European eProcurement: an overview

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Executive summary

Public procurement is a key sector of the EU economy accounting for about 16% of GDP. Two new directives have entered into force in 2006 giving a uniform legislative framework all over Europe.

From the political perspective, the European Union has fixed ambitious objectives for eProcurement by 2010: 100% electronic availability and 50% real use for procurement procedures above the legal thresholds. These objectives are specified in the i2010 eGovernment action plan.

In order to achieve these goals, administrations, business and software editors can profit from European eProcurement activities.

These activities have produced technical guidelines, tools and services that facilitate the development of systems compliant with EU legislation.

In addition, European programmes provide funding and organise working groups to share efforts.

Regarding the future, European eProcurement confronts several challenges in the field of catalogues, signatures and standards. These challenges have to be faced to prevent interoperability barriers.

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1   Introduction

Public procurement is a key sector of the EU economy accounting for about 16% of GDP.

Modernising and opening up procurement markets across borders is crucial to Europe's competitiveness and for creating new opportunities for businesses. Information technologies can contribute to reduce costs, improve efficiency and remove trade barriers.

This document summarises the current key activities on eProcurement at European level, suggests hints to profit from these activities and lists some of the key challenges ahead.

This summary does not intend to be exhaustive nor complete, but to provide a quick glance of the main activities and actors involved.

Therefore, the document summarises and simplifies, sometimes at the expense of precision. A coherent set of references is provided in order to get the exact and complete description of the programmes, directives and initiatives mentioned.

The document has been prepared from the **IDABC programme** perspective.

IDABC is a European Commission programme to promote eGovernment and interoperability. IDABC stands for *Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens*.

The IDABC programme is the successor of the IDA and IDA II programmes, which have been contributing to European eGovernment since 1995. The programme has been set up for a duration of 5 years. It will invest 150 M EUR in eGovernment projects until 2009.

In addition to eProcurement initiatives, some examples of IDA/IDABC projects are:
- Solvit: a system to get quick extra-judiciary solutions for cross-border business problems.
- The eGovernment Observatory (http://ec.europa.eu/idabc/egovo), which provides facts and news on eProcurement and other eGovernment activities in Europe.
- Your Europe (http://ec.europa.eu/youreurope), an information portal for business and citizens that want perform their activities abroad.

2   European eProcurement context

This chapter provides an overview of the key descriptors of European eProcurement.

2.1   Legal context

The directives 2004/17/EC and 2004/18/EC are part of the legal framework aimed at boosting the development and use of electronic procurement. These directives entered into force on 31 January 2006.

The directives base procurement on the principles of non-discrimination, transparency, and fair competition. The directives take into account the importance of technology, but they are technology neutral.

The directives allow to the public administrations the possibility to use exclusively electronic procedures. In addition, they define two new procedures, specifically conceived to be carried out by electronic means:
- DPS (Dynamic purchasing system)
- eAuctions

2.2   eProcurement action plan

In 2004, the DG Internal Market and Services launched a Commission Communication presenting the action plan for the implementation of the legal framework for electronic public procurement.

This action plan defines objectives and activities in the period 2005-2007, based on three axes:
- Ensure a well functioning Internal Market when public procurement is conducted electronically;
- Achieve greater efficiency in procurement and improve governance;
- Work towards an international framework for electronic public procurement.

Most IDABC eProcurement actions are linked to this action plan. Additionally, the action plan proposes activities regarding member states, the international context and the standardisation bodies.

The eProcurement action plan is also considered in the i2010 eGovernment action plan (see below).

2.3   Manchester ministerial declaration

The Manchester ministerial declaration of 24 November 2005 provides the political boost to eGovernment until 2010.

In the field of eProcurement, the ministers proposed ambitious objectives:
- All public administrations across Europe will have the capability of carrying out 100% of their procurement electronically, where legally permissible;
- At least 50% of public procurement above the EU public procurement threshold will be carried out electronically.

The Manchester declaration has inspired the i2010 eGovernment action plan.

2.4   i2010 eGovernment action plan

The i2010 eGovernment action plan defines the main lines of the European strategy for eGovernment until 2010.

The action plan focuses on five major objectives for eGovernment with specific objectives for 2010. Three of them are related to eProcurement:

- Implementing high-impact key services for citizens and businesses: by 2010, 100% of public procurement will be available electronically, with 50% actual usage, with agreement on cooperation on further high-impact online citizen services;
- Making efficiency and effectiveness a reality: significantly contributing to high user satisfaction, transparency and accountability, a lighter administrative burden and efficiency gains;
- Putting key enablers in place: enabling citizens and businesses to benefit from convenient, secure and interoperable authenticated access across Europe to public services.

The other two objectives of the action plan are:
- No citizen left behind: advancing inclusion through eGovernment so that all citizens benefit from trusted, innovative services and easy access for all;
- Strengthening participation and democratic decision-making: demonstrating tools for effective public debate and participation in democratic decision-making.

Regarding eProcurement, the European Commission in partnership with Member States, the private sector, and civil society will take the following actions:

2006	Agree with Member States on a roadmap setting measurable objectives and milestones and achieving 100% availability of public eProcurement and 50% take-up of eProcurement by 2010.
2007	Based on existing or under development Member States solutions, accelerate common specifications of key elements for cross border public eProcurement and launch implementation pilots.
2009	Assess pilots deployments and disseminate results across the EU.
2010	Review of progress of cross border public eProcurement applications in the Member States.

2.5 Key players in the European eProcurement field

Several actors are involved in eProcurement at European level:
- The DG Internal Market and Services is the main responsible at Commission level. This service has created the new legislative package.
- The Office for Official Publications of the European Communities (Publications Office) is in charge of the operational service to publish business opportunities from European administrations in the supplement to the Official Journal of the European Union (TED).
- The DG Information Society and Media is involved in a number of initiatives regarding eGovernment, including validation projects and subventions.
- The IDABC programme takes care of interoperability and eGovernment, including eProcurement progress.
- The standardisation bodies (CEN/ISSS, UN/CEFACT, OASIS) provide standards for eBusiness that can be used in public procurement.
- Last but not least, the Member States are the key actors in implementing eProcurement.

3   Getting profit from European activities

This chapter tries to provide some hints for reusing and taking advantage of international projects in Europe.

3.1   Guidance, tools and services

The Commission has developed guidelines and tools to help administrations, IT editors and business to adapt their systems to the new directives. In addition, there are already services available, especially in the field of publication of calls.

The documentation is available at http://ec.europa.eu/idabc/eprocurement

Firstly, a set of background studies that analyse the European status are available. One of the most relevant is the State of the Art study. This report analyses existing initiatives in Europe, in order to assess the state of the art in electronic public procurement. It presents the status of eProcurement and deduces practices from reviewed systems across Europe.

From the analysis of the directives and the experiences examined in the background studies, the Commission has produced Functional Requirements. They summarise technical elements to take into account when implementing eProcurement systems. The functional requirements are intended for application developers.

A more technical set of documents are the Data Models. They are technical models to built systems exchanging messages to implement eInvoicing, eOrdering, eTendering and eAwarding. The target users are the standardisation bodies and application developers.

The learning demonstrators are simulators of eProcurement applications that give a visual example of a partial implementation of a real system. They are technical tools but can easily be understood by non-technicians. For instance, they have been used for presentations to managers and lectures at the university.

Two implementations are available:
- The *dynamic demonstrators* are applications that have to be installed in a PC. They include a database to allow full interaction.
- The *static demonstrators* include just the basic functionality to show the most common uses.

The demonstrators and its sources are downloadable at the IDABC web site. The static demonstrators can also be browsed directly at the IDABC web site. In addition, a CD-ROM with the demonstrators and all the remaining documentation can be requested.

The Publications Office in cooperation with the DG Internal Market and Services offer services for publication of notices. The information is available at http://ted.europa.eu/ (TED: Supplement to the Official Journal of the European Union) and http://simap.eu.int/ (SIMAP: Système d'Information pour les Marchés Publics).

Finally, the Commission provides facts and news on eProcurement and other eGovernment activities in Europe at http://ec.europa.eu/idabc/egovo.

3.2   Funding opportunities

We can consider three main sources of funding related to eProcurement.

1.- IDABC programme

The IDABC programme funds eGovernment projects according to its legal base (Decision 2004/387/EC). However, the programme gives no subventions and therefore cannot help private investors.

IDABC funds 100% of the projects (studies, applications, etc) listed in its work programme. The projects are proposed by the Commission, taking into account suggestions and comments by the member states.

The work programme has to be endorsed (favourable opinion) by the member states represented at the management committee (PEGSCO).

When approved, the projects are run and managed by the Commission.

2.- Standardisation bodies

CEN and other specific standardisation bodies get regularly subventions from the European Commission for standardisation activities. CEN/ISSS is the IT branch of CEN and carries out several activities in the field of eInvoices, eCatalogues, etc.

CEN/ISSS submits proposals in line with general EU needs and, if approved, organise projects to produce guidelines, recommendations, etc.

Both private and public organisations can participate at the workshops to develop recommendations.

3.- Information Society programmes

Several programmes managed by the DG Information Society and Media provide subventions in the field of information technologies: IST, eContent, eTEN, etc. eTEN and other related programmes will be regrouped in a larger initiative for innovation (CIP) next year.

Each programme has its own specificities, but some common principles tend to be present:
- Subventions are given to consortia with public and private partners.
- The partners have to come from several countries.
- The consortia submit their proposals when the calls are launched (often yearly).
- The subventions are always limited (normally in the range 10-50%)

These programmes are related to eBusiness and eGovernment initiatives and each one is intended for a main purpose, for instance:
- IST is devoted to research;
- eTEN helps the implementation and validation of existing solutions (that is, no research).

3.3 *Standardisation and shared activities*

There are three main actors concerning eProcurement standardisation:

- <u>UN/CEFACT</u> is an United Nations organisation for facilitating the creation of international standards.

- <u>CEN/ISSS</u>. CEN is one of the officially recognised organisations for establishing standards in Europe. CEN is the entry point to UN/CEFACT in Europe. From the practical point of view, we can consider that CEN/ISSS and UN/CEFACT are the same organisation when we focus on European standards.

- <u>OASIS</u> is a non-profit organisation for the development of IT standards. OASIS has cooperated with UN/CEFACT especially in the context of ebXML, a standard for eBusiness exchanges. OASIS has also defined UBL, a standard for eInvoices and eOrders.

These organisations cooperate at different levels, but the standards proposed are not yet unified.

A group particularly active within OASIS is the <u>Northern European UBL initiative</u>. The group is lead by Denmark and includes the Scandinavian countries and the United Kingdom. Their goal is to produce a new version of UBL (2.0) for eInvoices, eOrders and eCatalogues.

Out of the standardisation field, <u>France and Belgium</u> have started a shared project in order to develop an eProcurement system with special focus on eCatalogues in framework agreements, in the context of Open Source collaboration.

3.4 Working groups

Several working groups are active at European level in the field of eProcurement. Participation at these groups can be essential for countries or organisations that wish to keep track of international developments. Some of them are mentioned here:

<u>IDABC eProcurement working group</u>

This working group is composed by experts coming from European national administrations. The group assists IDABC in the identification of needs and gives advice for the Commission activities.

<u>INFSO/eTEN ad-hoc working group</u>

The eTEN programme of the DG Information Society and Media manages a working group to refine the eProcurement roadmap in the framework of the i2010 Action Plan. This working group is composed by experts coming from European national administrations.

<u>CEN/ISSS workshops</u>

The CEN/ISSS eGovernment Focus Group analyses standardisation needs regarding eGovernment. There are other CEN working groups ("workshops" in the CEN terminology) dealing specifically with eCatalogues, eInvoices, etc. CEN workshops are composed by members of the private or public sector.

<u>Publications Office: eSenders</u>

The Publications Office offers a service for publishing notices regarding public procurement procedures. The exchange of information can be performed in several ways, but the goal is to promote electronic XML messages. The eSenders group is composed by representatives of administrations or companies in charge of the transmission of notices to the Publications Office.

<u>DG Internal Market and Services – Legal advisory committee</u>

The Commission counts on the support of several committees for the discussion and preparation of legal issues. These committees are composed by experts coming from European national administrations.

4   Challenges

The eProcurement landscape presents several challenges that could create interoperability concerns. Some of them are summarised in this chapter:

Virtual company dossier

European tendering procedures require that companies submit certificates and attestations to proof that they comply with selection and exclusion criteria.

The objective of the virtual dossier is to replace paper certificates with electronic attestations. The issue is being discussed in several of the working groups listed above.

In addition, a study regarding electronic business attestations is planned in the IDABC work programme.

eCatalogues

Electronic catalogues are a key topic regarding standardisation and implementation of eProcurement.

Electronic catalogues would save time to the suppliers when preparing their offers, would make easier the evaluation of tenders to the administrations and would help to cope with multilingualism.

The directives leave open the catalogue structure. A single recognised standard is necessary.

A study in the field has just been launched under the IDABC work programme.

eSignatures

Electronic signatures are relatively widespread. They allow identifying safely the originator of a message and also guarantee that a document has not been modified.

Directive 1999/93/EC specifies the basic requirements for the use of electronic signatures. In addition, there are technical standards available, such as X.509v3 for electronic certificates.

However, in practice certification authorities do not recognise each other in all the cases, creating identification hurdles.

Two studies on eIdentity and eSignatures are planned in the IDABC work programme.

Standards

As explained above, standards are essential for the proper development of eProcurement.

There exist standards and recommendations for eInvoices and eCatalogues. However, more work and closer cooperation between the different standardisation organisations will be needed in order to produce standards to be adopted by the market.

5 Conclusions

Public eProcurement implies opportunities and challenges to European administrations.

The European Union has fixed ambitious objectives by 2010: 100% electronic availability and 50% real use for procurement procedures above the legal thresholds.

In the legal side, two new directives have entered into force giving a uniform legislative framework all over Europe.

To support this legal framework there are guidelines, tools and services that help administrations, business and consultants to develop compliant systems.

However, there are still specific challenges for eProcurement in the field of catalogues, signatures and standards. These challenges have to be faced to prevent interoperability barriers.

References

These references are ordered by their position in the document

IDABC eProcurement activities
http://ec.europa.eu/idabc/eprocurement

Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors
http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_134/l_13420040430en00010113.pdf

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
http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_134/l_13420040430en01140240.pdf

Action plan for the implementation of the legal framework for electronic public procurement
http://europa.eu.int/comm/internal_market/publicprocurement/docs/eprocurement/actionplan/actionplan_en.pdf

Manchester eGovernment Ministerial Declaration
http://europa.eu.int/rapid/pressReleasesAction.do?reference=MEMO/05/446&format=HTML&aged=0&language=EN&guiLanguage=en

eGovernment Action Plan
http://europa.eu.int/information_society/activities/egovernment_research/doc/highlights/egov_action_plan_en.pdf

Office for Official Publications of the European Communities (Publications Office)
http://publications.europa.eu/index_en.html

TED: Supplement to the Official Journal of the European Union
http://ted.europa.eu/

SIMAP: Système d'Information pour les Marchés Publics
http://simap.eu.int/

IDABC eProcurement demonstrators:
http://europa.eu.int/idabc/eprocdemo/default.html

eProcurement news (eGovernment Observatory):
http://europa.eu.int/idabc/en/chapter/359

IDABC decision (No 2004/387/EC) of 21 April 2004
http://ec.europa.eu/idabc/en/document/3430/3

CEN/ISSS. CEN : Comité Européen de Normalisation, ISSS : Information Society Standardization System
http://www.cenorm.be/isss

eTEN programme
http://europa.eu.int/eten

UN/CEFACT: United Nations Centre for Trade Facilitation and Electronic Business
http://www.unece.org/cefact

OASIS: Organization for the Advancement of Structured Information Standards
http://www.oasis-open.org

Directive 1999/93/EC on a Community framework for electronic signatures
http://europa.eu.int/eur-lex/pri/en/oj/dat/2000/l_013/l_01320000119en00120020.pdf