



## **Guidelines on procuring IT solutions**



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## **1. INTRODUCTION**

Public services can be implemented faster and more efficiently by re-using already available solutions and by learning from the experiences of other Member States. In addition, using the same solutions and adapting best practices to one's needs often indirectly result in services which are more interoperable and more open. The aim of the ISA action 2.5. "Sharing and re-use Strategy" is thus to develop a holistic approach to help public administrations all over Europe to share and re-use solutions across borders and sectors in an efficient and effective way.

One fundamental aspect for an effective implementation of the ISA Action 4.2.5 "Sharing and re-use Strategy" is the existence of an internal market characterised by free competition whereby public administrations can share and re-use their ICT solutions, even when they are procured to contractors. Yet, public procurement processes are still characterised by practices that result in public administrations being locked-in both with regard to vendors and the solutions procured. This outcome has a significant impact not only in terms of competition, but also in terms of the potential for sharing and re-use of the procured solutions.

To overcome these obstacles, the European Commission has put forward a variety of best practice aiming at promoting the re-use of procured solutions. Currently, these guidelines are available in different locations, and users need to consult a variety of documents to have a comprehensive overview.

### **1.1. Objective**

In light of the above, the objective of this document is to assemble within one single access point the most important recommendations that have so far been put forward by the European Commission to help public administrations to procure solutions with a potential for sharing and re-use.

A set of relatively short and practical guidelines are herewith presented embracing legal, technical, communication and financial aspects to be taken into account during the public procurement process. Further details concerning each recommendation enlisted can be found by referring to the more detailed guidelines highlighted at the end of each section.

### **1.2. Scope of the report**

The scope of these guidelines is limited to the identification of already existing recommendations made by the European Commission to help public procurement officials to procure solutions that can be re-used, for instance, in a trans-European context (trans-EU solutions).

These guidelines enlist best practices that can be used during the public procurement process from the pre-award to the evaluation phase. Recommendations related to the post-award phase, for example practices related to the release of the procured solutions, fall outside the scope of this document.

The examples provided are for illustrative purposes only. Readers of this document are recommended to seek legal advice where necessary.

### 1.3. Methodology

The research was carried out in three phases:

- Scoping: first 6 guidelines produced by the European Commission have been identified
- Analysis: from this list, 12 recommendations have been extracted based on re-usability criteria identified in the Sharing and re-use Framework. Two Member States' public administrations have been consulted to validate the usefulness and the degree of alignment of these guidelines with national public procurement practices.
- Reporting: based on this assessment the recommendations have been classified and organised in the form of a list providing links to more detailed guidelines.

### 1.4. Glossary

This section provides common definitions used throughout the study.

**Table 1 Glossary**

Term / Acronym	Description
<b>ICT</b>	Information and Communication Technology
<b>Interoperability</b>	'Interoperability' means the ability of disparate and diverse organisations to interact towards mutually beneficial and agreed common goals, involving the sharing of information and knowledge between the organisations, through the business processes they support, by means of the exchange of data between their respective information and communication technology (ICT) systems. [Source: ISA Sharing and re-use Framework]
<b>Sharing</b>	'Sharing' of solutions refers to making solutions available to others, or developing common solutions. Examples can include: <ul style="list-style-type: none"> <li>• Releasing an application under an open source license on a repository</li> <li>• Providing common IT frameworks and architectures, common list of standards and metadata, guidelines for project management</li> <li>• The shared development of solutions, based on common requirements, with or without pooling of procurement</li> <li>• Making shared services available for several public administrations, for example as cloud, or web services.</li> </ul> [Source: ISA Sharing and re-use Framework]
<b>Solutions</b>	Common frameworks, common services and generic tools. [Source: ISA Sharing and re-use Framework]
<b>Re-use</b>	'Re-use' means that public administrations confronted with a specific problem seek to benefit from the work of others by looking at what is available, assessing its usefulness or relevance to the problem at hand, and deciding to use solutions that have proven their value elsewhere . In some cases, the solutions are reused once they have been adapted to specific requirements or linguistic environments. [Source: ISA Sharing and re-use Framework]

<p><b>Standard</b></p>	<p>A technical specification adopted by a recognised standardisation body, for repeated or continuous application, with which compliance is not compulsory, and which is one of the following:</p> <ul style="list-style-type: none"> <li>• “international standard” means a standard adopted by an international standardisation body</li> <li>• “European standard” means a standard adopted by a European standardisation organisation,</li> <li>• “harmonised standard” means a European standard adopted on the basis of a request made by the Commission for the application of Union harmonisation legislation;</li> <li>• “national standard” means a standard adopted by a national standardisation body;’</li> </ul> <p>[Source: EU Regulation 1025/2012]</p>
<p><b>Trans EU solutions</b></p>	<p>Trans-EU solutions (TESs) are defined as information systems developed by the European Commission or other bodies (in some cases co-funded by Member States), that facilitate cross-border exchange of information between European public administrations enabling the delivery of electronic public services and supporting the implementation of EU policies, where:</p> <ul style="list-style-type: none"> <li>• European public administrations mean European Institutions and other bodies, and national, regional and local administrations at national level including bodies performing public functions on their behalf (adaptation from ISA legal decision);</li> <li>• Cross-border refers to the attribute of a trans-European solution to support interaction in three cases:             <ul style="list-style-type: none"> <li>(i) between Member States administration(s) and European Institutions and other bodies;</li> <li>(ii) between two or more Member States administrations. In this context, we refer to Member States administrations as national, regional and local administrations at national level including bodies performing functions on their behalf; between public administrations and businesses and citizens.</li> </ul> </li> </ul> <p>[Source: ISA Sharing and re-use Framework]</p>
<p><b>Vendor lock-in</b></p>	<p>Vendor lock-in happens when the public authority cannot easily change a provider after procuring an ICT product or service, because not all essential information about the system is available for efficient takeover by another provider.</p> <p>[Source: COM(2013) 455]</p>

## 2. RECOMMENDATIONS FOR PROCURING IT SOLUTIONS

This chapter provides an overview of the 12 recommendations that have been extracted and classified based on the in depth analysis of the following sources:

- 1) Against lock-in: building open ICT systems by making better use of standards in public procurement, COM(2013) 455 final;
- 2) Guide for the procurement of standards-based ICT – Elements of Good Practice, SWD(2013) 224 final;
- 3) Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012);
- 4) Guideline on public procurement of open source software (2010);
- 5) "Sharing and re-using" clauses for contracts, Contractual Clauses for Service Procurement;
- 6) Golden Book of e-Procurement Good Practice (2013).

The analysis of each of the aforementioned guidelines has been carried out by identifying which recommendations met the re-usability criteria enlisted below. These criteria are based on the re-usability criteria identified in the "ISA Sharing and re-use Framework".

**Table 2 Re-usability criteria**

Criteria	Description
Architectural flexibility	Architecture designed for re-use
Cross-border	Developed to be used cross border, to exchange information across borders.
Dependencies	Possible re-use in other environments, for other purposes; list of operating systems, platforms and other technologies needed.
Extensibility or scalability	Possible extensibility of the solution.
Interoperability	Semantic and technical specifications used.
Intellectual Property Rights management	Type of licence enabling re-use.
Language	Documentation in several languages, design for internationalisation.
Maintenance and support	Description of the governance organisation and maintenance procedure, including updates related to new user's needs and technology evolution.
Re-use	Number of existing cases of re-use of the solution.
Suitability	List of the documentation needed to evaluate if the solution is suitable: general description (related EU policy, types of users, aim of the solution, domain), functional requirements, use cases, process description

## 2.1. Check which solutions are already available for re-use purposes

Before engaging in a public procurement procedure, public administrations should consult the market to **examine existing alternative solutions in the market place**. Transparent market engagement can encourage the participation of a wide range of firms, and can help the procurer develop options that are feasible and best meet ICT needs. Finding out what the market can offer helps public administrations assessing what are their needs, what standards and other technical specifications to use as well as to look for existing solutions that might be re-used, without having to “reinvent the wheel”. An example of how to find out about what standards are supported by the market is to consult lists of existing recommended solutions available via national and international repositories, such as Joinup and the European Federated Interoperability Repository (EFIR).

**Table 3 the European Federated Interoperability Repository**

### Joinup platform and EFIR

“The European Federated Interoperability Repository on the Joinup platform both focus on knowledge management by disseminating assets and information on legal issues, and on enterprise architecture, by defining re-usability criteria, identifying and selecting components according to their reusability levels and describing the components according to an architecture framework. The type of collaboration is opportunistic, as assets are shared without reuse predefined in advance and maintenance is not organised. Collaboration mechanisms are mostly licenses and in some cases, the collaboration agreements.”

*[Source: ISA Sharing and re-use Framework (2014)]*

## References

- Guide for the procurement of standards-based ICT – Elements of Good Practice SWD (2013) 224 final, p.17.
- Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012), p.77.



## 2.2. Re-use templates or ready text when drafting tenders

To avoid the inappropriate use of brand names, typos, or to make sure that the right intellectual property rights are used in the procurement phase, it is recommended to **use templates with some pre-filled fields** when writing tender specifications. Re-using information from previous tender specifications, instead of manually re-encoding, increases legal certainty and confidence because it decreases the risk of error and the number of inconsistencies between similar tender specifications. Officials responsible for drafting public procurement specifications should allow contracting authorities to create, store, search, re-use and edit templates that help them to create tender specifications and notices.

**Table 4 Best practices on how to re-use previous notices to create contract notices, tender specifications and award notices**

### “Dos

- Allow contracting authorities to create, store, search, re-use and edit templates that help them in creating tender specifications and notices
- Use frequently asked questions and other supporting information to help contracting authorities in creating tender specifications and notices
- Use automatic data validation in the online forms with clear guidance on how to correct any mistake
- Store information about the contracting authority on the platform and allow the contracting authority to make use of it when creating calls for tenders and notices
- Apply the "only once encoding" principle

### Don't

- Don't prevent contracting authorities from editing information copied from a template or their profile
- Don't ask the contracting authority to provide the same information more than once.”

*[Source: e-Procurement Golden Book of Good Practice, Final report (2013), p.36]*

### References

- Guide for the procurement of standards-based ICT — Elements of Good Practice SWD (2013) 224 final, p.20.
- Guidelines for Public Procurement of ICT Goods and Services (2012), p.77.
- Golden Book of e-Procurement Good Practice (2013), p.36.

### 2.3. Request ICT solutions to be easily accessible by everybody

For citizens and businesses to be able to re-use a given solution, it is first of all necessary to be able to access it. A requirement to **ensure maximum public access for citizens and businesses** may be included as an option in the procurement process. This may be achieved first by enabling users to access the procured solution by means of their preferred systems, without being limited by the use of specific branded products or applications. Secondly, to maximise accessibility of the procured solution, public authorities should also take into account accessibility needs for people with disabilities.

**Table 5 Example of public authorities that have implicitly or explicitly required citizen to use certain proprietary ICT products**

"BBC iPlayer is an on-line service from the UK state broadcaster allowing UK citizens to access television and radio. When it was first launched in July 2007, the beta version of iPlayer was criticised on the grounds that it required both Windows XP and Windows Media Player. This was subject to complaint from the Open Source Consortium in their evidence to DG Competition's consultation on the revision of the Communication on the application of State aid rules to public service broadcasting, on the grounds that it leveraged Windows Media Player and was not technology neutral. More recently, in 2010 iPlayer began to use a verification system, the SWF Verification Routine for Flash player for its streaming service that had the effect of blocking users who used unauthorised media players, including open source ones."

*[Source: Guidelines for Public Procurement of ICT Goods and Services SMART 2011/0044 D2 – Overview of Procurement Practices (2012) p.24.]*

#### References

- Guide for the procurement of standards-based ICT – Elements of Good Practice, SWD (2013) 224 final, p.24.
- Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012), p.24.
- Guideline on public procurement of open source software (2010), p.10.

## 2.4. Avoid referring to proprietary products such as: brand names, trademarks and patents

The use of references to proprietary items when purchasing ICT products restricts the ability to participate in tenders, because only certain vendors or suppliers will be in a position to provide the specific product. It also makes the public authority too dependent on a single vendor for its ICT systems, potentially reducing competition for the provision of these systems and its likelihood to be further used. Therefore public procurements should not make reference to proprietary products, brand names, trademarks, patents and similar items. Instead it is recommended to:

- **Use benchmarks** to indicate that products should meet or exceed overall performance ratings.
- **Use functional requirements or performance** to ensure that the procurement specifies functional requirements in a vendor-neutral manner.
- **Refer to standards and technical specifications:** to avoid mentioning a specific process or referring to a specific trademark.
- **Use specific references only exceptionally** when there are no other possible descriptions that are both sufficiently precise and intelligible to potential tenderers.

**Table 6 Example of best practice to avoid using proprietary product names**

“The Procurement Office of the Federal Ministry of the Interior and the Federal Association for Technology, Telecommunications and new Media (BITKOM) have produced guides on wording tenders in a non-proprietary manner for desktop PCs, notebooks and servers.

These guides are available in German and English. They are intended as a tool to allow authorities to comply with their legal requirements (European and German law forbids the use of brand names in public tenders), thereby safeguarding fair competition. The guides are also intended to allow authorities to “identify and describe state-of-the-art standards”.

The guides specifically acknowledge that technical complexity, quick succession of product cycles and precisely describing system performance requirements are all problems that have resulted in descriptions in tenders relying on proprietary product names.”

*Source: [Guidelines for Public Procurement of ICT Goods and Services SMART 2011/0044 D2 – Overview of Procurement Practices (2012) p. 36].*

### References

- Against lock-in: building open ICT systems by making better use of standards in public procurement, COM (2013) 455 final, p.3.
- Guideline on public procurement of open source software (2010), p.59.

## 2.5. Avoid to request compatibility with previously purchased ICT solutions

The request for new ICT procured solutions to be compatible with previously purchased proprietary products or systems can favour the original suppliers and thus restrict competition, increasing the risk of vendor lock-in. The consequences of such a scenario are that only a limited number of suppliers or providers might be favoured for the provision of a given product or service. In order to minimise the risk of long-term dependence on a single supplier or service provider, it is recommended **not to request compatibility with previously purchased proprietary solutions. Rather it is recommended to request for their interoperability.** This approach increases the freedom of future procurement choices because it enables full compatibility across multiple vendors and producers.

**Table 7 Evidence of requests for compatibility instead of interoperability in public procurement - FLOSSPOLs survey**

“Evidence of frequent requests for compatibility is found in the FLOSSPOLs survey in 2005. The results show that of the 955 European governments surveyed, 59 per cent favour compatibility when procuring ICT, compared with 33 per cent that favour interoperability. The authors of the survey suggest that this implies that in general procurement institutions tend to buy software products based on their backward compatibility with previously acquired software (often of a certain supplier), instead of buying new products based on their interoperability with other systems (based on standards). This trend can cause the user to be explicitly locked-in to previously purchased software. According to the FLOSSPOLs survey, many procurers were not aware that the compatibility criteria cited in their tenders reduced their ability to support or benefit from interoperability”.

*Source: [Guidelines for Public Procurement of ICT Goods and Services SMART 2011/0044 D2 – Overview of Procurement Practices (2012) p.23.]*

### References

- Against lock-in: building open ICT systems by making better use of standards in public procurement, COM (2013) 455 final, p.4.
- Guide for the procurement of standards-based ICT — Elements of Good Practice SWD (2013) 224 final, p.24.
- Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012), p.19.
- Guideline on public procurement of open source software (2010), p.22.

## 2.6. Include explicit requirements to use standards and no proprietary elements

To ensure that purchases are not limited to the original supplier and that they can be further used to deliver trans-EU services, it is recommended to **support solutions that use standards and no proprietary elements**. Public procurements should include only standards that are supported by the market and that are recognised by a formal standardisation organisation, or a technical specification that has been identified by the Commission or by a national organisation. So long as they are not recognised, they remain "technical specifications" that can also be used in public procurement, but their legal validity may be questioned, and an additional explanation may be necessary. Where openness requirements are justifiable due to interoperability needs of the procuring public authority, openness properties for open standards should be included as well. Furthermore, given that standards and technical specifications can be implemented in different ways, it is important that they provide reference to implementation or conformity tests.

**Table 8 Example of "no vendor lock-in clause"**

"All standards, interfaces, protocols, formats or semantic assets implemented by the supplied solution and required for the full use of all data created or maintained using the supplied solution during the lifetime must be made available to providers of equivalent technologies who may be awarded a subsequent contract, with no additional costs. Any costs resulting from the lack of availability, licence restrictions or royalties related to these standards, interfaces, protocols, formats or semantic assets shall be borne by the provider of the supplied solution.

Such costs may be minimized by ensuring that the supplied solution uses only standards, interfaces, protocols or formats that:

1. are implementable by all potential providers of equivalent technologies;
2. are developed through an open and transparent process;
3. can be reused without restrictions and royalty free in the framework of a distribution providing the rights stated in the article 2 of the EUPL."

[Source: "Sharing and re-using" clauses for contracts, *Contractual Clauses for Service Procurement*, p.22.]

### References

- Guide for the procurement of standards-based ICT — Elements of Good Practice SWD (2013) 224 final, p.22.
- Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012), p.11.
- "Sharing and re-using" clauses for contracts, *Contractual Clauses for Service Procurement*, p.22.
- Guideline on public procurement of open source software (2010), p.42, 56.

## 2.7. Request the use of licence conditions that enable sharing and re-use

The way in which ICT solutions are licensed may affect their possibility to be shared and re-used. To ensure that the procured solution can be re-used by other public authorities or redistributed in any other way it is important to **include the right IPR provisions in the procurement documents**. When the intention of the public authority is to redistribute the delivered work, solution or application, it is recommended that the tender documents specify the open licence that the public authority intends to use for this redistribution. This is especially important in the case of combined works to avoid licence conflicts between components received under incompatible licences. In particular, the contracting authority should take into account the following aspects:

- Obtain the full rights to re-use and redistribute the ICT solutions procured;
- Request the contractor to indicate how it will contribute to the open source community;
- Request that Intellectual Property Rights specifically developed in the framework of the contract are transferred and conferred to the contracting authority (with the exception of existing solutions that cannot be transferred exclusively to the contracting authority);
- Be aware of the need for the supplier to indemnify the authority against possible IPR infringements relating to the supplier's solution.

**Table 9 Example of clause for general IPR conditions**

"The ownership of all copyright, trademarks, trade names, patents, and all other intellectual property rights ("IPR") subsisting in the graphics, website layout, surface content, logos and devices, and the rights to the domain name(s), manuals, training materials or presentations shall vest and shall remain vested in the Commissioners absolutely.

The Commissioners, or the acknowledged owner, shall be and remain the sole owners of all IPR in all data, material, documentation or information inputted, loaded or placed onto the System in any manner, reports generated by or from the System, material or documentation placed on the System, outputs, and end-products.

The successful Tenderer will be required to indemnify the Commissioners against third- party claims relating to the Commissioners' use of any software, hardware or intellectual property.

All pre-existing IPR shall remain the sole property of the Party who owned, acquired or developed such IPR."

[Source: "Sharing and re-using" clauses for contracts, *Contractual Clauses for Service Procurement*, p.14.]

### References

- Guide for the procurement of standards-based ICT — Elements of Good Practice SWD (2013) 224 final, p.20.
- Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012), p.12.
- "Sharing and re-using" clauses for contracts, *Contractual Clauses for Service Procurement*, p.14.
- Guideline on public procurement of open source software (2010), p.48.

## 2.8. Do not request solutions with features that go beyond what is necessary

When procuring ICT solutions, there might be the tendency to request very specific solutions in order to ensure that what is requested will do exactly what the procuring entity is expected to do. However, such an approach hides several risks and disadvantages. First, **customised solutions are generally more expensive than standard 'off-the-shelf' options. In addition, they are more difficult to be re-used.** Finally, suppliers who develop and manage custom-made systems can retain all the information about the system and make it very difficult to migrate to another supplier or to maintain or upgrade the system in the future. Excessive customisations may lead to supplier dependence and thus should be avoided. Standards play an important role to overcome these disadvantages. Procuring ICT solutions based on standards that are available for any user increases the potential for interoperability with other applications that use the same standards and thus achieve 'vendor independence'.

**Table 10 Consequences of over-customisation**

"A commonly cited problem with ICT procurement that extends back to the development of the ICT need, is that public authorities often request bespoke solutions with features beyond what is necessary for the work being performed. These bespoke systems generally cost significantly more than standard 'off-the-shelf' commercial options. The levels of customisation and bespoke design also make it much harder for the systems to be re-used or to be fully interoperable with other systems. Public authorities can find themselves dependent on the service provider responsible for developing the system for all future changes or upgrade, as other suppliers lack the required knowledge to manage the system.<sup>40</sup> In addition, switching to other systems (or changing the brand/supplier of the products used within the system) can be prohibited by the risk of heavy migration and redevelopment costs."

*[Source: Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012) p. 21]*

### References

- Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012), p.21.
- Guide for the procurement of standards-based ICT – Elements of Good Practice SWD (2013) 224 final, p.24.

## 2.9. Request functionalities to make data transfer effective

Data are key enablers of sharing and re-use activities. Great attention should thus be given to how the information received, generated or stored by the procured ICT solution will be used, not only at present but also in the future. Thus, public procurements should include a provision requesting **data to be made available to third parties according to standards or other technical specifications that are open**, to make it easier for innovators to build new services.

**Table 11 Example of clause to be included for data that need to be migrated to future systems from a different provider**

"In order to ensure that a competitive tender can be used to select another potential provider after the lifetime of the solution supplied under this tender, an anti-lock-in requirement must be met. All technical specifications, interfaces, protocols or formats implemented by the supplied solution and required for the full use of all data created or maintained using the supplied solution during its lifetime must be made available to providers of equivalent technologies who may be awarded a subsequent contract, with no additional costs. Any costs required for migration of data must be borne by the supplier of the supplied solution. Such costs may be minimised by ensuring that the supplied solution uses only , interfaces, protocols or formats that:

1. are implementable by all potential providers of equivalent technologies
2. are developed through an open and transparent process
3. have no restrictions on re-use, and require no payments for re-use."

*[Source: Guide for the procurement of standards-based ICT – Elements of Good Practice SWD (2013)224 final, p. 36.]*

### References

- Guide for the procurement of standards-based ICT – Elements of Good Practice SWD (2013) 224 final, p.23.
- Against lock-in: building open ICT systems by making better use of standards in public procurement, COM (2013) 455 final, p.5.
- Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012), p.19.



## **2.10. Include a provision on documentation during the contract and knowledge handover at the end of it**

Another important aspect to ensure effective sharing and re-use of procured ICT solutions entails the **delivery of relevant documentation all along the contract period as well as a comprehensive knowledge handover once the contract comes to an end**. If this aspect is not included, there might be a risk that the public administration body will have no proper understanding of the functioning of the system, hampering not only future maintenance but also further developments, for example, by another contractor. Procurement documents should always include a provision, which requires that the documentation is properly maintained during the development of the project, and that a complete knowledge handover takes place at the end of the contract period.

**Table 12 Example of advantages derived from providing detailed documentation**

“Feedback from interviews indicates that procurers can make tenders more open in the context of legacy systems by providing detailed documentation on the existing systems and underlying code, where available. New suppliers will generally still be at a cost disadvantage compared with the incumbent, but are still given the opportunity to compete. However, interviewees did express concern that new suppliers might have been able to provide solutions at a lower cost than the incumbent had the original systems been designed in a more open way.”

*Source: Guidelines for Public Procurement of ICT Goods and Services SMART 2011/0044 D2 – Overview of Procurement Practices (2012) p.62.*

### References

- Guide for the procurement of standards-based ICT — Elements of Good Practice SWD (2013) 224 final, p.24.
- "Sharing and re-using" clauses for contracts, Contractual Clauses for Service Procurement, p.16.

### **2.11. Request to include exist costs in the price of the contract**

To promote sharing and re-use of the procured solution, exit costs should be carefully assessed. These costs are likely to be incurred when moving to another supplier or product in the future. On one hand, the up-front costs of an option using non-standard proprietary technology that cannot be implemented by other suppliers may be lower than a more open solution. On the other hand, non-proprietary products that are relatively cheap to purchase, may incur substantial operational costs over their lifetime. However, supporting technologies without considering their degree of openness and their ability to foster a fully competitive market is harmful to the competition and to the social and economic welfare. It is thus expensive, over the long term. Therefore, **the procurer should be requested to include the costs required to make the solution open to alternative suppliers at the end of the contract period.**

**Table 13 Illustration of some of the advantages of taking exit costs into account**

"If exit costs are taken into account, then procurers can place a more accurate value on alternative options with varying degrees of openness. This is important especially if including requirements in ICT tenders for systems to be more open increases the upfront costs of the procurement. Taking into account the exit costs of a more 'closed' alternative with lower upfront costs will enable a more equal evaluation of the options."

*[Source: Guidelines for Public Procurement of ICT Goods and Services SMART 2011/0044 D2 – Overview of Procurement Practices (2012) p.21.]*

#### References

- Guideline on public procurement of open source software (2010), p.28.
- Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012), p.21.
- Guide for the procurement of standards-based ICT – Elements of Good Practice SWD (2013) 224 final, p.26.

## 2.12. Assess the public procurement exercise

For sharing and re-use purposes it is also important to evaluate products and services as well as share best practices and lessons learned. For example, it is useful to **evaluate the effect of using certain standards, technical specifications and any cost benchmarking activity carried out in the course of the procurement process**. More in general, the procured products and services should be assessed against the overall ICT strategy of an organisation for future public procurement activities. Aspects to be taken into account may include, for example, new standards or other technical specifications that might impact decisions to buy, upgrade or renew a service or product.

**Table 14 Example of a lack of product evaluation in the context of e-Government**

“Most municipalities do not undertake (or even initiate) an evaluation before procurement of software and adoption of document formats. In responses, reference is often made to central procurement agencies, and a number of municipalities seem to misinterpret both the scope and focus of evaluation undertaken by those agencies.

Further, it seems that purchasing of application suites is largely a matter of history rather than strategic decisions. In some municipalities specific applications are named in procurements, which is in conflict with EU directives. This implies that many municipalities have made themselves over reliant upon central agencies.”

*[Source: Lundell, Bjorn. (2011) e-Governance in public sector ICT procurement: what is shaping practice in Sweden, European Journal epractice, Volume 12:6, p.11.]*

### References

- Guide for the procurement of standards-based ICT — Elements of Good Practice SWD (2013) 224 final, p.33.

## REFERENCES

1. Against lock-in: building open ICT systems by making better use of standards in public procurement, COM (2013) 455 final  
<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1404143853096&uri=CELEX:52013DC0455>
2. Guide for the procurement of standards-based ICT — Elements of Good Practice SWD (2013) 224 final  
<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1404143900811&uri=CELEX:52013SC0224>
3. ISA Sharing and re-use Framework, forthcoming
4. Join up  
<https://joinup.ec.europa.eu/>
5. Guidelines for Public Procurement of ICT Goods and Services – Overview of Procurement Practices (2012)  
<http://cordis.europa.eu/fp7/ict/ssai/docs/study-action23/d2-finalreport-29feb2012.pdf>
6. Sharing and re-use strategy  
[http://ec.europa.eu/isa/actions/04-accompanying-measures/4-2-5action\\_en.htm](http://ec.europa.eu/isa/actions/04-accompanying-measures/4-2-5action_en.htm)
7. An Economic Basis for Open Standards, Maastricht, FLOSSPOLs project (2005)  
[http://intgovforum.org/Substantive\\_1st\\_IGF/openstandards-IGF.pdf](http://intgovforum.org/Substantive_1st_IGF/openstandards-IGF.pdf)
8. Guideline on public procurement of open source software (2010).  
<https://joinup.ec.europa.eu/sites/default/files/24/ac/83/OSS-procurement-guideline%20-final.pdf>
9. "Sharing and re-using" clauses for contracts, Contractual Clauses for Service Procurement  
<https://joinup.ec.europa.eu/elibrary/document/standard-sharing-and-re-using-clauses-contracts>
10. Golden Book of e-Procurement Good Practice  
[http://ec.europa.eu/internal\\_market/publicprocurement/e-procurement/golden-book/catalogue\\_en.htm](http://ec.europa.eu/internal_market/publicprocurement/e-procurement/golden-book/catalogue_en.htm)
11. Lundell, Bjorn. (2011) e-Governance in public sector ICT procurement: what is shaping practice in Sweden, *European Journal epractice*, Volume 12:6.

### *European Union legislation*

12. Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts, OJ L 134, 30.04.2004, p. 114–240.
13. Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information, OJ L 175, 27.6.2013, p. 1–8.
14. Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council, OJ L 316, 14.11.2012, p. 12–33.