

PSI MANAGEMENT GUIDELINES

Version 2

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1 Introduction

This document is the second version of the Guidelines related to the Management of Public Sector Information (PSI), produced by the ePSINet team within PricewaterhouseCoopers (PwC) Luxembourg. The guidelines have the objective of providing information about all issues affecting the management of PSI as an economic resource.

This work takes place in the context of the activities in the EPSInet project to establish an internet portal, dissemination and knowledge-switching facility related to the exploitation and re-use of PSI. This facility aims to provide access to all of the results from the project, collecting and producing its own information and guidelines in areas such as standards, architectures and performance measurement and actively feeding other networks and a stakeholder distribution list across all of the many diverse areas of PSI.

On 23 October 2001, the European Commission published its Communication to the European Council, Parliament and Committee of the Regions: *e-Europe 2002: Creating an EU Framework for the Exploitation of Public Sector Information*. Recently, this led to the publication of *Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information* in the Official Journal on 31 December 2003 [1].

2 Scope and approach

2.1 Sources

This report is based on sources that were identified through desk research and through responses to the EPSInet Questionnaire that was distributed to the EPSInet partners, EPSInet Country Co-ordinators and individual contacts in Europe and beyond.

Desk research was based on EPSInet's own news service EPSIGate [2] and other sources (e.g. the IDA eGovernment Observatory [3]).

Responses to the EPSInet Questionnaire (included in the Annex) included contributions from the EPSInet partners in the UK, EPSInet Country Co-ordinators in Austria, Greece, Portugal, the Netherlands and Sweden, other public sector contacts in Denmark Finland, Portugal, Australia, and New Zealand, and an individual expert in the US.

- Relevant resources that were identified through the Questionnaire and through desk research included policies and frameworks in the EU ([4]), in member states Denmark ([5], [6]), France ([7], [8]), Germany ([9]), the Netherlands ([10]) and the UK ([11], [12]), and in other parts of the world in Australia ([13]), Canada ([14]), and New Zealand ([15], [16]),

2.2 Main aspects

The main management aspects covered in the various sections of chapter 3 below look at a number of levels that are relevant to building a consistent environment that enables the access to and re-use of public sector information.

They range from high-level policy consideration to the technical and system level of implementation approaches. In any of the aspects, the importance of that aspect for the re-

use and exploitation of PSI is outlined, followed by an analysis of the Questionnaire responses and other source material related to that aspect.

3 Management aspects

3.1 Policy level

On this highest level, it is important to see which types of strategies are being implemented to drive the conditions across the public sector to ensure fair and broad access to PSI, including the policies related to pricing and licensing of PSI.

Because of the deadline of 30 June 2005 for transposition of the Directive into national legislation, reports from various member states indicate that the setting of national policies is underway. However, several correspondents in the EPSInet Questionnaire report that it is not always obvious that these activities are based on coherent and clear plans, and that there is sometimes a lack of understanding among the players where appropriate responsibilities are assigned on the national level.

In many cases, importance is given to an approach where clear political leadership strives towards broad national consensus on the main aspects of policy and implementation approaches. Such national consensus needs to be based on the realisation that PSI is an important economic asset. This should not necessarily be seen in the sense that the public sector can make money out of it, but rather in the sense that better availability of PSI through value added channels would stimulate businesses.

The policies need to recognise that an overall approach, encompassing all of the public sector, is required to create the level playing field that re-users and exploiters would like to see. Such an approach of openness would enable broad accessibility, although clearly restrictions may apply related to privacy and confidentiality.

As to licensing policies, the landscape in Europe tends towards a situation where individual agencies can define their own licenses within a framework that is usually in line with what the Directive defines in terms of recovery of marginal cost. This approach can also be observed outside of Europe, for example in the case of New Zealand [15] where a clear definition is given what costs can be recovered in which circumstances.

Recommendation:

- ***Assign clear political leadership to achieve national consensus on main issues of policy and implementation approaches***

3.2 Organisational level

Here the main issues are related to the organisational structures that are in place to manage the production of and access to information.

Apart from clear political leadership that aims at achieving national consensus on a policy level, there needs to be co-ordination of the implementation of the policies across the public sector.

In many countries a central agency is made responsible as a focal point for developing, managing, promoting and supporting common resources, such as standards, guidelines, quality control, training materials and tools. Such an environment can help to enhance the

efficiency and effectiveness of creation of content items in appropriate granularities, sizes and formats, and to the policies related to timeliness, quality control, persistence, and versioning.

Nevertheless, implementation of common strategies cannot be done only from a central point. Rather, this central agency needs to be a point of co-ordination for activities that take place in the various sectors and levels of the public sector.

One important aspect that needs to be covered through co-ordination is the development of skills and competences across all levels of staff in the public sector, to create awareness about the importance of the information created and held by the public sector.

Recommendation:

- *Establish appropriate mechanism for cross-agency co-ordination and management*

3.3 Semantic level

On this level, important issues are how information is structured, classified, and described in a way that users and re-users of the information can find the information relevant to them.

In the first place, it is important that the way information is structured and described is well defined. For example, if there is a common description approach, with a specific metadata standard being applied, the definition of the descriptive fields should be publicly available and well documented. In some of the existing national interoperability frameworks, the specification of the metadata approach only requires XML [17] to be used, but does not specify the semantic standard that the semantics should be based on, such as for example Dublin Core [18]. In addition to specify a common description standard and associated guidelines of its application in various practical cases, also mapping mechanisms and tools need to be provided in cases where pre-existing or domain-specific metadata needs to be converted or mapped to a common approach.

A second important area for consideration is the way that information is classified. Most PSI programmes devise or use classification schemes that are either based on the structure of the administration or on the way that the public will want to find information. In this latter case, the term "lifecycle events" is used to indicate that information is classified according to main events requiring interaction between the public and the administration (e.g. moving house, registering birth, paying taxes). It is important that the taxonomies and controlled vocabularies underlying this structuring of information are publicly available.

Recommendation:

- *Define a common description standard with guidance and mapping to pre-existing or domain-specific metadata, and publish taxonomies and controlled vocabularies*

3.4 Technical level

This is the area where definitions and guidelines for the use of standards and technologies are the main aspects.

Over the years, there has been a tension between vendor-specific solutions and open standards. Increasingly, the balance has tilted in the direction of products that are based on open standards. Specifically in the public sector, there is often a political requirement to

adhere to international standards, but there is certainly also a practical reason for this, as it increases vendor independence and creates a more open procurement environment.

When selecting particular standards and technologies, it should be an important consideration whether the chosen solution is proven in practice. PSI programmes usually work against tight deadlines and clear results to be delivered, and have a low margin of error. This means that, rather than aiming for the leading edge, programmes should be based on the firm ground of proven technology.

Once standards and technologies have been selected, it is a good idea to document these decisions in some form of standards catalogue or registry that can be used by everyone, both inside and outside the public sector as a reference resource.

Recommendation:

- ***Define common standards and technologies that are proven in practice, and make the list of standards publicly available***

3.5 System level

Choices for specific system architectures, solutions, and products have an impact on the way information can be accessed and applications will be developed.

Like on the technical level described above, there are choices to be made within a spectrum between vendor-specific and open (e.g. Open Source) solutions, again looking at practical aspects. Main issues to be considered are the price of a ready product versus cost of own development, maintainability, and scalability.

Other than on the technical, where there is a need for a high degree of commonality across the public sector, there should be a fair degree of freedom on the system level. It should be acknowledged that there probably is no one-size-fits-all solution across very different areas in the public sector with different characteristics in terms of size of information collection, number of users and transactions. Individual public sector agencies should be able to select their preferred systems, as long as the interface requirements set on the technical level are being satisfied.

In some cases, a common tool for content management is used across the content producers within an administration that can help harmonising procedures and information architectures. Examples are the European Commission's CIRCA groupware tools [19], the Documentum Enterprise Content Management Platform used for the European Commission's EUROPA server [20], DotP (Delivering on the Promise) in the UK [21] and Government Site Builder in Germany [22].

When system services are outsourced, appropriate service level agreements should be in place to ensure availability of the information at appropriate quality so that requirements that are being defined in the Directive and national legislation can be satisfied.

Recommendation:

- ***Select systems that are proven in practice, maintainable and scalable, and that support the common standards and technologies***

4 Conclusions

From a top-level of political leadership and planning, a realisation needs to trickle down throughout the public sector that public sector information is a valuable resource that can only be unlocked through common strategies leading to interoperable solutions. This requires the public sector taking control and joint responsibility for the quality and technical solutions.

On the various levels related to management of PSI, the following recommendations are made in this report:

Recommendation:

- *Assign clear political leadership to achieve national consensus on main issues of policy and implementation approaches*

Recommendation:

- *Establish appropriate mechanism for cross-agency co-ordination and management*

Recommendation:

- *Define a common description standard with guidance and mapping to pre-existing or domain-specific metadata, and publish taxonomies and controlled vocabularies*

Recommendation:

- *Define common standards and technologies that are proven in practice, and make the list of standards publicly available*

Recommendation:

- *Select systems that are proven in practice, maintainable and scalable, and that support the common standards and technologies*

5 References

- [1] DIRECTIVE 2003/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 November 2003 on the re-use of public sector information. http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_345/l_34520031231en00900096.pdf
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- [17] XML. Extensible Markup Language. <http://w3.org/XML/>
- [18] Dublin Core metadata standards, see Dublin Core Metadata Initiative. <http://dublincore.org/>
- [19] CIRCA (Communication and Information Resource Centre Administrator) groupware application, developed by the European Commission under the IDA Programme, offered as a common tool to the EU public administrations, with free licences, its architecture being based on Open Source Software <http://europa.eu.int/ISPO/ida/jsps/index.jsp?fuseAction=showDocument&parent=crossreference&documentID=2086>
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- [22] Government Site Builder. <http://www.bva.bund.de/aufgaben/gsb/>

Annex 1: EPSINet Questionnaire

In the context of the EPSINet project (www.epsi.net.org), we are conducting a survey on Performance and Management aspects related to the exploitation of Public Sector Information.

The EPSINet project is funded by the European Commission under the eContent programme. It aims to support the implementation of the European Directive 2003/98/EC on the re-use of public sector information, published on 31 December 2003 in the Official Journal of the European Union. http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_345/l_34520031231en00900096.pdf

In 2003, we published a first report on aspects of Management of Public Sector Information as well as a first report on Performance related to the Directive.
http://www.epsi.net.org/protected/docs/MGv1_5_1123_707.pdf
http://www.epsi.net.org/protected/docs/PGv1_5_1123_692.pdf

We are now planning second issues of these two reports, based on contributions from various experts in several countries, both from Europe and from other parts of the world, to see how initiatives and programmes to exploit public sector information are developing.

We would like to invite you to answer the questions below. We will use your answers to further analyse the situation in Europe and beyond. On the basis of our analysis we aim to define a small number of recommendations in areas where problems occur, as well as provide information about existing activities and experiences around the world.

We would appreciate it if you could share your views and knowledge with us and return your answers to <mailto:jan.rieken@lu.pwc.com> by the 27th of February 2004.

EPSINet Performance and Management Questionnaire

Questions:

1. Are proposals being prepared in your country to implement the Directive (or similar regulation in countries outside of Europe) on a national level? Is there a target date for implementation?
2. Are technical and organisational frameworks being put in place to enable and encourage the provision of public sector information to organisations wishing to exploit it? For example, is there a set of technical standards, a central repository, guidelines for public sector bodies how to manage information in a way that makes it easier to access and re-use?
3. Are methodologies and cost models being defined that govern the provision of information and are prices being advertised?
4. Is the national government defining standard licenses for the re-use of public sector information, and are these licenses co-ordinated on a European level or otherwise internationally?
5. Are there examples of licenses for the re-use of public sector information already in place? Please give us references to these licenses or contact information of the organisation(s) that manage these licenses.
6. Do you know any examples of exploitation of PSI that the EPSINet

project could investigate and publish? We are particularly interested in the following aspects:

- Content production approaches, with special attention to the creation of content items of appropriate granularities, sizes and formats, and to the policies related to timeliness, quality control, persistence and versioning.
- Infrastructures to enable authenticated and secure access to and transfer of the information items held by public sector organisations.
- Frameworks defining approaches and standards related to data formats and structuring; assignment and maintenance of metadata; definition of descriptive taxonomies; and searching, harvesting and alerting services.

Please give us any references that you may have and give us your personal opinion on relevance, importance, and any value-added features.

Thank you very much for your contribution.