use of PSI

- Overpricing
- Location



These success stories show that exciting things are already being done in the market with PSI – innovative products are being developed, new companies are forming and old ones growing. By looking at the factors that are key to these successes it can be seen that the existing industry is built on firm foundations of the available information infrastructure, skills and know-how and access to investment capital, although there are still significant, specific goals that need to be achieved within these spheres.

So why, despite these foundations is the current market size estimated as being less than half the size of that in the US? What is stopping the market maximising the value of PSI?

4. Overcoming barriers

For a company developing a business using PSI there are some vital practical issues. These include:

- Can I find out what information is available? Are there indexes, catalogues and metadata?
- Can I easily find a person to deal with to help me get a licence and acquire the information?
- Is there a simple standard licence and an easily understood, publicly accessible charging structure, or will I need a lawyer and plan for long negotiations?
- Can I easily access the information in a standard form that I can process readily?

Practical questions of this type need to be addressed before small businesses can participate. In Europe, there are examples of even very large companies walking away from possible opportunities because of problems in areas like these. It is sometimes hard for officials and policy-makers to understand that for a small business, spending time and money finding who to deal with, and then spending more time negotiating, can make a marginal, but potentially worthwhile, opportunity just not worth starting.

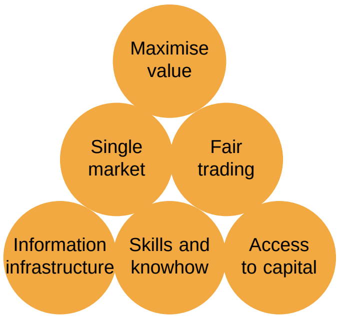
As previous studies and the consultations following the Green Paper have shown, discussion of the issues surrounding PSI invariably lead to some well-rehearsed arguments about significant barriers.

The variety of types of relationships between PSI holders and exploiters means that in individual cases, players can meet unique sets of barriers. For example, an entrepreneurial service dealing with a single source could have the obstacle of a monopoly supplier. Depending on the specific State's policy, the supplier may be able to alter licence terms under which the raw PSI is provided unilaterally. An entrepreneurial service dealing with multiple sources, while not being at the mercy of a monopoly supplier, may be faced with a variety of licensing regimes and information formats.

The variety of types of PSI results in different obstacles within different domains. For example, the main obstacle for companies working in the well-developed market of companies information may be potential competition from the public sector itself and the price it wants for the data. In the less developed market of environmental information obstacles are often caused by suppliers who are unaccustomed to locating appropriate information and not used to negotiating with the private sector.

The collection of barriers described here is by no means exhaustive but they are the most common which cross boundaries of sector and country.

The lack of a single market for PSI in Europe is evident. Several of the main barriers identified fall into a category of obstacles that would certainly have to



be overcome in order to facilitate a vibrant trade of PSI in the single European market.

Other significant barriers concern the operation and regulation of the market and, in particular, the need for a fair and equitable trading environment with parties subject to the full force of competition legislation.

These two goals – the single market and a fair trading environment for PSI – are seen by the study as key objectives whose achievement would close the gap between Europe's existing technical, skills and investment infrastructure and the desired goal of maximising the value of PSI.

4.1 Single market barriers

Location – Many companies have experienced difficulties finding the PSI needed for their businesses to develop. This is particularly apparent with companies using PSI from more than one country. Having located and established accessing methods in one country, locating and accessing the same PSI (if it exists at all) in another Member State may need an entirely different approach. Biovista (see case study 2) has experienced this type of barrier.

Standards – The lack of standards in PSI can cause problems. There are differences in 'like' information between Member States and even between regions.

For example, this can range from countries and regions collecting and releasing different information on companies and individuals due to differing data protection laws, to little, and non-standard metadata being generated about PSI.

Lack of pricing consistency – There is a lack of harmony in prices charged for PSI across the EU. Large variances in pricing for similar data across the EU could suggest that there are cases of unreasonably high pricing. This can affect the ability, particularly of SMEs to build coherent pan-European businesses.

Dun & Bradstreet highlighted this in a survey of their European divisions. This showed huge variations in the prices paid for 'like' information with the cheapest being Belgium, Sweden and the UK and the most expensive being Italy and the Netherlands. For example, the price paid in 2000 for company balance sheets varied from EUR 0.11 in Belgium to EUR 3.29 in the Netherlands.

Language barriers – Some markets are just too small to be exploited commercially. This can be the case with products which aim to reflect the language diversity in the EU, where it may not financially viable to produce products for some of the smaller language markets.

4.2 Fair trade barriers

Players in the market often feel that they are operating in an environment of unfair trade.

Reluctance – Some public sector bodies have been wary of jeopardising the revenue they generate from products produced with their own PSI assets, and so have been reluctant to allow the private sector to license it. Bureau van Dijk (see case study 5) provided an example of this.

CASE STUDY 5 Bureau van Dijk www.bvdep.com

Bureau van Dijk's electronic publishing division started in the mid 1980s with the production of CD-ROMs for clients including various public bodies. Operations were expanded to develop their own products, licensing the raw data from public bodies and private companies and adding value by combining the data with powerful financial analytical software. Their wide range of products includes CD-ROMs of companies' reports, statistical databases and directories. BvD's customers clients and data suppliers are drawn from across Europe.

Despite its undoubted success, BvD has had to contend with varying regimes across and within Member States when attempting to licence PSI. For example, BvD developed a CD-ROM for the Comext database (which contains harmonised EU trade statistics) for the EC several years ago for a flat fee. Recently BvD offered to improve the product but the EU was not willing to invest the money. BvD approached the EC to license the data, invest in the development and make an improved, more up-to-date product. By summer 2000, despite many requests from BvD, the EC have refused on the grounds that it would jeopardise the revenue gained from their own product.

BUREAU VAN DIJK
ELECTRONIC PUBLISHING

Success factors

- IT skills available
- Information infrastructure available

Barriers to use of PSI

- Reluctance from public bodies
- Lack of harmony
- Overpricing

Overpricing – This has been identified as a problem in some sectors, most notably for meteorological data. While the price per item of data is often seen as not particularly high, the amount of data needed by private companies to make forecasts as accurate as possible means that the resultant costs are prohibitively expensive.

The high prices charged by the Spanish Meteorological Service mean that SAM, a Spanish meteorological services provider, actually use information from the US. In addition, they have found it more economically viable to build their own radar station rather than buy radar images from the national service.

Lack of pricing transparency – There are complaints that it is often difficult for the private sector to obtain access to pricing details for PSI. This not only delays the take-up of commercial opportunities but also creates fears that inconsistent pricing practices may be being applied to the same PSI. Internet available and standard price lists for PSI would answer these difficulties.

Mirroring – With more and more public bodies being required to disseminate their information via the Internet, sometimes offering value added priced services, many private sector companies have felt that their products are being mirrored by the public sector. This can result in the private and public sectors competing on what is essentially an uneven playing field with the public bodies having direct access to all the data and not having to pay licence fees.

This complaint is most frequently heard in the areas of companies information and in meteorological services. A recent case between the Companies Registration Office in Ireland and CFI Online, a companies' information provider, highlights this problem. Both were providing companies' information via their respective websites. However, CRO have facilities to supply their bulk customers (including CFI) with information only on a fortnightly basis. CFI felt it was unable to compete on equal terms with CRO whose website had up-to-date information. Consequently in December 1999 CFI submitted an interlocutory injunction against CRO and by summer 2000 the case had not yet gone to court and the CRO were unable to supply companies' information on their website.

In other areas private companies feel that the threat of the private bodies mirroring their products could be realised if public bodies are encouraged to recover more costs.

Accounting – Related to the previous barrier, the lack of relevant accounting information from many public bodies makes EU competition laws difficult to enforce. Unless a public body separates its official and commercial activities there is no indication whether the public body's commercial activities are operating within the same parameters as the private sector (see case study 6).

meteofax Wetterdienste GmbH

Success factors

- IT skills available
- Eye for the market

Barriers to use of PSI

- Overpricing
- Mirroring
- Lack of accounting information

CASE STUDY 6 Meteofax Wetterdienste GmbH www.meteofax.de

Meteofax is a fairly new German meteorological services provider who offer more viewer-friendly, as well as more localised, presentations than had previously been offered by the national meteorological service (Deutscher Wetterdienst), to new private German TV companies. Meteofax supply ready to use productions for the media as well as data and consulting services for corporate and private customers.

Meteofax has seen impressive growth from 4 employees in 1994 to 25 in 2000. However, they believe that their operations and expansion are severely hampered by the policies of the national meteorological services who supply their data. Their data licensing contracts and price lists prevent Meteofax from competing with Deutscher Wetterdienst on a level playing field and this reduces their possible growth. Meteofax predict this could be 100 % within five years if the public and private sector were subjected to equal conditions.

Despite a new legal framework (passed in January 1999) to ensure that the public and commercial activities of the Deutscher Wetterdienst were separated by means of internal accounting methods no reports or findings had been published by September 2000.

Exclusivity – Exclusive deals between the public and private sector are often used when the public sector commissions the private sector to help it with the dissemination of its information. An example here is first publishing deals for official publications. These deals do not generally cause problems, providing they are transparent.

However, with regard to contracts to license PSI to the private sector whose aim is to add value and develop a commercial product, exclusive deals mean that one player in the market has a unfair advantage. For example, ORT's exclusive deal with INPI for electronic dissemination of French companies information, has caused concern among competitors.

IPR – The area of intellectual property rights and copyright is one which causes enormous problems in certain areas. The private sector often feels that copyright restrictions, under the guise of preventing fraudulent use and protecting quality, can be used by the public sector to restrict the reuse of PSI.

Another problem is that if the public body does not have full rights to the information it is producing, it cannot, in turn, license the material for commercial exploitation. Education is as area where this is particularly prevalent. Although information *about* education, such as statistics on schools and curriculum details, is generally available for exploitation, the content generated for use *in* education is harder to licence. In many cases the content has been created by a variety of individuals (working in public and private capacities) who use a variety of source material and so tracing copyright is not feasible.

5. Policy initiatives

Availability of PSI collected by democratic mandate is seen as a key component of open government. To reinforce this view, various freedom of information acts are in force or under development in all EU Member States. Linked with this are policies to publish proactively (usually via the Internet) much more PSI and to produce catalogues, indexed lists etc. so that citizens and businesses can more easily locate what is available.

However, the concept of commercial companies being able to acquire, at very low cost, quantities of PSI and resell it for a variety of unregulated purposes to make a profit is one that policy-makers in the EU find uncomfortable. Commercial exploitation is undoubtedly a complicated policy issue.

EU governments' website presences

All EU governments now have a strong web presence and in general make information available on websites free of charge or at a very low, direct cost-based charge. This indicates that at least in this area policies are being turned into action quickly and effectively. Many countries have government umbrella websites, such as www.palazzochigi.it in Italy, www.infocid.pt in Portugal and www.belgium.fgov.be in Belgium. In the UK, an asset register has been built out of metadata describing available PSI. Called 'Inforoute' this will provide a gateway into the information held by UK government departments.

Developments in the USA

In spite of the importance EU Member States are now placing on the commercial exploitation of PSI, none has such a politically clear and simple policy in place as that in the USA. The current position there shows that the debate has moved on from the local issues of access, charging, copyright, and resale, to matters such as the more detailed implementation questions, and increasingly to global PSI exploitation ones.

Recent developments in the EU

Policy-makers in Europe accept relatively easily the concept that more PSI should be given to citizens in the context of participation in a modern democracy. However, the knock-on effect of the availability of this information on the web to private companies already in the market to disseminate this information has not until recently been as widely recognised.

There are a few new initiatives which look at issues essential for a fair trading environment. For example, the French government action programme 'L'État et les nouvelles technologies de l'information et de la communication' has a working group looking at, among other issues, the roles of the public and private sectors in disseminating information and pricing of PSI. In Sweden the State Office published a report 'The State as a commercial actor', making recommendations that would control competition from the public sector and limit public sector activities.

On the basis of our study it seems that the Netherlands and Finland come closest to a policy model within which companies would find it easy to maximise the value of PSI. In the Netherlands, the 'Governments and markets' directive in 1998 specified that public sector databases could be made available to third parties only on a non-discriminatory basis and at uniform prices. In Finland, the 1999 Publicity Act together with the Council of State decision in May 2000, includes provisions to encourage uniform practice for commercial exploitation.

The area in the EU that seems to come closest to the position in the USA in practical terms is the policy operated by the Office for Official Publications of the European Communities (EUR-OP). We have been told by companies who obtain licences from EUR-OP, that they are easy to obtain, they are on standard terms, charges are low and the information is easy to acquire. However, the policy adopted by EUR-OP is not applied to all the information held by the Commission that could be made available. Some departments operate different pricing and licensing policies.

It is clear that Member States have grasped very positively the economic and social issues relating to facilitating the benefits of the 'information society'. In addition, the need to define roles for the private and public sectors is starting to be addressed as problems emerge with the implementation of new dissemination routes.

However, they have, in general not yet fully addressed the policy and practical issues that would result in the wide scale exploitation of PSI by private sector companies seeing new market opportunities and thus maximising the value being generated from PSI.

6. Conclusions and recommendations

Public sector information is being commercially exploited in Europe with considerable success in some sectors however there is still significant opportunity for expansion. While the evolution of the Internet and the new active policy initiatives around the European Union will stimulate growth, the study's findings also identified barriers. These can have a potentially stifling effect to the disadvantage of citizens in terms of access, businesses in terms of commercial success and government in terms of efficient and effective administration and decision-making.

The following outline proposals for action seek to address these shortcomings and to point to ways in which the European Commission, within the *e*Content programme, can further facilitate the successful commercial exploitation of PSI in Europe. They are the outcome of analysis, discussion and prioritisation – in particular discussion at the second Round Table at which draft recommendations were presented. **Details and the underpinning analysis of the comprehensive recommendations can be found in the full study report.**

The overall objective of maximising the value to government, citizens and business of PSI will be supported by addressing the two goals:

- creating a single European market in PSI;
- facilitating a fair trading environment for PSI.

The recommendations are presented in these categories clustered around the goals to which they should contribute and for each a priority action has been identified.

Maximising the value to government, citizens and business of PSI

The study has seen compelling evidence of the benefits of the adoption of strong freedom of information, no government copyright, marginal cost recovery, non-exclusive licensing and explicit removal of restrictions on reuse of licensed public sector information.

- **Remove friction from PSI trading by making it available digitally at marginal cost for non-exclusive, non-restrictive reuse**

  The Internet will loosen government control on the supply of commercially exploitable information and increase pressure to make raw data readily available for a notional cost covering to whoever wants it. Far from being negative, this action would encourage SMEs into the exploitation business, thereby creating jobs and tax revenues in a far greater magnitude than the present level.

Overall value will be maximised by the same deal being available to all interested parties. When exclusivity is unavoidable there must be strict transparent tender processes to award contracts. Restrictions on reuse must be removed to lower the barrier to new product development.

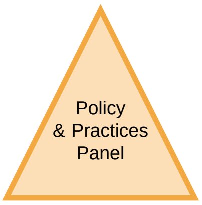
The EC should establish an EU directive making use of the EC's 1989 synergy guidelines.

- **Reduce negotiation overheads by class licensing and sharing of standard contracts**

  Class licensing, the use of standard contracts for licensing and service levels will facilitate exploitation by removing discord, simplifying negotiation and shortening the learning curve. Standards will also enable the monitoring of performance quality, which will contribute to maximising value.

Priority action: Policy and practices panel

A policy and practices panel consisting of senior figures from private and public sectors should be established to oversee the dissemination and promotion of these principles in the Member States. The panel can oversee further detailed economic research and, taking into account the specifics of sectors and Member States, identify any necessary policy exceptions.



Creating a single European market in PSI

Much PSI is, naturally enough, national in character. Different processes, formats and standards have evolved reflecting in part different mandates and cultures of administration. The different scales of investment and value in Europe and the US may reflect the fact that, although large, the European PSI marketplace is still largely a fragmented patchwork of national and regional markets. To achieve the benefits of e-scale and encourage business development and healthy cross-border cooperation and competition, the infrastructure for the single European market in PSI needs to be developed.

- **Make electronic publishing the primary means of dissemination**

  The speed of dissemination, overall costs, and user accessibility when compared with traditional printing make electronic publication a preferable option. Moreover, making digital formats the primary form of dissemination will lower barriers to development of added value products and services based on the data.

- **Give information a place in national accounts**

  Now that we are entering the information society, the hidden, but substantial 'information' category must be given due recognition by the EU Member States in their national accounting structure. The EC should take the political initiative to encourage the adoption of a standard definition of 'information' for use in the national accounts of Member States.

- **Stimulate good practice including transparent pricing**

  The promotion of standardisation must be matched by the stimulation of uptake of good practice appropriate to different sectors to cater for the specialist needs when dealing with, e.g. geographical or meteorological data. A common need across many areas is to have clear and commonly accessible price lists for information available for licensing. In all areas the good practice of publishing prices on the web should be encouraged.

Priority action: Search and sources standards

In order to achieve a critical mass of infrastructure developments that will advance standardisation and create pan-European asset registers it is suggested that the EC considers the development of a common search engine/indexing resource for PSI in Europe. Such a development (technically based on XML and DOI and open rights management standards, and made accessible to all exploiters of PSI) could support the implementation of several of the above proposals, including asset registers contributing to a single European market for PSI.

A fair trading environment for PSI

To stimulate the desired growth in commercial exploitation, the trading environment must provide a level playing field that is trusted, monitored and enforced. Thus, public sector bodies are able to fulfil their mandates, giving citizens the access and protection they need, while the private sector – small and large companies alike – is able to pursue its commercial missions.

- **Enforce transparency of roles, deals and accounting**

  Current competition law needs to be enforced as effectively in the public/private domain of exploitation of PSI as in other sectors. This will be helped by the recent transparency directive.

  Instances of unfair competition between the public and private sector can be traced back to a lack of clarity in roles that have changed as technologies and the marketplace have evolved. Public sector institutions that produce or collect information should have explicit, transparent ‘functional publishing mandates’ which specify what they are supposed to achieve (rather than how they are supposed to publish).

  Where both public and private sectors exploit information, transparent pricing structures must be backed up by transparent cost accounting systems whenever public bodies are involved in both non-commercial and commercial activities.

Priority action: Market monitor

The success of the fair trading environment should be measured and monitored in order to drive its implementation. To achieve this a mechanism should be established which will monitor the successful enforcement of regulatory measures, for example transparency. Where possible this should be handled by existing structures such as DG Competition.

This market monitor should also measure the overall success of maximising value and a set of targets should be established by the EC to achieve transformation. Targets should be monitored annually by the EC and the European Parliament in consultation with Member States and some of the criteria to be monitored should be:

- long-term tax revenue growth through enhanced PSI trading in the private sector;
- employment growth in the information sector attributable to PSI trading;
- growth in turnover and profit of the EU information trading sector.

European Commission

Commercial exploitation of Europe's public sector information —
Executive summary

Luxembourg: Office for Official Publications of the European Communities

2000 — 27 pp. — 21 x 29.7 cm

ISBN 92-828-9934-9

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KK-31-00-570-EN-C

OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-828-9934-9

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